A Message from the President

To all prospective students:

We all increasingly face the continuous demands and challenges of a fast-paced and complex society that shoulders us with an ever-increasing level of family, social, and economic responsibilities. Northwestern Polytechnic University (NPU) is an educational institution that develops and molds future leaders by providing a unique, cutting edge learning opportunity and training ground that propels our graduates to success wherever their career paths may lead.

The location of NPU in the heart of Silicon Valley along with the efforts and accomplishments of NPU’s faculty and administrators combine to provide a unique environment for students to learn and to gain practical experience. NPU’s forward-thinking staff and administration promote international understanding and cooperation and creatively strive to lead our graduates into achieving not only academic excellence but also a wider view of their roles as individuals and as members of society.

Our university dedicates itself to the continual improvement of academic curricula and programs that combine existing knowledge and new developments arising from today’s ever-changing world. In doing so, NPU’s programs encourage both analytical and creative thinking. Even though the specific goals and objectives of each student are different, it is the dedication to learning that matters. If you are devoted to the pursuit of education and self-enrichment, we invite and welcome you to accept the challenge and further your career and intellectual growth by attending NPU.

Peter Hsieh
President
Frequently Asked Questions

If you have any questions or concerns, please call the university administration office.
Tel: (510) 592-9688; Fax: (510) 657-8975.

The university website address is http://www.npu.edu.

For Admissions Office: e-mail admissions@npu.edu; Tel (510) 592-9688 ext. 1

• **How can I apply to NPU?**
  See admission and application information on pages 3-5 (ADMISSIONS POLICIES), 48-50 (School of Engineering, Undergraduate Programs), 64-65 (School of Engineering, Masters Programs), -92 (School of Business and Information Technology, Undergraduate Program), 107-108 (School of Business and Information Technology, Masters Program).

• **How can I get an application form? What should I submit for application?**
  You may apply online from the NPU website by entering the “Admissions” section and clicking the “Online Application” button.
  The required application materials are listed on NPU’s website in the “Admissions” section and in the “Application Requirement” subsection. This information is also provided on the online application form.

• **How can I see an admission officer or an academic counselor?**
  Admission officers and academic counselors are available on campus to assist the applicants and the students during office hours posted on the NPU Website at http://www.npu.edu/contact-us. Also see Academic Advising on page 19.

• **What courses do I need to complete for my major?**
  See Curriculum under various degree programs:
  School of Engineering: pages -54 (Undergraduate programs graduation requirements), 68-70 (Masters programs graduation requirements),
  School of Business and Information Technology: page 95 (Undergraduate program graduation requirements), 111 (Masters program graduation requirements).

• **I want to know the costs for taking courses or pursuing a degree.**
  See the tuition and fees information on pages 5 (Tuition), 6 (Fees), 52 (School of Engineering, Undergraduate programs), 66 (School of Engineering, Masters Programs), 93 (School of Business and Information Technology, Undergraduate Program), 110 (School of Business and Information Technology, Masters Program).

• **How do I register for classes?**
  See Registration and related information on page 20.

• **Where can I find the directions to NPU?**
  See page 162 or on our web site at http://www.npu.edu/contact-us.
# 2018 Academic Calendar

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 1</td>
<td>New Year Holiday; Campus Closed</td>
</tr>
<tr>
<td>Jan 2</td>
<td>· Posting final grades for 2017 fall trimester</td>
</tr>
<tr>
<td></td>
<td>· Check point – student counseling</td>
</tr>
<tr>
<td>Jan 4</td>
<td>New students report to campus/Orientation</td>
</tr>
<tr>
<td>Jan 8</td>
<td>Trimester and classes begin</td>
</tr>
<tr>
<td>Jan 8-13</td>
<td>· Late registration</td>
</tr>
<tr>
<td></td>
<td>· Add/Drop</td>
</tr>
<tr>
<td>Jan 13</td>
<td>Last day to add/drop (without affecting official records)</td>
</tr>
<tr>
<td>Jan 15</td>
<td>Faculty classroom observation begins</td>
</tr>
<tr>
<td>Feb 19-24</td>
<td>Mid-term exams</td>
</tr>
<tr>
<td>Feb 26</td>
<td>· Deadline for graduation petition for summer trimester (without late fee)</td>
</tr>
<tr>
<td></td>
<td>· Deadline for changing program (without late fee)</td>
</tr>
<tr>
<td>Mar 5-9</td>
<td>Check point – student counseling</td>
</tr>
<tr>
<td>Mar 5</td>
<td>Summer trimester application deadline for international students</td>
</tr>
<tr>
<td>Mar 12</td>
<td>Summer class schedule and registration packages ready</td>
</tr>
<tr>
<td>Mar 19</td>
<td>· Begin registration for the summer trimester</td>
</tr>
<tr>
<td></td>
<td>· Faculty evaluation - by students</td>
</tr>
<tr>
<td>Mar 24</td>
<td>Summer registration ends (for current students)</td>
</tr>
<tr>
<td>Mar 25</td>
<td>Late registration for summer trimester begins (for current students)</td>
</tr>
<tr>
<td>Apr 7</td>
<td>Faculty classroom observation ends</td>
</tr>
<tr>
<td>Apr 13</td>
<td>Summer trimester application deadline for local and international transfer students</td>
</tr>
<tr>
<td>Apr 16-21</td>
<td>Course review and final exams</td>
</tr>
<tr>
<td>Apr 28</td>
<td>· Posting final grades for spring trimester</td>
</tr>
<tr>
<td></td>
<td>· Check point – student counseling</td>
</tr>
<tr>
<td>May 3</td>
<td>New students report to campus/Orientation</td>
</tr>
</tbody>
</table>
2018 Academic Calendar (continued)

Summer Trimester (5/7 – 8/20)

May
3 New students report to campus/Orientation
7 Trimester and classes begin
7-12 · Late registration
· Add/Drop
12 Last day to add/drop (without affecting official records)
14 Faculty classroom observation begins
28 Memorial Day Holiday; Campus Closed

June
2 Graduation ceremonies (for students graduated in the 2017 Summer, 2017 Fall, and 2018 Spring trimesters)
18-23 Mid-term exams
22 Fall trimester application deadline for international students
25 · Deadline for graduation petition for fall trimester (without late fee)
· Deadline for changing program (without late fee)

July
2-6 Check point – student counseling
4 Independence Day Holiday; Campus Closed
9 Fall class schedule and registration packages ready
16 · Begin registration for the fall trimester
· Faculty evaluation - by students
21 Fall registration ends (for current students)
22 Late registration for fall trimester begins (for current students)

August
4 Faculty classroom observation ends
10 Fall trimester application deadline for local and international transfer students
13-20 Course review and final exams
27 New students report to campus/Orientation
28 · Posting final grades for summer trimester
· Check point – student counseling
2018 Academic Calendar (continued)

Fall Trimester (8/30 – 12/17)

August
30 · Trimester and classes begin
30-31 · Late registration
      · Add/Drop

September
3   Labor Day Holiday; Campus Closed
1-5 · Late registration
      · Add/Drop
5    Last day to add/drop (without affecting official records)
10   Faculty classroom observation begins

October
15-20 Mid-term exams
19   2019 spring trimester application deadline for international students
22   · Deadline for graduation petition for next spring trimester (without late fee)
      · Deadline for changing program (without late fee)
29   Check point – student counseling

November
5    2019 spring class schedule and registration packages ready
12   · Begin registration for the 2019 spring trimester
      · Faculty evaluation - by students
17   2019 spring registration ends (for current students)
18   Late registration for 2019 spring trimester begins (for current students)
22-23 Thanksgiving Holiday; Campus Closed

December
1    Faculty classroom observation ends
7    2019 spring trimester application deadline for local and international transfer students
11-17 Course review and final exams
24-31 Christmas Holiday; Campus Closed
30   · Posting final grades for 2018 fall trimester
      · Check point – student counseling

January 2019
1    New Year Holiday; Campus Closed.
3    New students report to campus/Orientation
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INTRODUCTION

The Northwestern Polytechnic University (NPU) catalog is an annual publication containing information on academic requirements, learning facilities, tuition and fees, and disciplinary issues concerning all applicants and students at NPU. Student handbooks, for local and for international students, are published separately every trimester and posted on the MyNPU student portal. New students are introduced to the MyNPU student portal on the New Student Orientation Day. The handbooks provide additional information to help the students adjust to the school environment quickly and learn how to use the administrative services provided to them.

The majority of the information contained in this catalog and other pertinent information is also available on the university website at www.npu.edu.

Mission

Mission Statement
Northwestern Polytechnic University’s mission is to provide quality higher education to help individuals of diverse backgrounds, interests, and skills achieve their full academic and career potential.

Objectives
Northwestern Polytechnic University’s objectives are:

• To prepare students for real world success by bringing current innovations and experience to the classrooms.

• To provide quality higher education through rigorous review, assessment, and improvement of the institution.

• To provide opportunities through cost effective tuition and scholarship programs.

• To cultivate professionalism and integrity to advance social, communal, and work environments.

Vision

Northwestern Polytechnic University will be recognized as a leader in higher education through academic excellence and a transformative student experience. NPU will provide innovative and effective education and a positive learning environment that results in graduates exceeding academic and industry expectations.

Values

Academic Excellence - Share and expand knowledge, promote critical thinking, stimulate innovation and inspire life-long learning.

Student-Centered - Focus on students’ academic, social and economic needs.

Opportunity For Success - Empower individuals to achieve their full potential.

Diversity - Embrace differences, promote openness, support freedom of inquiry and expression, and respect others.

Honesty - Bolster ethical behavior, foster integrity, and promote responsibility and professionalism.

Collaboration - Encourage team effort and cooperative spirit to attain great results.

Community - Nurture social, economic and environmental well-being and advance the public good.

Institutional Learning Outcomes

Northwestern Polytechnic University has adopted Institutional Learning Outcomes that represent our degrees and general education outcomes. These are supported through each of our major areas of study, general education courses, and through our administrative and educational support programs.

NPU graduates are expected to demonstrate the following institutional student learning outcomes:

Written Communication - Write sustained, coherent arguments or explanations.

Oral Communication - Utilize effective oral communication strategies.

Quantitative Reasoning - Utilize mathematical concepts and methods to analyze, and explain issues in quantitative terms.
Information Literacy - Identify, locate, evaluate, and effectively and responsibly use and share information in support of academic, personal, and professional needs.

Critical Thinking - Explore and analyze issues, ideas, artifacts, and/or events to formalize an opinion or conclusion.

Specialized Knowledge - Achieve knowledge and skill required in a specialized field of study appropriate to the degree level.

Diversity Statement

Northwestern Polytechnic University strongly believes in diversity in all of its many forms at every level of our university as we find having a broad spectrum of perspectives and backgrounds vital to accomplishing our mission. Diversity is essential in furthering social justice, educational quality, and career success. NPU is dedicated to fostering a culture that promotes, supports, and respects diversity throughout our university. Diversity includes, but is not limited to, race, color, religion, age, marital status, sexual orientation, gender, ethnic origin, national origin, ancestry, military or veteran status, and physical impairment.

Faculty

The University faculty maintains a tradition of personal attention to students and devotion to teaching and research. Many members of the faculty have been cited for excellence in teaching. Some of them are leaders in their disciplines and professional organizations. Members of the faculty have had the experience of working in high-tech fields and various business professions; some also acted as consultants to educational institutions, industry, businesses, government, and foundations.

Accreditation

Northwestern Polytechnic University is an academic institution accredited by the Accrediting Council for Independent Colleges and Schools (ACICS) to award bachelor’s degrees and master’s degrees. ACICS is listed as a nationally recognized accrediting agency by the United States Department of Education (U.S. DOE) and is recognized by the Council for Higher Education Accreditation (CHEA). For recent updates on ACICS, please review, http://www.acics.org/news/content.aspx?id=715

4. ACICS may be contacted at 750 First Street, NE, Suite 980, Washington, DC 20002-4241, Tel: (202) 336-6780.

Approval to Operate

NPU is a private institution and it is approved to operate by the Bureau for Private Postsecondary Education. APPROVAL TO OPERATE MEANS COMPLIANCE WITH STATE STANDARDS AS SET FORTH IN THE CALIFORNIA EDUCATION CODE.

Contacting the Bureau for Private Postsecondary Education

Any questions a student may have regarding this catalog that have not been satisfactorily answered by the institution may be directed to the Bureau for Private Postsecondary Education at 2535 Capitol Oaks Drive, Suite 400, Sacramento, CA 95833, www.bppe.ca.gov, (888) 370-7589, or by fax (916) 263-1897.

A student or any member of the public may file a complaint about this institution with the Bureau for Private Postsecondary Education by calling (888) 370-7589 or by completing the complaint form, which can be obtained on the bureau’s internet website address www.bppe.ca.gov.

No Participation in Financial Aid Programs; Loan Information

Please be advised that NPU does not participate in federal or state financial aid programs, and that a student enrolled in an unaccredited institution is not eligible for federal financial aid programs. Nevertheless, students are advised of the following:

1. If you obtain a loan to pay for an education program, you will have the responsibility to repay the full amount of the loan plus interest, less the amount of any refund.

2. If you received federal student financial aid funds, you are entitled to a refund of
the moneys not paid from federal financial aid funds.

**Corporate Status**

Northwestern Polytechnic University is organized under California Corporate Law as a nonprofit, public-benefit corporation and is deemed tax-exempt, as applies to corporations falling within the IRS 501(c)(3) ruling.

NORTHWESTERN POLYTECHNIC UNIVERSITY ADMINISTERS ALL ITS PROGRAMS WITHOUT REGARD TO RACE, ETHNIC ORIGIN, AGE, OR SEX. NPU CONFRONTS AND REJECTS ALL MANIFESTATIONS OF DISCRIMINATION IN ITS EDUCATIONAL POLICIES, ADMISSION POLICIES, SCHOLARSHIPS, OR OTHER SCHOOL ADMINISTERED PROGRAMS.

**Governing Board**

NPU is governed by its Board of Trustees. Board members follow applicable nonprofit rules, as NPU is a nonprofit, public-benefit educational institution.

**Community Involvement**

The University is first and foremost an institution of learning and teaching, committed to serving the needs of society and involved in the academic and civic communities of which it is a part. The NPU administrators participate in local job fairs and work with local businesses to provide job opportunities for our students. NPU sponsors and promotes various community activities and encourages participation of its students in community outreach and volunteering programs. NPU believes that community involvement by its students helps develop social responsibility.

**Non-Discrimination Policy**

NPU, in accordance with applicable Federal and State law and University policy, does not discriminate on the basis of race, color, national, and/or ethnic origin, sex, marital status, gender identity, sexual orientation, pregnancy, physical or mental disability, medical condition (cancer related or genetic characteristics), ancestry, religion, service in the uniformed services, or age. NPU also prohibits unlawful harassment including sexual harassment and sexual violence. This policy of non-discrimination applies to all aspects of admission, education, employment, financial aid, student activities, and other school-administered programs. NPU is obligated to investigate all discrimination complaints, including harassment, in an unbiased, thorough manner.

Anyone with questions about NPU’s non-discrimination policy or complaints is encouraged to contact the Compliance Team at compliance@npu.edu.

1Pregnancy includes pregnancy, childbirth, and medical conditions related to pregnancy or childbirth.

2Service in the uniformed services includes membership, application for membership, performance of service, application for service, or obligation for service in the uniformed services.

**Reasonable Accommodation for Students with Disabilities**

NPU adheres to the Americans with Disabilities Act (ADA) requirements and provides reasonable accommodations for students who are otherwise qualified but have disabilities. Such disabilities may include learning disabilities, health impairments, and other documented disabling conditions.

**Statement of Financial Solvency**

Northwestern Polytechnic University does not have a pending petition in bankruptcy, is not operating as a debtor in possession, and has not filed a petition with the preceding five years or had a petition in bankruptcy filed against it within the preceding five years that resulted in reorganization under Chapter 11 of the United States Bankruptcy Code (11 U.S.C. Sec. 1101 et seq.).

**ADMISSION POLICIES**

- NPU admits all qualified individuals into the university without regard to race, religion, sex, ethnic origin, or disability.
- NPU makes education available to all individuals who meet the qualifications for entrance into NPU.
Trimester: The school’s annual calendar and course offering are based on a trimester system of three 15-week trimesters starting in January, May, and September of the year. An applicant may apply for entrance in any of the three trimesters each year.

The application deadline for each trimester is given in the Academic Calendar included in this catalog as well as posted on the NPU website. Applicants are advised to apply online at http://www.npu.edu/admissions.

Late Application: A late application fee will be charged for applications received after the deadline each trimester. Overseas applicants should apply earlier to allow sufficient time for processes related to visa application and international travel. The online Application Guide provides application details.

Application Requirements

Refer to the description on application requirements in the section for the school and level of program of your choice.

Please note that NPU does not admit ability-to-benefit students.

Official Transcripts

Official transcripts are required for admission into a degree program. All official transcripts must be received before the admission evaluation. Late submissions are permitted only with the approval of the Admissions Committee. Students enrolled in courses at another institution at the time of application will have 60 days after the completion of the courses to provide NPU with the updated transcripts. Failure to submit official transcripts on time may result in placement of the applicant in a non-degree status or withdrawal from the university.

Admission Evaluation: The NPU Admissions Committee provides individualized admission evaluation service and follows the approved credit transfer policy to transfer credit for each applicant. A copy of the evaluation report will be provided to the accepted applicant.

Document Submission

Please note all documents that you submit, or are submitted on your behalf, in support of your application for admission, or to fulfill enrollment requirements, become the exclusive property of NPU. NPU will under no circumstances release the documents to you or any other party, nor will NPU provide you with any copies of the documents.

Notification of Admission

Upon approval of admission, prospective students will receive a notification of admission status. An admitted applicant will receive an acceptance package. An applicant denied for admission will receive an explanation for their denied application. Processing times will vary. Processing begins upon receipt of all hard copies of required documents as instructed, and not upon simply submitting an application.

Confirming Intent to Report

All accepted applicants are required to confirm their intent to report to reserve their place in the accepted term. Instructions, applicable fees, and due dates are provided in the acceptance package.

Cancellation of Admission and Readmission

If an applicant is accepted into a degree program for a given trimester and does not begin classes in that trimester, admission will automatically be canceled. The prospective student’s application records (transcripts from previous colleges and English language proficiency records) are kept on file for a period of six months from the trimester start date. If the applicant then wishes to be considered for readmission in a later trimester, he/she will be required to (1) resubmit an application online with the initial account ID and (2) pay the application fee. A reevaluation of admission will be made for the applicant. If reaplication is made more than six months from the initial admission term, the applicant may be required to submit an entire new set of the application materials.
Returning Students

When a former NPU student returns to continue his/her study in an unfinished program after skipping more than one term, the returning student must submit a new online application and pay the application fee. The student will receive a new evaluation and study plan based on the graduation requirements specified in the current catalog. Applicable courses and credits earned in the unfinished program may be applied towards the new study plan.

International Students

NPU is authorized under federal law to enroll non-immigrant international students. NPU Designated School Officials are authorized to issue Forms I-20. However, NPU does not provide visa services, nor does NPU vouch for student status. Please note that the only language of instruction shall be English.

NPU Institution Codes for Standardized Tests

<table>
<thead>
<tr>
<th>ACT</th>
<th>SAT</th>
<th>GMAT</th>
<th>GRE</th>
<th>TOEFL</th>
<th>CLEP</th>
<th>DANTES</th>
<th>FCE</th>
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</thead>
<tbody>
<tr>
<td>1750</td>
<td>4335</td>
<td>5485</td>
<td>5485</td>
<td>9626</td>
<td>7569</td>
<td>9670</td>
<td>UX357</td>
</tr>
</tbody>
</table>

New Student Orientation

All new students are required to attend the New Student Orientation program conducted at NPU before each trimester starts.

No Transfer and Articulation Agreements

NPU does not have any articulation or transfer agreements with any other college or university. NPU does not currently enroll any students pursuant to a transfer or articulation agreement with another institution, nor does it have any transfer or articulation agreements with other institutions to accept credits from NPU.

ENROLLMENT AGREEMENT

To enroll in NPU, a student must execute an enrollment agreement. The enrollment agreement is presented digitally through the student online portal (MyNPU). The agreement indicates the student’s program, estimated length of study, estimated costs, and other information. As a prospective student, you are encouraged to review this catalog prior to signing an enrollment agreement. You are also encouraged to review the School Performance Fact Sheet, which must be provided to you prior to signing an enrollment agreement.

TUITION AND FEES

Tuition

Undergraduate

- Program and Deficiency Unit Rate: $330 per unit
- Estimated Tuition per Trimester: $3,960; based upon a 12 unit course load

Graduate:

- Program Unit Rate: $450 per unit
- Deficiency Unit Rate: $330 per unit, except that MBA deficiency units are $450 per unit
- Estimated Tuition per Trimester: $4,050; based upon a 9 unit course load

IEP:

- Tuition for full-time students (four courses, 20 hours/week): $2000 per session.
- Tuition for part-time students (one course, 5 hours/week): $500 per session.
- Tuition for part-time students (two courses, 10 hours/week): $1000 per session.
- Tuition for part-time students (three courses, 15 hours/week): $1500 per session.

Special tuition rates: Special tuition rates may apply to the following groups of students:

- NPU faculty or family members taking courses for credit. The policy is posted on the MyNPU faculty portal.
- NPU staff members approved to take courses for credit or staff family members taking courses at NPU.

In general, tuition scholarships do not apply to students in these groups.
## Fees

**Notice:** Please observe deadlines to avoid late fees. All late fees are $50 unless otherwise specified below.

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Fee</td>
<td>$100</td>
<td>Non-refundable. International applicants. Includes express mail service. Non-refundable. Local applicants.</td>
</tr>
<tr>
<td>Application Late Fee</td>
<td>$100</td>
<td>For applicants that apply after the application deadline.</td>
</tr>
<tr>
<td>IEP Application Fee</td>
<td>$80</td>
<td>Non-refundable. Local applicants.</td>
</tr>
<tr>
<td>Intent to Report Fee</td>
<td>$150</td>
<td>Non-refundable. If student reports to NPU and enrolls, first trimester tuition is discounted by Intent to Report Fee amount.</td>
</tr>
<tr>
<td>Campus Fee</td>
<td>$125</td>
<td>Per trimester.</td>
</tr>
<tr>
<td>Registration Fee</td>
<td>$75</td>
<td>Per trimester.</td>
</tr>
<tr>
<td>IEP Registration Fee</td>
<td>$75</td>
<td>Per session.</td>
</tr>
<tr>
<td>Learning Resource Fee</td>
<td>$200</td>
<td>Per trimester.</td>
</tr>
<tr>
<td>Graduation Petition Fee</td>
<td>$300</td>
<td></td>
</tr>
<tr>
<td>Re-petition Graduation Fee</td>
<td>$50</td>
<td>Fee is per each re-petition to graduate.</td>
</tr>
<tr>
<td>Health Insurance Premium</td>
<td>$416.12</td>
<td>Per trimester. All students are required to have health insurance. Refunds are subject to and processed in accordance with the third party insurance carrier’s terms and conditions, which can be found in the plan brochure located at: <a href="https://www.npu.edu/admissions/insurance">https://www.npu.edu/admissions/insurance</a></td>
</tr>
<tr>
<td>Student Tuition Recovery Fund Fee</td>
<td>$0</td>
<td>Non-refundable unless student cancels pursuant to Right to Cancel.</td>
</tr>
<tr>
<td>Add/Drop Request Processing Fee</td>
<td>$10</td>
<td>First request to modify registration for a particular trimester</td>
</tr>
<tr>
<td></td>
<td>$20</td>
<td>Second Request to modify registration for a particular trimester</td>
</tr>
<tr>
<td></td>
<td>$50</td>
<td>Third Request to modify registration for a particular trimester</td>
</tr>
<tr>
<td></td>
<td>$100</td>
<td>Fourth Request to modify registration for a particular trimester</td>
</tr>
<tr>
<td>Late Registration Fee (New Student Only)</td>
<td>$20</td>
<td>Applies if student registers during Week 1</td>
</tr>
<tr>
<td></td>
<td>$120</td>
<td>Applies if student registers during Week 2</td>
</tr>
<tr>
<td>Late Registration Fee (Continuing Student Only)</td>
<td>$50</td>
<td>Applies if student registers late during the period from the beginning of Week 12 of the previous trimester to the end of the previous trimester.</td>
</tr>
<tr>
<td></td>
<td>$75</td>
<td>Applies if student registers late during the period from the end of the previous trimester to the start of the trimester.</td>
</tr>
<tr>
<td></td>
<td>$100</td>
<td>Applies if student registers late after the trimester starts.</td>
</tr>
<tr>
<td>Payment Plan Service Fee</td>
<td>$100</td>
<td>Service fee to enroll in a two installment payment plan</td>
</tr>
<tr>
<td>Fee Description</td>
<td>Fee Amount</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Payment Plan Late Fee</td>
<td>$50</td>
<td>Applies if student misses second installment payment deadline (i.e., Week 6) and pays during Week 7</td>
</tr>
<tr>
<td></td>
<td>$100</td>
<td>Applies if student misses second installment payment deadline (i.e., Week 6) and pays during Week 8 or thereafter</td>
</tr>
<tr>
<td>Change Major or Program of Study</td>
<td>$50</td>
<td>NPU may from time to time update its program curriculum and requirements. In such circumstance, a student may, at student’s discretion, change student’s study plan to the updated program curriculum and requirements.</td>
</tr>
<tr>
<td>Change to New Curriculum</td>
<td>$50</td>
<td>NPU may from time to time update its program curriculum and requirements. In such circumstance, a student may, at student’s discretion, change student’s study plan to the updated program curriculum and requirements.</td>
</tr>
<tr>
<td>Undergraduate Student Challenge Exam Fee</td>
<td>$100</td>
<td>Fee is per course challenged. If the challenge is successful, student must also pay tuition for the challenged course.</td>
</tr>
<tr>
<td>Proficiency Exam Fee</td>
<td>$150</td>
<td>Fee is per program background requirement that student seeks to clear. If successful, student will clear the requirement, but shall not receive any credits.</td>
</tr>
<tr>
<td>Graduation Cap and Gown Fee</td>
<td>$30</td>
<td>Undergraduate Student</td>
</tr>
<tr>
<td></td>
<td>$50</td>
<td>Graduate Student</td>
</tr>
<tr>
<td>Transcript Fee</td>
<td>$5</td>
<td>Each copy after first two copies</td>
</tr>
<tr>
<td>Duplicate Diploma Processing Fee</td>
<td>$150</td>
<td>Applies if the student requests a duplicate diploma</td>
</tr>
<tr>
<td>Express Service Fee</td>
<td>$120</td>
<td>For expedited one business day processing of I-20, transcript, and other requests</td>
</tr>
<tr>
<td>Express Mail Service Fee</td>
<td>$50</td>
<td>NPU is not a bank and lacks the resources to intake, process, and disburse funds deposited to the student’s university account in excess of amounts owed by the student to NPU. Therefore, students are strongly discouraged from having third parties transfer to the university funds that are intended for the student’s living expenses, discretionary spending, and the like.</td>
</tr>
<tr>
<td>Excess Deposit Processing Fee</td>
<td>$100</td>
<td>NPU may pay out a student’s positive credit balance, not resulting from the student’s withdraw or cancellation, to the student by check. The student must request a check payout by submitting a copy of the “Excess Deposit Processing Request Form” to the Finance Office. There is a $100 service fee for each request. For purposes of clarity, the excess deposit processing fee does not apply to refunds for withdraw or cancellation.</td>
</tr>
<tr>
<td>Returned/Bad Check Fee</td>
<td>$25</td>
<td>First returned or bad check</td>
</tr>
<tr>
<td></td>
<td>$35</td>
<td>Each returned or bad check after the first</td>
</tr>
<tr>
<td>Chargeback Fee</td>
<td>$100</td>
<td>Fee assessed if follow criteria are not satisfied. Before initiation of a chargeback request to the credit/debit card provider for any disputed credit/debit card charge, an applicant or student shall make a formal dispute request in writing directly with NPU’s finance office of such disputed charge. NPU shall have 15 business days to resolve the issue.</td>
</tr>
<tr>
<td></td>
<td>$200</td>
<td>If a chargeback is initiated after NPU makes a final determination on the formal dispute request required above,</td>
</tr>
</tbody>
</table>
and that chargeback is denied by the credit/debit card provider, NPU will charge a chargeback fee of $200. Typically, but not only, occurs in fraudulent chargeback situations.

<table>
<thead>
<tr>
<th>Service</th>
<th>Fee</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student ID Replacement Fee</td>
<td>$10</td>
<td></td>
</tr>
<tr>
<td>International Student Transfer-Out</td>
<td>$150</td>
<td>Does not apply to NPU graduates.</td>
</tr>
<tr>
<td>Processing Fee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optional Practical Training Extension</td>
<td>$20</td>
<td></td>
</tr>
<tr>
<td>Service Fee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International Student Change of Status</td>
<td>$50</td>
<td>Applies if student changes to F-1 student status from another immigrant or nonimmigrant status, such as, but not only F-2 and H-4.</td>
</tr>
<tr>
<td>Duplicate I-20 Service Fee</td>
<td>$5</td>
<td></td>
</tr>
<tr>
<td>Dependent I-20 Service Fee</td>
<td>$5</td>
<td></td>
</tr>
<tr>
<td>Student Housing Fee</td>
<td>$2600</td>
<td>Per trimester. Optional, students are not required to reside in university housing.</td>
</tr>
<tr>
<td>Student Housing Deposit</td>
<td>$500</td>
<td>Use and refund in accordance with California law. Only required for students residing in university housing. Students are not required to reside in university housing.</td>
</tr>
</tbody>
</table>

**NOTICE**: For any student who does not fulfill his/her financial obligation to the school on time, a penalty of $20/month will be debited to the student’s financial account until his/her obligation is fulfilled. In addition, the late fee and automatic withdrawal rule will also apply.
Student Tuition Recovery Fund

The State of California established the Student Tuition Recovery Fund (STRF) to relieve or mitigate economic loss suffered by a student in an educational program at a qualifying institution, who is or was a California resident while enrolled, or was enrolled in a residency program, if the student enrolled in the institution, prepaid tuition, and suffered an economic loss. Unless relieved of the obligation to do so, you must pay the state-imposed assessment for the STRF, or it must be paid on your behalf, if you are a student in an educational program, who is a California resident, or are enrolled in a residency program, and prepay all or part of your tuition.

You are not eligible for protection from the STRF and you are not required to pay the STRF assessment, if you are not a California resident, or are not enrolled in a residency program.

It is important that you keep copies of your enrollment agreement, financial aid documents, receipts, or any other information that documents the amount paid to the school. Questions regarding the STRF may be directed to the Bureau for Private Postsecondary Education, 2535 Capital Oaks Drive, Suite 400, Sacramento, CA 95833, (916) 431-6959 or (888) 370-7589.

To be eligible for STRF, you must be a California resident or are enrolled in a residency program, prepaid tuition, paid or deemed to have paid the STRF assessment, and suffered an economic loss as a result of any of the following:

1. The institution, a location of the institution, or an educational program offered by the institution was closed or discontinued, and you did not choose to participate in a teach-out plan approved by the Bureau.

2. You were enrolled at an institution or a location of the institution within the 120 day period before the closure of the institution or location of the institution, or were enrolled in an educational program within the 120 day period before the program was discontinued.

3. You were enrolled at an institution or a location of the institution more than 120 days before the closure of the institution or location of the institution, in an educational program offered by the institution as to which the Bureau determined there was a significant decline in the quality or value of the program more than 120 days before closure.

4. The institution has been ordered to pay a refund by the Bureau but has failed to do so.

5. The institution has failed to pay or reimburse loan proceeds under a federal student loan program as required by law, or has failed to pay or reimburse proceeds received by the institution in excess of tuition and other costs.

6. You have been awarded restitution, a refund, or other monetary award by an arbitrator or court, based on a violation of this chapter by an institution or representative of an institution, but have been unable to collect the award from the institution.

7. You sought legal counsel that resulted in the cancellation of one or more of your student loans and have an invoice for services rendered and evidence of the cancellation of the student loan or loans.

To qualify for STRF reimbursement, the application must be received within four (4) years from the date of the action or event that made the student eligible for recovery from STRF.

A student whose loan is revived by a loan holder or debt collector after a period of noncollection may, at any time, file a written application for recovery from STRF for the debt that would have otherwise been eligible for recovery. If it has been more than four (4) years since the action or event that made the student eligible, the student must have filed a written application for recovery within the original four (4) year period, unless the period has been extended by another act of law.

However, no claim can be paid to any student without a social security number or a taxpayer identification number.
STUDENT’S RIGHT TO CANCEL

You have a right to cancel this enrollment agreement and obtain a refund of charges paid if notice of cancellation is received by NPU through attendance at the first class session, or the 7th day after enrollment, whichever is later. You shall provide notice of cancellation in writing through the MyNPU Student Portal using the following navigation links: My Requests > Non-Academic > Transfer Out/Withdrawal. Cancellation shall be effective when successfully submitted.

REFUND POLICY

Students who withdraw by the end of the first week of class in a period of attendance will receive a full refund. Following the first week of class and up through completion of 75 percent of the period of attendance, students may withdraw from NPU and obtain a pro rata refund of unearned institutional charges. The application fee and intent to report fee are non-refundable.

NPU shall refund any credit balance on the student’s account within 45 days after the date of the student’s completion of, or withdrawal from, the student’s educational program.

A withdrawal may be effectuated preferably by the student’s written notice, as described above under cancellation, or by the student’s conduct, including, but not necessarily limited to, a student’s lack of attendance, as further detailed below.

A student is deemed to have been withdrawn when any of the following occurs: (1) the student drops all enrolled courses in a period of attendance, (2) the student submits a written notice to withdraw through the portal, as described in the cancellation section, (3) NPU suspends or expels the student due to misconduct, unsatisfactory academic performance, or overdue fees, (4) NPU terminates an F-1 student for violation of U.S. Department of Homeland Security regulations, (5) the student fails to return from a leave of absence, or (6) the student, without prior approval, fails to attend four consecutive classes for all enrolled courses in a period of attendance.

A student that drops one or more courses, but not all courses, will receive a pro rata refund of tuition for the dropped courses.

Calculation of Refund

Refund amount = total paid by student – amount owed

Amount Owed = (total institutional charge/hours in program) * hours attended or scheduled to attend prior to withdrawal

MINIMUM TERMS FOR TUITION PAYMENTS

The student is only obligated for the portion of the program cost applicable to each trimester in which the student is enrolled in the school. The student must pay the school the applicable cost (i.e. trimester tuition, other required fees) at the time of registration, unless the student and school agree in writing to a tuition payment plan.

Students whose tuition/fees are overdue are subject to withdrawal from classes by the school. Students who fail to fulfill their financial obligations to the school may be suspended from school and may be considered for reenter only after full payment of the delinquent portion of their account unless the school has agreed in writing to a different payment arrangement.

Penalty: For any student whose tuition/fees are past due, a penalty of $20/month will be debited to the student’s financial account until his/her obligation is fulfilled.

If the student withdraws or is terminated from the program for any reason and subsequently applies to reenter the school, the school will determine in its sole discretion whether to allow the applicant to reenter. If the school allows the applicant to reenter, the student must execute a new enrollment agreement and pay all the current program costs.

PAYMENT PLANS

Eligibility

Generally, a student is eligible to enroll in a payment plan for any trimester after the first trimester. To apply for a payment plan, the student must clear all financial obligations pertaining to
or arising out of student’s prior trimester/s enrollment.

**Two Installments**

The first installment is due by the end of week 12 of the trimester prior to the trimester for which the payment plan is requested. The second installment is due by the end of week 6 of the trimester. For example, if a student is permitted to enroll in a payment plan for 2017 summer trimester, the first installment will be due by the end of week 12 of 2017 spring trimester, and the second installment will be due by the end of week 6 of 2017 summer trimester.

The first installment includes amounts for half of the tuition, the full health insurance premium, and all required fees. The second installment is for the remaining tuition.

**Payment Plan for Exceptional Circumstance**

A payment plan for students with exceptional circumstances may qualify for a customized payment plan. These plans are typically for those who are facing severe economic hardship. The student must provide evidence of severe economic hardship. Such examples are receipt of CalWORKs benefits or U.S. Citizenship and Immigration Services Employment Authorization based on severe economic hardship. These cases are reviewed on a case to case basis and approved sparingly.

**Payment Plan Enrollment and Withdraw**

Payment Plan Enrollment at the Time of Registration: Students enroll in a payment plan at the time of registration via the student portal. Eligible students may select and enroll in a payment plan without administration approval.

Later Payment Plan Enrollment: If a student wishes to enroll in a payment plan after registration, the student must (a) contact NPU Finance to have the plan manually added to the student’s account, (b) pay the payment plan service fee, and (c) pay or have paid an amount equal to or greater than the first installment amount.

Withdraw from payment plan: If a student wishes to withdraw from a payment plan, the student may do so prior to the first installment deadline by contacting NPU Finance to have the plan removed from the student’s account. At the time of withdraw from the payment plan, the student must pay or have paid an amount equal to or greater than the total amount owed by student to NPU for student’s registration. The payment plan service fee will be credited back to the student’s account.

**Failure to Pay Installments**

Failure to make timely payment of the first installment will result in automatic cancellation of a student’s registration. Students that fail to make timely payment of the second installment will be assessed a late fee. A student that fails to pay the second installment by the end of week 8 will be withdrawn from courses. Students with nominal balances may be given additional time to settle their accounts.

**Fee Amounts**

Please see the fee schedule for all payment plan related fees.

**DEBTS OWED TO THE UNIVERSITY**

Should a student or former student fail to pay a debt owed to the University, NPU may withhold permission to register, to use facilities for which a fee is authorized to be charged, to receive services and materials, or any combination of the above from any person owing a debt until the debt is paid (see Title 5, California Administrative Code, Sections 42380 and 42381). The University will withhold issuance of official transcripts of grades to any person owing a debt. If a student believes that he or she does not owe all or part of an unpaid obligation, the student should contact the campus Finance Office. The Finance Office will review the pertinent information, including any information the student may wish to present, and will advise the student of its conclusions with respect to the debt.

**SCHOLARSHIPS**

Tuition scholarships are offered to qualified applicants, current students, and NPU alumni. The NPU Scholarship Committee is responsible
for evaluating, selecting, and awarding scholarships.

President’s Scholarship (Bachelors)

Northwestern Polytechnic University grants a full tuition scholarship to approved qualified applicants in the bachelor’s programs.

Minimum Eligibility for Consideration:

- U.S. Citizen or U.S. Legal Permanent Resident.
- Applicants must be applying for bachelor’s degree in computer science (BSCS) or business administration and information sciences (BBAIS).
- Standard admission requirements; PLUS
  - Minimum cumulative grade point average (high school or any college level) of 3.30 on a 4.00 scale.
  - Personal Statement.
  - At least one letter of recommendation by a teacher or professor.
- The scholarship is limited to 30 students each trimester. Minimum eligibility does not guarantee a scholarship. The university reserves the right to deny an application for any reason.

Terms:

- 100% tuition scholarship.
- The distribution of the full tuition scholarship is based on the completion of the program entered and degree earned.
- Half of the tuition scholarship will be issued each trimester, which requires a student out-of-pocket expense of 50% of the tuition each trimester. The remaining tuition scholarship will be issued upon the student’s program completion and degree earned at NPU, which will be in a form of a reimbursement of the student’s out-of-pocket tuition payment.
- The student is required to pay fees (approximately $400 per trimester).
- The student is required to pay for health insurance (approximately $300) unless waived.
- The scholarship is valid for tuition payments only. The scholarship has no cash value. Any unused tuition scholarship will be forfeited.
- The tuition scholarship payments shall not exceed the program’s minimum total credits required for completion.
- The student is required to enroll in a minimum of 12 credits per trimester (unless eligible for a trimester break) and maintain a minimum trimester GPA of 3.30. In addition, a minimum grade of “C” is required in all courses.
- The program must be completed within 12 trimesters, excluding breaks.
- The student must maintain good standing with the university by upholding the university’s academic standards and integrity.
- If the student is unable to meet any of the terms, the tuition scholarship will be rescinded and no further tuition payments will be made by NPU including the reimbursement of any out-of-pocket tuition payments upon completion of the student’s program.
- The university reserves the right to rescind a scholarship if it deems the decision to be in the best interest of the university.

President’s Scholarship (Masters)

Northwestern Polytechnic University grants a full tuition scholarship to approved qualified applicants in the masters programs.

Minimum Eligibility for Consideration:

- U.S. Citizen or U.S. Legal Permanent Resident.
- Applicants must be applying for master’s degree in computer science (MSCS) or business administration (MBA)
- Standard admission requirements; PLUS
  - Minimum cumulative grade point average (undergraduate level) of 3.30 on a 4.00 scale.
  - Personal Statement.
  - At least one letter of recommendation by a professor.
- The scholarship is limited to 30 students each trimester. Minimum eligibility does not guarantee a scholarship. The university reserves the right to deny an application for any reason.
Terms:
- 100% tuition scholarship.
- The distribution of the full tuition scholarship is based on the completion of the program entered and degree earned.
- Half of the tuition scholarship will be issued each trimester, which requires a student out-of-pocket expense of 50% of the tuition each trimester. The remaining tuition scholarship will be issued upon the student’s program completion and degree earned at NPU, which will be in a form of a reimbursement of the student’s out-of-pocket tuition payment.
- The student is required to pay fees (approximately $400 per trimester).
- The student is required to pay for health insurance (approximately $300) unless waived.
- The scholarship is valid for tuition payments only. The scholarship has no cash value. Any unused tuition scholarship will be forfeited.
- The tuition scholarship payments shall not exceed the program’s minimum total credits required for completion.
- The student is required to enroll in a minimum of 9 credits per trimester (unless eligible for a trimester break) and maintain a minimum trimester GPA of 3.30. In addition, a minimum grade of “C” is required in all courses.
- The program must be completed within 4 trimesters, excluding breaks. Students requiring prerequisites may be eligible for up to an additional 2 trimesters depending on the circumstances.
- The student must maintain good standing with the university by upholding the university’s academic standards and integrity.
- If the student is unable to meet any of the terms, the tuition scholarship will be rescinded and no further tuition payments will be made by NPU including the reimbursement of any out-of-pocket tuition payments upon completion of the student’s program.
- The university reserves the right to rescind a scholarship if it deems the decision to be in the best interest of the university.

Academic Excellence Scholarship (Bachelors)

Northwestern Polytechnic University grants a 50% tuition scholarship to approved qualified applicants in the bachelors programs.

Minimum Eligibility for Consideration:
- U.S. Citizen or U.S. Legal Permanent Resident.
- Applicants must be applying for bachelor’s degree in computer science (BSCS) or business administration and information sciences (BBAIS).
- Standard admission requirements; PLUS
  - Minimum cumulative grade point average (high school or any college level) of 3.00 on a 4.00 scale.
  - Personal Statement.
  - At least one letter of recommendation by a teacher or professor.
- The scholarship is limited to 100 students each trimester. Minimum eligibility does not guarantee a scholarship. The university reserves the right to deny an application for any reason.

Terms:
- 50% tuition scholarship.
- 25% tuition scholarship will be issued each trimester, which requires a student out-of-pocket expense of 75% of the tuition each trimester. The remaining tuition scholarship will be issued upon the student’s program completion and degree earned at NPU, which will be in a form of a reimbursement of the student’s out-of-pocket tuition payment.
- The student is required to pay fees (approximately $400 per trimester).
- The student is required to pay for health insurance (approximately $300) unless waived.
- The scholarship is valid for tuition payments only. The scholarship has no cash value. Any unused tuition scholarship will be forfeited.
- The tuition scholarship payments shall not exceed the program’s minimum total credits required for completion.
- The student is required to enroll in a minimum of 12 credits per trimester.
(unless eligible for a trimester break) and maintain a minimum trimester GPA of 3.00. In addition, a minimum grade of “C” is required in all courses.

- The program must be completed within 12 trimesters, excluding breaks.
- The student must maintain good standing with the university by upholding the university’s academic standards and integrity.
- If the student is unable to meet any of the terms, the tuition scholarship will be rescinded and no further tuition payments will be made by NPU including the reimbursement of any out-of-pocket tuition payments upon completion of the student’s program.
- The university reserves the right to rescind a scholarship if it deems the decision to be in the best interest of the university.

шей Academic Excellence Scholarship (Masters)

Northwestern Polytechnic University grants a 50% tuition scholarship to approved qualified applicants in the masters programs.

Minimum Eligibility for Consideration:
- U.S. Citizen or U.S. Legal Permanent Resident.
- Applicants must be applying for master’s degree in computer science (MSCS) or business administration (MBA)
- Standard admission requirements; PLUS
  - Minimum cumulative grade point average (undergraduate level) of 3.00 on a 4.00 scale.
  - Personal Statement
  - At least one letter of recommendation by a professor.
- The scholarship is limited to 100 students each trimester. Minimum eligibility does not guarantee a scholarship. The university reserves the right to deny an application for any reason.

Terms:
- 50% tuition scholarship.
- 25% tuition scholarship will be issued each trimester, which requires a student out-of-pocket expense of 75% of the tuition each trimester. The remaining tuition scholarship will be issued upon the student’s program completion and degree earned at NPU, which will be in a form of a reimbursement of the student’s out-of-pocket tuition payment.
- The student is required to pay fees (approximately $400 per trimester).
- The student is required to pay for health insurance (approximately $300) unless waived.
- The scholarship is valid for tuition payments only. The scholarship has no cash value. Any unused tuition scholarship will be forfeited.
- The tuition scholarship payments shall not exceed the program’s minimum total credits required for completion.
- The student is required to enroll in a minimum of 9 credits per trimester (unless eligible for a trimester break) and maintain a minimum trimester GPA of 3.00. In addition, a minimum grade of “C” is required in all courses.
- The program must be completed within 4 trimesters, excluding breaks. Students requiring prerequisites may be eligible for up to an additional 2 trimesters depending on the circumstances.
- The student must maintain good standing with the university by upholding the university’s academic standards and integrity.
- If the student is unable to meet any of the terms, the tuition scholarship will be rescinded and no further tuition payments will be made including the reimbursement of any out-of-pocket tuition payments upon completion of the student’s program.
- The university reserves the right to rescind a scholarship if it deems the decision to be in the best interest of the university.

шей Dean’s Scholarship

NPU scholarships for new applicants are merit-based financial awards offered to qualified applicants interested in pursuing degree programs at NPU.

Qualifications are posted on the NPU website and, at a minimum, cumulative GPA from the official
transcripts received by the admissions office, resume, and scholarship application are the evaluation criteria. If the applicant’s native language is not English, official TOEFL/IELTS/PTE Academic score is an additional requirement. The required minimum scores for scholarship awards are: TOEFL - 90 (IBT), or 233 (CBT), or 577 (PBT); IELTS - 7.0 bands; PTE Academic - 61.

The scholarship application deadline for each term is in general three months before the term begins.

If the applicant is granted the scholarship, he/she will be awarded with a tuition scholarship of $500 per trimester for the first three trimesters, a cumulative tuition scholarship of $1,500, provided that the student enrolls full-time consecutively for the first three trimesters, maintains a CGPA of 3.30 or above for a graduate student and 3.00 or above for an undergraduate student in his/her study at NPU, and is in good standing with the University. The scholarship is applied towards tuition payment. No payments will be made directly to the student for any reason. Any refunds of tuition amount will not include scholarship awards. The scholarship is valid for tuition payments only. The scholarship has no cash value. Any unused tuition scholarship will be forfeited.

膦 Outstanding Student Scholarship

Tuition scholarships are awarded to current students in the fall trimester. Ten $1,000 scholarships are awarded to qualified students who are pursuing degrees at NPU. Application for the scholarship must be received by the Scholarship Committee by the deadline - June 30th. The following are the qualifications:

1. The student must have completed at least two trimesters of coursework towards his/her degree goal at NPU,

2. The student has maintained a cumulative GPA of at least 3.80 at NPU,

3. The student must be recommended by at least one faculty member for the scholarship award,

4. The student must be in good standing with the University,

5. The student must be a contributing member of the NPU Student Association or student extracurricular activities,

6. The student must be an active member in at least one professional society, and

7. The student is required to submit a Statement of Purpose and give a presentation in an open forum to clearly state the student’s academic goal, services provided to the community or fellow schoolmates, personal qualities and skills obtained, and other points that the student chooses to make. The Scholarship Committee is responsible for arranging the presentation schedule,

8. The scholarship is applied towards tuition payment. No payments will be made directly to the student for any reason. Any refunds of tuition amount will not include scholarship awards. The scholarship is valid for tuition payments only. The scholarship has no cash value. Any unused tuition scholarship will be forfeited.

膦 Outstanding Alumni Scholarships (Masters)

Full Tuition Scholarships

Northwestern Polytechnic University grants a full tuition scholarship to approved qualified applicants in the masters programs to NPU alumni.

Minimum Eligibility for Consideration:

- Applicants must be NPU alumni.
- Applicants must be enrolling to pursue a master’s degree in computer science, or electrical engineering, or business administration.
- Standard admission requirements; PLUS
  - A cumulative grade point average of 4.00 at NPU’s bachelor’s or master’s degree level.
  - A Personal Statement.
  - At least one letter of recommendation by NPU faculty.
An Interview with the scholarship committee.

- The scholarship is limited to 30 students each trimester. Minimum eligibility does not guarantee a scholarship. The university reserves the right to deny an application for any reason.

Terms:

- 100% tuition scholarship
- The distribution of the full tuition scholarship is based on the completion of the program entered and degree earned.
- Half of the tuition scholarship will be issued each trimester, which requires a student out-of-pocket expense of 50% of the tuition each trimester. The remaining tuition scholarship will be issued upon the student’s program completion and degree earned at NPU, which will be in a form of a reimbursement of the student’s out-of-pocket tuition payment.
- The student is required to pay fees (approximately $400 per trimester).
- The student is required to pay for health insurance (approximately $300) unless waived.
- The scholarship is valid for tuition payments only. The scholarship has no cash value. Any unused tuition scholarship will be forfeited.
- The tuition scholarship payments shall not exceed the program’s minimum total credits required for completion.
- The student is required to enroll in a minimum of 9 credits per trimester (unless eligible for a trimester break) and maintain a minimum trimester GPA of 3.70. In addition, a minimum grade of “B” is required in all courses.
- The program must be completed within 4 trimesters, excluding breaks. Students requiring prerequisites may be eligible for up to an additional 2 trimesters depending on the circumstances.
- The student must maintain good standing with the university by upholding the university’s academic standards and integrity.
- If the student is unable to meet any of the terms, the tuition scholarship will be rescinded and no further tuition payments will be made by NPU including the reimbursement of any out-of-pocket tuition payments upon completion of the student’s program.
- The university reserves the right to rescind a scholarship if it deems the decision to be in the best interest of the university.

Half-Tuition Scholarships

Northwestern Polytechnic University grants a 50% tuition scholarship to approved qualified applicants in the masters programs to NPU alumni.

Minimum Eligibility for Consideration:

- Applicants must be NPU alumni.
- Applicants must be enrolling to pursue a master’s degree in computer science, or electrical engineering, or business administration.
- Standard admission requirements; PLUS
  - A cumulative grade point average of 3.80 on a 4.0 scale at NPU’s bachelor’s or master’s degree level.
  - A Personal Statement.
  - At least one letter of recommendation by NPU faculty.
  - An Interview with the scholarship committee.
- The scholarship is limited to 100 students each trimester. Minimum eligibility does not guarantee a scholarship. The university reserves the right to deny an application for any reason.

Terms:

- 50% tuition scholarship.
- 25% tuition scholarship will be issued each trimester, which requires a student out-of-pocket expense of 75% of the tuition each trimester. The remaining tuition scholarship will be issued upon the student’s program completion and degree earned at NPU, which will be in a form of a reimbursement of the student’s out-of-pocket tuition payment.
• The student is required to pay fees (approximately $400 per trimester).
• The student is required to pay for health insurance (approximately $300) unless waived.
• The scholarship is valid for tuition payments only. The scholarship has no cash value. Any unused tuition scholarship will be forfeited.
• The tuition scholarship payments shall not exceed the program’s minimum total credits required for completion.
• The student is required to enroll in a minimum of 9 credits per trimester (unless eligible for a trimester break) and maintain a minimum trimester GPA of 3.70. In addition, a minimum grade of “B” is required in all courses.
• The program must be completed within 4 trimesters, excluding breaks. Students requiring prerequisites may be eligible for up to an additional 2 trimesters depending on the circumstances.
• The student must maintain good standing with the university by upholding the university’s academic standards and integrity.
• If the student is unable to meet any of the terms, the tuition scholarship will be rescinded and no further tuition payments will be made by NPU including the reimbursement of any out-of-pocket tuition payments upon completion of the student’s program.
• The university reserves the right to rescind a scholarship if it deems the decision to be in the best interest of the university.

30% Tuition Scholarships

Northwestern Polytechnic University grants a 30% tuition scholarship to approved qualified applicants in the masters programs to NPU alumni.

Minimum Eligibility for Consideration:

• Applicants must be NPU alumni.
• Applicants must be enrolling to pursue a master’s degree in computer science, or electrical engineering, or business administration.
• Standard admission requirements; PLUS
  • A cumulative grade point average of 3.50 on a 4.0 scale at NPU’s bachelor’s or master’s degree level.
  • A Personal Statement.
  • At least one letter of recommendation by NPU faculty.
  • An Interview with the scholarship committee.
• The scholarship is limited to 250 students each trimester. Minimum eligibility does not guarantee a scholarship. The university reserves the right to deny an application for any reason.

Terms:

• 30% tuition scholarship.
• 15% tuition scholarship will be issued each trimester, which requires a student out-of-pocket expense of 85% of the tuition each trimester. The remaining tuition scholarship will be issued upon the student’s program completion and degree earned at NPU, which will be in a form of a refund of the student’s out-of-pocket tuition payment.
• The student is required to pay fees (approximately $400 per trimester).
• The student is required to pay for health insurance (approximately $300) unless waived.
• The scholarship is valid for tuition payments only. The scholarship has no cash value. Any unused tuition scholarship will be forfeited.
• The tuition scholarship payments shall not exceed the program’s minimum total credits required for completion.
• The student is required to enroll in a minimum of 9 credits per trimester (unless eligible for a trimester break) and maintain a minimum trimester GPA of 3.70. In addition, a minimum grade of “B” is required in all courses.
• The program must be completed within 4 trimesters, excluding breaks. Students requiring prerequisites may be eligible for up to an additional 2 trimesters depending on the circumstances.
• The student must maintain good standing with the university by
upholding the university’s academic standards and integrity.

- If the student is unable to meet any of the terms, the tuition scholarship will be rescinded and no further tuition payments will be made by NPU including the reimbursement of any out-of-pocket tuition payments upon completion of the student’s program.
- The university reserves the right to rescind a scholarship if it deems the decision to be in the best interest of the university.

VA EDUCATIONAL ASSISTANCE

The University is authorized by the U.S. Veterans Administration (VA) to accept qualified veterans who receive veteran’s education benefits. In administrating student financial and academic affairs for veteran and military students, the University follows VA and related military regulations. A newly admitted student is required to submit a Certificate of Release or Discharge from Active Duty Form (Form DD-214). Please refer to the NPU website or contact the Administration Office for additional information.

STUDENT ON-CAMPUS OPPORTUNITIES

Limited on-campus openings are available on an as-needed basis to highly qualified degree-seeking candidates. Applications are submitted via the MyNPU Student Portal. Students may apply for positions such as Teaching Assistant (TA), Administrative Assistant, and Facility Assistant. These assistantships are offered primarily on the basis of outstanding academic and professional achievement. Students selected to perform these services must be diligent, demonstrate a strong work ethic, and be compassionate towards fellow students, in addition to meeting the academic qualifications.

PRACTICUM AND INDUSTRIAL COOPERATIVE PROJECTS

Practicum is a supervised practical experience that is the application of previously studied theory. Normally, three hours of work in a practical setting has the credit equivalency of one hour of classroom lecture. Under the supervision of a faculty or staff member, a written agreement shall be developed that outlines the arrangement between the institution and the practicum site, including specific learning objectives, course requirements, and evaluation criteria. Details of the qualifications are specified in the application process for the student. The supervising staff is responsible for checking the student’s qualifications.

International students must observe additional rules required by the U.S. Immigration & Customs Enforcement on Curricular Practical Training (CPT).
**ACADEMIC INFORMATION**

**Audio Plan**

Upon admission to a degree program, the new student receives a copy of his/her admission evaluation form which also includes his/her graduation requirements. The electronic file of the student’s study plan will be maintained by designated administrative staff as the student continues his/her study at NPU. The student will have access to his/her own study plan through his/her MyNPU student portal. The student is advised to check his/her online study plan regularly and report any error to the administrative staff immediately.

**Follow Proper Sequence:** In general, a student should complete lower-level courses before taking higher-level courses. A graduate student should clear all deficiencies before taking graduate level courses.

**Follow Original Plan:** A student should follow his/her original study plan to complete his/her study in the program. When courses are replaced due to a catalog update, the student should take the replacement courses as substitutes accordingly. The student may also submit an online request, via the MyNPU student portal, to “Request for Substitution of a Required Course” for each such update of a course.

**Use New Curriculum:** As the school catalog is updated each trimester, a student is allowed to submit a request for upgrading his/her study plan by using the graduation requirements specified in the newer and current catalog. The evaluation committee will make a new study plan for the student. The student may risk additional course requirements with such a request since the new requirements are different from the previous ones for the same program. The student is advised to make a careful decision before submitting such a request as the process is not reversible.

**Returning Student:** When a student returns to NPU to continue his/her study in an unfinished program after skipping more than one term, the returning student must submit a new application form. The student will receive a new study plan based on the graduation requirements specified in the current catalog. Applicable courses and credits earned in the unfinished program may be applied towards the new study plan.

**Academic Advising and Counseling**

Academic advising and counseling is an essential element of the educational process. Designated faculty members and staff advisors serve as academic advisors and counselors to the students. Academic advising and counseling involves both the student and the advisor/academic counselor.

Although online registration is available to the student, he/she is welcome to meet with an academic advisor before and during the course registration period each trimester. During the meeting, the advisor and the student will examine the student's study plan and academic records, verify course prerequisites, and choose suitable courses to enroll. Academic advising is also available to students throughout the school year. In addition to helping students plan course schedules, academic advisors may also encourage students to explore their academic options and personal goals in preparation for entering the professional world.

To ensure satisfactory progress of each student, designated administrative staff maintains close contact with the faculty and the teaching assistants to monitor those students who may need extra help. Class attendance records, available online to the managing staff, are used as one input for student counseling. The student is to be contacted for counseling when either of the following occurs: (1) The managing staff is informed by any instructor who is concerned about the student’s performance in the class at any checkpoint during the trimester, (2) the student has a poor attendance record, (3) the student is placed in academic-probation status.

**Class Schedule**

Classes are scheduled every trimester. The class schedule is published approximately 7-8 weeks before the trimester starts, and it falls on the timeline shortly after the mid-term point in the preceding trimester.

Many degree program classes, especially graduate courses, are conducted on weekday evenings and on Saturdays to allow both non-working students and working professionals to pursue their studies during after-work hours. A number of degree courses and most English Language classes are conducted on weekdays in the daytime. Since the
Learning Resource Center and the Student Center are open in both day and evening, full-time students may use weekdays’ daytime to study, conduct research, do homework, practice hands-on exercises in the labs or work on projects in the practicum labs, or get involved in extracurricular activities. Administrative personnel are available during office hours to assist students, faculty, and prospective applicants.

Addresses of Instruction

The addresses where the class sessions will be held are as follows:

**East Building:** 105-107 Fourier Ave., Fremont, CA 94539

**West Building:** 117-119 Fourier Ave., Fremont, CA 94539

**South Building:** 47655 Warm Springs Blvd., Fremont, CA 94539

**OEC Building:** 47613 Warm Springs Blvd., Fremont, CA 94539

**North Building:** 47102 Mission Falls Ct., Fremont, CA 94539

Registration

The registration calendar is listed in the University catalog and on the NPU website. The trimester registration notice is sent to the students by e-mail and posted on the NPU website and bulletin boards. The registration packages are available online as well as in the library. Late registration fees will be imposed on all continuing students who register after the official pre-registration deadline.

1. All applicants to NPU must first be admitted into the University by the Admissions Office before enrolling and attending classes.

2. Except for new students registering for courses in the first trimester, all on-going students must register on or before the scheduled pre-registration deadline for each trimester.

   *New students* who have received their acceptance documents are scheduled to register during the reporting and orientation period before the trimester starts.

3. All students are urged to register online. Designated staff advisors are ready to offer assistance to the students for course selection or counseling.

4. Tuition and fees are due and payable in full at the time of registration unless the student has signed up for a tuition payment plan. Tuition payment plans are not applicable to new international students in their initial registration for their first trimester of studies at NPU.

5. Working professionals who enjoy education benefits offered by their employers and receive tuition reimbursements may follow NPU’s special payment plan by submitting supporting documents to the NPU Administration Office prior to registration.

6. An undergraduate student wishing to enroll in more than 16 units and a graduate student in more than 12 units in a given trimester must obtain permission from the student's school dean. In order to submit such a request, the following requirements must be met:

   a. The student must have completed at least two trimesters of study in the current program (the grades from the second term have all been published), counting only program-specific credit courses;
   b. The student's CGPA in the current program: Undergraduate student - minimum CGPA of 3.5; graduate student - minimum CGPA of 3.7;
   c. The student did not fail any course in the past two trimesters in the program.

7. Students on academic probation may be advised to enroll with limited course load.

8. Any student attending a class without officially registering in the class will be required to pay a fine as defined by the administration.

9. An international student is required to enroll as a full-time student (see definition in the next section) and maintain good status with the University during his/her study at NPU.
10. All students are required to have a valid health insurance plan. They are required to purchase coverage under the NPU Student Aetna Health Insurance Group Plan and pay the insurance fee at registration time. Students with alternative U.S. based coverage may waive out of the plan if they satisfy all of the waiver eligibility criteria. To review the criteria, please see the waiver request page in the MyNPU student portal.

11. Students are required to undergo Tuberculosis (TB) testing prior to arriving on campus. The purpose is to maintain a healthy and safe campus for the NPU community. You will need to visit your primary care physician or a clinician prior to arriving at NPU. Required forms are available on the MyNPU student portal and on the website.

12. Registration is complete when all fees are paid.

13. Students with a prior bad-check record will not be allowed to pay by check again.

A non-international student may enroll as a full-time or part-time student.

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Credit Hour Policy

NPU follows federal guidelines regarding credit hours.

Pursuant to 34 C.F.R. §600.2, a credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than –

1. One hour of classroom or direct faculty instruction and a minimum of two hours of out of class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or

2. At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours.

One hour of classroom = One contact hour
One contact hour = 50 minutes of instruction

At NPU, students are expected to dedicate minimum nine hours a week to attending lecture, reading course materials, completing homework assignments, etc. for a three-unit course. For a two-unit course, students are expected to dedicate minimum six hours a week. For a one-unit course, students are expected to dedicate minimum three hours a week.

Full-Time Students

Undergraduate students taking 12 or more units per trimester and graduate students taking 9 or more units per trimester are considered full-time students for the enrolled term.

All international students must be enrolled as full-time students. In NPU’s trimester system, an international student is required to enroll full-time for two consecutive trimesters before being allowed to either take a trimester break or enroll with part-time course load for one trimester. The international students must observe the NPU class attendance policy, maintain satisfactory progress towards completion of their degree objectives, and maintain good status with the University. See an International Student Advisor in the Administration Office for information on how to maintain “full-time” status at NPU.

Part-Time Course Load

Undergraduate students taking less than 12 units per trimester and graduate students taking less than 9 units per trimester are considered taking part-time course load in the enrolled term.

Non-degree Students

A person may wish to take courses at NPU as a non-degree student. It is the non-degree student’s responsibility to prove that he/she meets the prerequisite requirement when enrolling in a course. Therefore, a non-degree student is advised to submit his/her previous academic records, official or unofficial, to the Admissions Office. Additionally, all non-degree students must at a minimum possess a high school diploma or equivalent certification.
A student pursuing a degree study may be placed in non-degree status when the student violates certain rules. Examples are: failure to submit official transcript or other required documents by a given deadline, failure to maintain satisfactory academic progress, failure to follow the student’s study plan. A student placed in non-degree status is required to remedy the flaw within a limited period of time. Violation of this limitation may result in termination of the student’s study at NPU.

Pre-degree Status

When a student is taking courses to clear background deficiencies and the enrolled subjects constitute a sizable portion of his/her course load in a trimester, the student is considered to be in pre-degree status for the trimester.

Change Study Status

In the event that the non-degree student decides to apply for degree study at NPU, he/she must go through the regular degree program application procedures. No more than 12 units earned in non-degree status at NPU may be applied to the degree requirements.

Academic Program Change

Current NPU students may request to change their program of study. This academic program change policy applies to both change of academic program and change of school (Business to Engineering, or vice versa).

- Students are permitted to change the program only once during their course of study at NPU.

- Students requesting to change schools must meet the admissions criteria specified by that school.

- Credits and grades earned from applicable courses taken at NPU in the original program may be applied towards the new program requirements. The grades are included in the cumulative grade point average (CGPA) calculation for the new program at the same degree level. The credits are excluded from the maximum program length (MPL).

- Students who are placed on academic probation must meet with their respective school dean to determine their eligibility to change programs.

Adding and Dropping Courses

After registering for a trimester, a student may add/drop courses by a deadline which is specified in the school calendar. Adding courses is allowed in the first week of the trimester and is on a space available basis. Only four Add/Drop requests (for one or multiple courses) are allowed by the add/drop deadline after each registration except for courses affected by cancellations made by the administration. A student may drop courses without records’ effect if it is made before the deadline – end of the first week of the trimester.

From the second through the fourteenth week of the trimester, a student may drop courses for serious and compelling reasons after discussing this with an academic counselor. The student will be issued a grade of “W”.

To add/drop courses, the student must:

1. Add/drop courses online if the online registration activity is open. Otherwise, meet with a staff advisor to add/drop courses. The Records Officers will review the add/drop request and approve or deny the request. International students must observe the “full-time” requirement.

2. Pay applicable fees (including Add/Drop fee except for courses affected by cancellations made by the administration).

The late registration fee is not assessed for courses added under this policy. Any refund for dropped courses will be calculated according to the Refund Policy.

No official withdrawal: Students who leave a course without official withdrawal (drop) are subject to a failing grade in the course.

Grading Policy and Academic Standards

- Grades
The instructors are requested to submit their trimester grades for their classes within one week after the last day of the trimester. An online grade entry system is used by the instructors to enter grades. Each student may check his/her own academic records online. Grades are not given out over the telephone. The following symbols shall be used in evaluating student performance. The symbols reflect the quality of the student’s accomplishments relative to standards set for each course.

- **A** = Highest level, showing excellence.
- **B** = Performance is good, but not at the highest level.
- **C** = Performance is adequate in an undergraduate course and passing in a master’s degree course.
- **D** = Performance is passing in an undergraduate course and failing in a graduate course.
- **F** = (Fail) Course requirements have not been met. Credits are not earned by the student.
- **I** = Incomplete grade is issued with approval by the faculty and the Records Office. Coursework was passing at the time. Completion of coursework and grade conversion must follow the academic policy in effect.
- **CR** = Credit by passing challenge examination.
- **S** = Satisfactory performance (for project/thesis/practicum courses only). Credits are earned by the student.
- **P** = Pass without credit. Student passed the course which was offered on pass/no-pass basis.
- **NP** = (Not pass) Student did not pass the course which was offered on pass/no-pass basis. No credit was earned.
- **IP** = (In progress) performance is satisfactory, but a final grade is not yet assigned.
- **AU** = (Audit) Student was enrolled on a non-credit basis.
- **W** = (Withdrawal) Student drops a course after the add/drop deadline.
- **NC** = (No credit) The student did not pass a challenge examination. Prior to May 1998 the grade NC might also be issued to a student taking an ESL course.
- **U** = (Unauthorized withdraw) The student did not withdraw from the course but failed to meet attendance and course requirements.
- *** = Course has been repeated.

Grades assigned by each course instructor conform to individual policies as stated in the published course syllabus. A grade submitted by an instructor is considered final and may be changed only for one of the following reasons:

1. Error in recording a score for a student product (test, quiz, paper, etc.)
2. Miscalculation of a score, including the cumulative score for a trimester.
3. Omission from consideration of valid student products that were submitted in time.

No other reason constitutes a basis for a request for grade change. All requests for grade changes must be submitted to the Records Office within two weeks following the date of issuance of the grade in question. Under no condition will a grade change be permitted after a degree has been awarded. A grade will not be changed after one trimester from the date of its issuance unless it has been repeated.

### Passing Grades

1. **Undergraduate Programs**
   In each undergraduate program, the passing grade for courses taken at NPU is D or better.

2. **Master’s Degree Programs**
   In each master’s degree program, C is the passing grade for each course taken to earn credit towards graduation. “A” to “C” level grades earned from undergraduate level courses or preparatory module courses to clear background deficiencies are considered meeting the requirement.

### Grade Point Average (GPA and CGPA)

The grade point average (GPA) is based on courses in which letter grades are earned. Instructors may add plus (+) or minus (-) options to letter grades in order to refine evaluation procedures. GPA may be calculated on trimester base or cumulatively (CGPA). **CGPA** is calculated based on all courses and grades earned to meet a degree program’s graduation requirements. To compute the GPA or CGPA, divide the total number of grade points by the total
number of units attempted in courses receiving letter grades. Use the table for grade point assignments.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>4.0</td>
</tr>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td>1.7</td>
</tr>
<tr>
<td>D+</td>
<td>1.3</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
</tr>
<tr>
<td>D-</td>
<td>0.7</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
</tr>
<tr>
<td>NP</td>
<td>0</td>
</tr>
<tr>
<td>NC</td>
<td>0</td>
</tr>
</tbody>
</table>

All other grading symbols receive no grade points, and units for those courses are excluded from computation for GPA or CGPA.

- **Incomplete**

In order to receive a grade of “I”, a student must have completed all homework and tests/quizzes to date, passed the mid-term exam, and have serious and compelling circumstances beyond the student’s control that occur within the last two weeks of the trimester preventing the student from taking the final exam or submitting the final project. Issuance of an “I” grade requires approvals from both the course instructor and the responsible Records Officer.

If approval is granted, an “I” grade will be issued to the student. The “incomplete” work **must be made up and a final grade issued by the instructor by the end of the 4th week of the following trimester.** An “F” grade will be issued to the student if an “I” grade is not cleared within the 4-week deadline.

- **Auditing Courses**

A student may audit a course instead of enrolling for credit. No credit is earned by the student and the grade symbol of “AU” is received by the student for auditing a course. NPU views auditing classes as an opportunity for students and alumni to review courses previously taken or to become informed about current information on a subject. The following categories of courses cannot be taken with auditing status: CPT (practicum), Intensive English Program (IEP) courses, lab courses, and project courses.

Priority will be given to students enrolled in a class for credit toward graduation. When enrollments in a class exceed the class limit, the University reserves the right to remove auditors from the registration list and refund tuition paid for the class.

A student may change his/her status from audit to credit or from credit to audit by the add/drop deadline by conducting a regular ADD/DROP process.

**Attendance**: A student enrolled in a class on audit status must observe the NPU attendance policy and rules set by the instructor although the student is not required to do homework or take exams given to the class.

- **Repetition of Courses**

A student may repeat a course due to several reasons: (a) To meet the graduation requirements on CGPA, (b) To earn a better grade for a subject, or (c) To gain a better understanding of the subject. In such cases, both grades will appear on the student's permanent record, but only the latest grade earned for the same course will be calculated towards the student's cumulative grade point average. When repeating a course, the student pays at the regular tuition rate.

1. **Undergraduates**

For purposes of academic renewal, any course taken to meet graduation requirements in which a failing grade was earned must be repeated.

2. **Graduates**

Master’s degree students who receive a grade of C- or below in a course taken to meet graduation requirements must repeat the course. Such a repetition is permitted for purposes of academic renewal.

- **Form of Instruction**

NPU offers its courses primarily “on-site” in traditional classroom setting and labs at the NPU campus in Fremont, California.

- **Attendance**
• **General Attendance Policy**

Attendance in class is required for all students, including those “auditing” a course. Students must attend all class meetings. If a student is absent, the student is required to complete class assignments as assigned and maintain communication with his/her instructors. Responsibility for class attendance rests with the individual student, and since regular and punctual class attendance is expected, the student must accept the consequence of failure to attend.

A student who fails to attend a total of three classes is required to meet with a counselor. A student who fails to attend a total of four classes or more may be withdrawn from the class based on the decision of the Attendance Committee.

A student who fails to attend four consecutive classes for all enrolled courses in a period of attendance shall be withdrawn from all courses.

• **Trimester Break**

All students who are eligible and wish to take a trimester break must register for a trimester break through their student portal. Students are allowed to take a break upon approval. Failure to comply with this procedure may lead to withdrawal from the University.

**Notice to International Students:** Failure to comply with this procedure will lead to withdrawal from the University and auto-termination of your SEVIS record.

• **Leave of Absence**

Students who are ineligible for a trimester break may request for a leave of absence, which must be formally requested through the student portal. The request must be approved by the administration before the leave is taken; otherwise, the student may be withdrawn from the university.

The maximum Leaves of Absence may not exceed a cumulative total of three trimesters during the course of study at that program level. Such Leave of Absence must be requested on a trimester basis. If the student fails to register for classes or fails to request an additional leave of absence prior to the initial leave’s end, the student will be withdrawn from the university.

**Notice to International Students:**

International students (F-1 immigration status) must follow immigration rules and thus should seek the advice of an international student advisor before taking a Short-Term Absence or a Leave of Absence. In general, students must maintain a full course of study to maintain their immigration status. A Short-Term Absence is considered a brief leave amounting to no more than three consecutive classes per course. A Short-Term Absence or a Leave of Absence must be formally requested through the student portal. Students must have a valid reason for the leave, and are required to inform their instructors and obtain permission. Administration must give final approval before the absence or leave is taken.

Students wishing to take a Leave of Absence, if ineligible for a trimester break, may only make such requests due to personal illness or medical condition, as per immigration rules. No other reasons are permitted. Per immigration rules, the maximum time allowed is a total of 12 months during the course of study at that program level.

**E Standards of Satisfactory Progress (SSP)**

NPU has a policy on satisfactory academic progress that measures whether students are maintaining satisfactory academic progress in their educational program. It requires each student to meet the minimum qualitative and quantitative components of the standards. When the student fails to maintain the standard at various checkpoints, the student will be placed in one of the following statuses: On Academic Probation, or Dismissal.

There are two primary factors affecting the student’s academic status: [1] Cumulative Grade Point Average (CGPA – refer to the subsection on GPA and CGPA in the section on Grading Policy and Academic Standards) and [2] Percentage of successful course completion of courses attempted.
Although currently NPU does not offer any government financial aid program, the term “financial aid” may be mentioned below for students’ information purposes. In order to state NPU’s policy of satisfactory academic progress, the terms of “Maximum Program Length” (MPL) and “Academic Year” must be defined:

- **Maximum Program Length (MPL)**

  Program length is the number of units required for the student to complete his/her program. It is determined at the time when the student’s admission evaluation has been made. The maximum program length is equal to 150% of the program length. The student is expected to successfully complete his/her degree program within his/her MPL in order to receive the academic credential/degree he/she is pursuing.

- **Academic Year**

  A period of two (2) trimesters is equivalent to one (1) academic year in evaluating the academic progress of a student.

- **Evaluation Points in the Student’s Academic Program**

  A student is evaluated at the end of every trimester and, at this point, the student’s CGPA determines whether the student should be placed in academic-probation status. In addition, at the checkpoints listed in the tables below, the combination of CGPA and the percentage of successful course completion of courses attempted determines whether the student maintains satisfactory academic progress or not. Each table shows that the required minimum percentage of successful course completion versus courses attempted increases as the student earns an increasing number of credits in the program.

- **Meeting Standards of Satisfactory Progress (SSP)**

  A student is considered meeting the standards of satisfactory progress if meeting the following requirements:

  **SSP Chart for Undergraduate Students**

<table>
<thead>
<tr>
<th>Evaluation Point (end of period)</th>
<th>Min. CGPA</th>
<th>Min. Successful Course Completion % of Courses Attempted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st academic yr</td>
<td>2.0</td>
<td>55%</td>
</tr>
<tr>
<td>2nd academic yr</td>
<td>2.0</td>
<td>60%</td>
</tr>
<tr>
<td>Subsequent yr</td>
<td>2.0</td>
<td>65%</td>
</tr>
</tbody>
</table>

  **SSP Chart for Graduate Students**

<table>
<thead>
<tr>
<th>Evaluation Point (end of period)</th>
<th>Min. CGPA</th>
<th>Min. Successful Course Completion % of Courses Attempted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st academic yr</td>
<td>3.0</td>
<td>60%</td>
</tr>
<tr>
<td>2nd academic yr</td>
<td>3.0</td>
<td>65%</td>
</tr>
<tr>
<td>Subsequent yr</td>
<td>3.0</td>
<td>75%</td>
</tr>
</tbody>
</table>

- **Effect of Grades on Satisfactory Academic Progress and Successful Course-Completion Percentage**:

  - **Withdrawal (W):**
    A student dropping a course after the add/drop deadline will receive a withdrawal (W) in that course. Withdrawals do not affect the trimester GPA or CGPA. Withdrawal from a course is counted as credits attempted but not completed.

  - **Incomplete (I):**
    An incomplete (I) grade is a temporary grade issued to a student who has completed all homework and tests/quizzes to date, passed the midterm exam, and have serious and compelling circumstances beyond the student’s control that occur within the last two weeks of the trimester preventing the student from taking the final exam or submitting the final project. Issuance of an “I” grade requires approval from the course instructor and the responsible Records Officer. The incomplete work must be made up by the end of the 4th week of the following trimester. An “F” grade will be issued to the student if an “I” grade is not cleared within the 4-week deadline. An “I” grade does not affect the trimester GPA or CGPA as this grade will change to a failing or a passing grade after the end of 4th of the following trimester.
- **Repeated Courses:**  
A "**" is assigned to the course that has been repeated. A student may repeat a course due to several reasons: (a) To meet the graduation requirements on CGPA, (b) To earn a better grade for a subject, or (c) To gain a better understanding of the subject. In such cases, both grades will appear on the student's permanent record, but only the latest grade earned for the same course will be calculated towards the student's CGPA.

- **Non-punitive Grades:**  
Non-punitive grades are assigned if  
a. the student withdraws from a course. A “W” grade is assigned to the course.  
b. the student is withdrawn from a course due to failure to meet attendance and course requirements. An “U” grade is assigned to the course.  

These grades do not affect the trimester GPA or CGPA. These courses are counted as credits attempted but not completed.

- **Non-Credit Courses:**  
The grades of P (pass without credit), AU (audit), and non-credit courses do not count for credit attempted nor completed. These grades have no effect on the calculations of trimester GPA or CGPA, or percentage of successful course completion. Examples of non-credit courses are: Intensive English Program (IEP) courses and business preparatory module courses (courses numbered as PBUS05 through PBUS06).

- **Changing Academic Programs:**  
Credits and grades earned from applicable courses taken at NPU in the original program may be applied towards the new program requirements. The grades are included in the CGPA calculation for the new program at the same degree level. The credits are excluded from the maximum program length (MPL).

- **Earning an Additional Credential/Degree:**  
a. Students Starting a New Program in the Same Degree Level - Credits and grades earned from applicable courses taken at NPU may be applied towards the new program requirements. The grades are included in the CGPA calculation for the new program at the same degree level.  
b. Students Starting a Master’s Degree after Earning a Bachelor’s Degree at NPU/Other Institutions: Grades and credits earned at a bachelor’s degree level are not applied towards the master’s degree.

- **Transfer of Credits from Other Institutions:**  
Credits transferred, performed at the time of admission evaluation, will reduce the program length. Credit transferred from any outside institution is excluded from the maximum program length and has no effect on the calculation of the student’s GPA or CGPA.

- **Deficiency Courses:**  
A graduate student may be required to take undergraduate course subjects to clear background deficiencies. These course units are not included in the student’s program length and do not affect the MPL; the credits and grades of these courses do not affect the student’s CGPA.

- **Academic Probation**  
The following students are placed on academic probation:  

1. In any trimester, an undergraduate student’s CGPA is below 2.0, or a graduate student’s CGPA is below 3.0,  
2. Students who fail to meet the Standard of Satisfactory Progress at checkpoints listed in the two SSP charts above.

- **Maximum Terms of Academic Probation**  
1. Bachelor’s Students: A student placed on academic probation must remedy the
condition within two trimesters (excluding trimester breaks or approved leave of absence). A student that reenters into academic probation must remedy the condition within one trimester.

2. Master’s Degree Students: A student placed on academic probation must remedy the condition within one trimester (excluding trimester breaks or approved leave of absence). A student that reenters into academic probation must also remedy the condition within one trimester.

Rule Related to Financial Aid (for information only): A student receiving federal financial aid who does not meet the CGPA standards at the end of the second year will no longer be eligible for financial aid, may not be placed on probation, and must be dismissed, unless the student wishes to continue without being eligible for federal financial aid. However, a student not meeting the CGPA standards at the end of the second year may remain as an enrolled student who is eligible for federal financial aid if there are documented mitigating circumstances (i.e. death in the family, sickness of the student, etc.).

• Removing Academic Probation Status

A student who is able to remedy the condition and reestablish satisfactory progress within the terms specified in the above section of Maximum Terms of Academic Probation will be removed from academic probation. Observations will be made on the student every trimester thereafter.

• Counseling

Students are required to seek academic counseling immediately upon entering academic probation. While in academic probation, students are required to attend at least one counseling session per trimester or as often as required by the Counselor.

• Academic Probation Committee

1. Bachelor’s Students: An Academic Probation Committee will convene to review a student’s progress following the second trimester after the student entered into academic probation. In the case of a student reentering academic probation, an Academic Probation Committee will convene to review a student’s progress following the first trimester after the student reentered into academic probation. In either case, the committee shall decide whether the student may continue to remedy the condition for an additional trimester.

2. Master’s Students: An Academic Probation Committee will convene to review a student’s progress following the first trimester after the student entered/reentered into probation. The committee shall decide whether the student may continue to remedy the condition for an additional trimester.

• Dismissal

A student will be dismissed from the university if:

1. The Academic Probation Committee’s decision is to dismiss the student.

2. The student is unable to remedy the condition in the additional trimester provided by the Academic Probation Committee.

• Appealing Academic Probation Status or Dismissal

A student who has been placed on probation or dismissal and disagrees with the finding may appeal according to the grievance procedures set forth in this catalog and posted on the MyNPU student portal. The Administration Office will hold a hearing and make a decision on the probation/dismissal.

Examinations

NPU has different types of examinations:

• Course Examinations

Most courses at the University have at least two examinations in a trimester: a midterm and a final. These examinations may be comprehensive or partially comprehensive, so students need to ascertain from their instructors the precise scope of the examinations. Course examinations can consist of information found in the textbook, outside reading, and the lectures; thus, students should review and synthesize all of the course material. Furthermore, the structure of course examinations can be a combination of essay, multiple-choice answers, and short answers. At the end of each trimester, the students are required to take final examinations.
- **Examination for Challenging a Course**

NPU recognizes that exceptional undergraduate students, for example, by reason of independent studies or overlapping course work, may have achieved the learning objectives of a course. Therefore, undergraduate students with the course background may petition to receive credit for the course by completing a “Challenge Examination”.

Students wishing to challenge a course by examination must enroll for the course and pay tuition fees in the same manner as courses to be completed by regular class attendance.

The course to be challenged must be:
- listed on the schedule of classes for the trimester; and
- numbered at or below 350 level.

**How many challenge exams can I take?**
- A student may request up to 2 challenge exams per trimester.
- The maximum number of requests to take a challenge exam is five courses with the corresponding labs, if any (whether pass or fail), for the entire duration of the program study.

**How do I submit my request?**
- A formal online petition, via the MyNPU student portal, for challenge must be submitted to the Records Office at the time of registration, which must be before the beginning of the trimester.
- Permission from the academics team and the dean of the program is required.
- A fee per examination for the challenged course is charged to the student.

- **Proficiency Examinations**

Graduate students who have knowledge of a background (undergraduate) subject but have not taken a course in the subject may clear the background requirement by taking a proficiency examination. The proficiency exam should be taken early enough to satisfy the “prerequisite” requirement for higher-level courses.

An undergraduate student may be required to take a proficiency examination on a major subject if the subject was taken more than ten years ago and the student has not had relevant experience in the subject for ten years.

New graduate students in the business program who took the following courses in foreign countries may be required to take proficiency examinations on these subjects: accounting, finance, economics, marketing, and business law.

**Passing the Test:** The instructor giving the proficiency examination grades the test and determines whether the student passes the test or not. A non-refundable fee is charged to the student for taking a proficiency examination. The student is allowed to apply for taking a proficiency examination on a subject only once. If the student misses a pre-scheduled proficiency examination, the exam fee is non-refundable and the student loses his/her chance of taking the examination on the subject.

- **Teaching Assistants**

Each trimester, designated administrative staff assign Teaching Assistants (TAs) to assist faculty teaching in a number of courses. TAs are assigned based on class/course requirements and needs. Under designated faculty supervision, TAs provide additional assistance to students to support their learning. These services are provided by the University to the students free of charge.

- **Graduation**

- **Bulletin Requirements**

The NPU catalog serves as the school's contract with the students. Therefore, students fall under the graduation requirements written in the catalog used at the time of the student’s entrance to the program as a degree-seeking student. The section on “Study Plan” in “Academic Information” describes the rules for the student to follow for the graduation requirements.

- **Petition to Graduate**

As a student approaches the end of his/her undergraduate/graduate study, he/she must initiate a review process for the Records Officers to verify the student’s eligibility for graduation. The student must file an online petition one trimester in advance - prior to his/her last registration – by using the MyNPU student portal to submit this request. The Records Office staff
will then make a graduation evaluation in time for the petitioner to register for the last time before graduation. The student will receive his/her evaluation report to confirm the courses left for him/her to complete in order to meet his/her graduation requirements. A graduation fee is charged for each graduation petition.

- Re-petition to Graduate

A student is required to resubmit the request and pay a re-petition fee after filing the original graduation request if any of the following occurs:

1. If the petition for graduation is denied.
2. If the student is unable to complete the rest of his/her coursework by the approved graduation date.
3. If the student decides to make a change to his/her graduation requirements by adopting the requirements specified in the current catalog (a new admission evaluation and study plan will be made for the student) which results in additional course work for the student.
4. If an international student wishes to enrich his/her knowledge and skills by taking courses in addition to the minimum graduation requirements beyond the approved graduation date, (4) NPU terminates an F-1 student for violation of U.S. Department of Homeland Security regulations, (5) the student fails to return from a leave of absence, or (6) the student, without prior approval, fails to attend four consecutive classes for all enrolled courses in a period of attendance when the student is required to remain enrolled to maintain his/her academic status, or (7) the student has not enrolled at NPU for two consecutive trimesters or more.

A re-evaluation of the student’s graduation requirements will be made and a new checklist will be provided to the student.

Students are responsible for compliance with the announcements and regulations specified in the catalog and with all policies, rules and regulations of the University. Upon completion of their study programs and fulfilling their financial obligations to the University, students are granted degrees and receive diplomas.

- Completion of a Program

The trimester in which a student fulfills the graduation requirements, including course requirements, project completion (if applicable), and any financial obligations, is the trimester the student graduates and is the date that is shown on the diploma.

The student will not have his/her degree awarded or diploma or transcript released until all university fees have been paid, library records cleared, and an online exit survey conducted.

**Enrollment in the Last Trimester:** A student must be enrolled at NPU in the trimester he/she graduates.

 Withdrawal from the University

A student is deemed to have been withdrawn when any of the following occurs: (1) the student drops all enrolled courses in a period of attendance when the student is required to remain enrolled to maintain his/her academic status, (2) the student submits a written notice to withdraw through the portal, as described in the cancellation section, (3) NPU suspends or expels the student due to misconduct, unsatisfactory academic performance, or overdue fees, (4) NPU terminates an F-1 student for violation of U.S. Department of Homeland Security regulations, (5) the student fails to return from a leave of absence, or (6) the student, without prior approval, fails to attend four consecutive classes for all enrolled courses in a period of attendance when the student is required to remain enrolled to maintain his/her academic status, or (7) the student has not enrolled at NPU for two consecutive trimesters or more.

The student must clear his/her financial obligation to the school as well as his/her library records upon withdrawal from the University.

Withdrawal during the first week of a trimester will not be recorded on the permanent transcript. For withdrawal after the first week and before the final exams, a “W” grade for each enrolled course is posted on the permanent transcript. A student withdrawing from the University without formal notification to the Records Office is subject to a “U” grade which is posted on the permanent transcript.

Refer to the “Refund Policy” section for the policy on refunds for students withdrawing from NPU. Students who withdraw from NPU without clearing their financial balances will not be issued their official transcripts.

- Re-entry to NPU

Any student who withdraws from NPU and is absent for more than one trimester before resuming studies at a later date must submit a new
Application for Admissions online, and the student falls under the admissions and graduation requirements in effect at the time of reentrance.

- **International Students**

International students who plan to transfer to another institution must follow the transfer rules published by the U.S. Citizenship and Immigration Services.

- **Notice Concerning Transferability of Credits and Credentials Earned at our Institution**

The transferability of credits you earn at NPU is at the complete discretion of an institution to which you may seek to transfer. Acceptance of the degree or certificate you earn in the educational program is also at the complete discretion of the institution to which you may seek to transfer. If the credits and degree or certification that you earn at this institution are not accepted at the institution to which you seek to transfer, you may be required to repeat some or all of your coursework at that institution. For this reason, you should make certain that your attendance at this institution will meet your educational goals. This may include contacting an institution to which you may seek to transfer after attending NPU to determine if your credits and degree or certification will transfer.

**EDUCATIONAL RECORDS**

Northwestern Polytechnic University has adopted the following policies and procedures regarding student records.

- **Definitions**

1. Student: any person who attends or has attended NPU.
2. Education Records: any record maintained by the school, which is directly related to a student; except: sole possession records, employment records, school security records, counseling records, and alumni records.

- **Student Rights**

Students have a right to inspect education records within forty-five days of submission of a written request to the registrar’s office, except for the financial records of the student’s parent and confidential recommendations to which the student has waived access. When a record contains information about more than one student, the student may only inspect the portion pertaining to the student.

Students may obtain copies of education records upon payment of a reproduction fee. However, NPU reserves the right to deny copies of education records if the student has an unpaid financial obligation to NPU, or if there is an unresolved disciplinary action against the student.

Students may request that NPU amend an education record that the student believes is inaccurate, misleading, or in violation of their privacy rights. All such requests must be made in writing to the registrar’s office, and clearly identify the part of the record that the student would like to amend and specify why the record should be amended. If NPU decides not to comply with the request, NPU will notify the student of the decision, advise the student of his or her right to a hearing, and provide additional information regarding the hearing.

- **Directory Information**

NPU may at its discretion disclose the following types of directory information without consent: name, address, email address, phone number, birth date, birth place, major field of study, participation in recognized activities and sports, dates of attendance, degrees, honors, and awards received, the most recent previous educational institution attended, and photographs.

Upon receipt by the registrar’s office of a written request to withhold directory information, NPU will withhold disclosure of all directory information indefinitely. Please note that in such circumstance (1) the student’s information will not appear in any commencement materials, (2) NPU will inform employers, credit card companies, scholarship committees, and other requesters looking to verify enrollment or degree
information that NPU has no information available about the student’s attendance at NPU, (3) NPU has no duty to contact the student to request permission to release the directory information, and (4) NPU shall not be responsible or liable for any consequences arising from or related to withholding directory information. A student may revoke the hold by submitting a written request to the registrar’s office.

Disclosure

In addition to directory information, NPU may release, without prior written consent, information from an education record to school officials with a legitimate educational interest. Education records may also be shared with parties outside of NPU in certain circumstances, including, for example, (a) to other schools, in which the students seeks or intends to enroll; (b) to federal, state, and local authorities in connection with certain state or federally supported education programs; (c) to DHS or ICE in connection with SEVIS requirements; (d) to accrediting agencies; (e) to parents that claim the student as a dependent; (f) in connection with financial aid; (g) to comply with a judicial order or lawfully issued subpoena; (h) to appropriate parties in a health or safety emergency; (i) the results from a disciplinary proceeding to an alleged victim of a crime of violence or sexual assault; or (j) to organizations conducting studies for or on behalf of NPU.

RECORDKEEPING POLICY

Northwestern Polytechnic University (“NPU”) takes seriously its obligations to preserve information, documentation and records.

1. Custodian of Records.

The Custodian of Records for student academic records is the Registrar and the Custodian of Records for student financial records is the Chief Financial Officer.

2. Required Student Records.

NPU shall maintain the following records for each student who is enrolled in an educational program at NPU:

   a. The name;
   b. Address;
   c. E-mail address; and
   d. Telephone number.

NPU shall maintain, for each student granted a degree or certificate by that institution, permanent records of all of the following:

   a. The degree or certificate granted and the date on which that degree or certificate was granted.
   b. The courses and units on which the certificate or degree was based.
   c. The grades earned by the student in each of those courses.


NPU shall maintain, for a period of not less than five years, at its principal place of business in this state, complete and accurate records of all of the following information:

   a. The educational programs offered by NPU and the curriculum for each.
   b. The names and addresses of the members of the institution’s faculty and records of the educational qualifications of each member of the faculty.
   c. Any other records required to be maintained by this chapter, including, but not limited to, records maintained pursuant to Article 16 of the California Private Postsecondary Education Act of 2009 regarding Completion, Placement, Licensure, and Salary Disclosure information.

4. Student Records.

NPU shall maintain a file for each student who enrolls whether or not he student completes the educational service.

In addition to the information required in Paragraph 2, the file shall contain all of the following pertinent student records:

   a. Written records and transcripts of any formal education or training, testing, or experience that are relevant to the student's qualifications for admission or the award of credit or acceptance of transfer credits including the following:
i. Verification of high school completion or equivalency or other documentation establishing the student's ability to do college level work, such as successful completion of an ability-to-benefit test;

ii. Records documenting units of credit earned at other institutions that have been accepted and applied by the institution as transfer credits toward the student's completion of an educational program;

iii. Grades or findings from any educational achievement used for admission or college placement purposes;

b. Personal information regarding a student's age, gender, and ethnicity if that information has been voluntarily supplied by the student;

c. Copies of all documents signed by the student, including contracts, instruments of indebtedness, and documents relating to financial aid;

d. Records of the dates of enrollment and, if applicable, withdrawal from the institution, leaves of absence, and graduation; and

e. A transcript showing all of the following:
   i. The courses or other educational programs that were completed, or were attempted but not completed, and the dates of completion or withdrawal;
   ii. Credit for courses earned at other institutions;
   iii. Credit based on any educational achievement used for admission or college placement purposes;
   iv. The name, address, website address, and telephone number of the institution.

f. For independent study courses, course outlines or learning contracts signed by the faculty and administrators who approved the course;

g. The dissertations, theses, and other student projects submitted by graduate students;

h. A copy of documents relating to student financial aid that are required to be maintained by law or by a loan guarantee agency;

i. A document showing the total amount of money received from or on behalf of the student and the date or dates on which the money was received;

j. A document specifying the amount of a refund, including the amount refunded for tuition and the amount for other itemized charges, the method of calculating the refund, the date the refund was made, and the name and address of the person or entity to which the refund was sent;

k. Copies of any official advisory notices or warnings regarding the student's progress; and

l. Complaints received from the student.


As of the Fall 2015 term, NPU implemented policies to minimize paper forms for recordkeeping. Therefore, most, if not all, information and documents for student recordkeeping are now stored in electronic form. All information and documents received are inputted into the Campus Management System ("CAMS") and/or scanned into CAMS or the designation network folder, as applicable. Electronic documents will be retained as if they were paper documents. Therefore, any electronic files will be maintained for the appropriate amount of time.

NPU shall maintain all records required by law. NPU shall maintain for a period of 5 years the pertinent student records from the student's date of completion or withdrawal.

NPU is not required to maintain records relating to federal financial aid programs since NPU does not offer federal financial aid.

A record is considered current for three years following a student's completion or withdrawal. A record may be stored on microfilm, microfiche, computer disk, or any other method of record storage only if all of the following apply:

a. The record may be stored without loss of information or legibility for the period within which the record is required to be maintained;

b. For a record that is current, NPU maintains functioning devices that can immediately reproduce exact, legible
printed copies of stored records. The devices shall be maintained in reasonably close proximity to the stored records at NPU’s primary administrative location in California. For a record that is no longer current, NPU shall be able to reproduce exact, legible printed copies within two (2) business days.

c. NPU has personnel scheduled to be present at all times during normal business hours who know how to operate the devices and can explain the operation of the devices.

6. BPPE Student Tuition Recovery Fund Assessment Record Keeping Requirements

NPU shall collect and maintain records of student information to substantiate the data reported on the STRF Assessment Reporting Form and records of the students’ eligibility under the Fund. Such records shall include the following for each student:

   i. Student identification number,
   ii. First and last names,
   iii. Email address,
   iv. Local or mailing address,
   v. Address at the time of enrollment,
   vi. Home address,
   vii. Date enrollment agreement signed,
   viii. Courses and course costs,
   ix. Amount of STRF assessment collected,
   x. Quarter in which the STRF assessment was remitted to the Bureau for Private Postsecondary Education (“Bureau”),
   xi. Third-party payer identifying information,
   xii. Total institutional charges charged, and
   xiii. Total institutional charges paid.

NPU shall maintain the data required under this section in an electronic format that is readily available and open to inspection by the Bureau upon request. The institution shall make the records immediately available to a Bureau representative conducting a site inspection or, upon written request, shall provide a copy within 14 calendar days of the request. All records shall be provided to the Bureau in an intelligible and orderly manner and in an electronic format.

7. Security and Safekeeping

NPU’s records will be stored in a safe and secure manner.

All information and documents in paper form that are within the retention period are keep secured in fireproof safes locked in file rooms located in the Administration Building. The doors to these rooms remain locked at all times. Unauthorized personnel may not enter these Student File Rooms. Documents removed from the Student File Room must be checked out by the person removing the document and maintained by that person in a secured manner until its prompt return.

All information and documents in electronic form are stored in the Campus Management System (“CAMS”) and/or designated network folders. All data should be backed up. Currently, two backup systems are in place: 1) a local backup performed nightly and 2) a remote backup performed weekly.

8. Length of Record Retention.

Student records for all students are kept for five years; they include both academic and financial information.

9. Student’s Right to Inspect and Review Records

Students have a right to inspect education records within forty-five days of submission of a written request to the registrar’s office, except for the financial records of the student’s parent and confidential recommendations to which the student has waived access. When a record contains information about more than one student, the student may only inspect the portion pertaining to the student.

Students may request copies of education records. However, NPU reserves the right to deny copies of education records if the student has an unpaid financial obligation to NPU, or if there is an unresolved disciplinary action against the student.

Students may request that NPU amend an education record that the student believes is inaccurate, misleading, or in violation of their privacy rights. All such requests must be made in writing to the registrar’s office, and clearly identify the part of the record that the student would like to amend and specify why the record should be amended. If NPU decides to not comply with the request, NPU will notify the student of...

The Compliance Department is responsible for the ongoing process of identifying its records, which have met the required retention period, and overseeing their destruction. Destruction of financial and personnel-related documents will be accomplished by shredding.

11. Legal Hold.

From time to time, the President may issue a notice, known as a “legal hold,” suspending the destruction of records due to pending, threatened, or otherwise reasonably foreseeable litigation, audits, government investigations, or similar proceedings. No records specified in any legal hold may be destroyed, even if the scheduled destruction date has passed, until the legal hold is withdrawn in writing by the President.

12. Compliance.

Failure on the part of employees to follow this policy can result in possible civil and criminal sanctions against NPU and its employees and possible disciplinary action against responsible individuals. The President and the Compliance Department will periodically review these procedures to ensure that they are in compliance with new or revised regulations.

ACADEMIC INTEGRITY POLICY

Honesty and integrity are the virtues that NPU holds in high regards. Students are expected to uphold high moral standards in the pursuit of their academic degree, as well as their professional career. NPU encourages the students to exercise them as a part of their daily lives, not only while they are at the university or because they are required to do so.

NPU takes the acts of academic misconduct very seriously. A student who violates the university’s policy is deemed dishonest and is subject to appropriate disciplinary actions. For an international student, the consequence may adversely impact one’s immigration status and possibly result in a dismissal from the university and the United States.

1. Definition of Academic Integrity

Integrity is the quality of being honest and having strong moral principles. Students should take pride in earning their grades and degrees through dedication, hard work, and honesty. This means knowing and following the ethical standards when making decisions and completing one’s work. Both the faculty members and the students share the responsibility of maintaining the academic integrity to ensure that the university degrees and the public trust are not compromised.

2. Types of Academic Misconducts

Academic misconducts are strictly prohibited by the university and are dealt with in diligent manner. Students should avoid committing such acts and learn the proper conducts for accomplishing required tasks. The followings are the common forms of academic dishonesty and their implications.

2.1 Plagiarism

Plagiarism is the practice of taking someone else’s ideas, designs, or body of work and representing them as one’s own without giving proper credit.

The act of plagiarism includes but not limited to:

a) Failing to give credit to the source of work, ideas, designs, or written materials (including excerpts from such materials), and claiming as one’s own work

b) Utilizing computer programs, user interface designs, images, photographs, charts, diagrams, figures, or similar work created by someone else without giving credit or receiving a permission

Proper credits should be given to the originator of the materials used in academic work. Students have a duty to learn and apply the appropriate methods for citing and referencing the source of information. In addition, copyrighted materials should not be reproduced and used without permission.
2.2 Cheating

Cheating is obtaining or attempting to obtain credit for academic work through dishonesty, deception, or fraud. Whether one commits the act oneself or helps others to perform such infraction, both parties are considered responsible for cheating. True learning is accomplished by performing one’s own work honestly and diligently.

Cheating includes but not limited to:

a) Copying (either in part or in whole) course work such as homework assignments, quizzes, exams, projects, reports, data, etc.

b) Allowing or aiding another person to copy course work as stated above in any form

c) Collaborating with other people on a course work without an expressed consent from the instructor

d) Submitting work used in another course either from the previous or the current trimester, unless expressly approved by the course instructor

e) Submitting work done by another person in any form or manner (paid or unpaid)

f) Using unauthorized materials or equipment during a quiz or an exam

g) Communicating or passing information during a quiz or an exam

h) Taking a quiz or an exam by using or acting as a surrogate for another person

i) Impersonating as or for someone else in the classroom for attendance or other purposes

j) Obtaining unauthorized copies (written or photographed) of course materials for one’s own use or for someone else

Students should understand the differences between collaborating, helping, and cheating. Working together (if permitted by the instructor) to achieve a common goal or assisting a fellow student to learn and be able to complete the work by himself/herself is honorable. Providing answers or committing acts identified above as cheating is dishonest.

2.3 Falsification/Misrepresentation

Providing falsified information or misleading statements to the professor, TA, or administrative staff is considered a breach of the policy. Students must provide truthful information and answer questions honestly.

2.4 Sabotage

One should not obstruct or stop another student from completing a course work for a personal gain or advantage.

2.5 Coercion/Intimidation

Faculty, TAs, and staffs shall be treated with respect and be allowed to perform their work without improper interference. It is unacceptable for a student to pressure or intimidate another person into awarding a favorable grade or helping to circumvent the proper requirements. NPU does not tolerate such behavior and may impose strict penalties if such incidents occur.

2.6 Gross Transgression

Gross transgression occurs when a student commits a serious violation, which can lead to dismissal from the university. This includes but not limited to:

a) Gaining or attempting to gain unauthorized access to documents, electronic files/records, or IT properties that belong to the university or the faculty

b) Presenting falsified documents to NPU administration

c) Interfering with the grading process or alteration of records

d) Stealing data or information from the university, the instructor, or the TA

e) Destroying/Altering documents, records, or equipment in order to cover up any wrongdoings or to impede the investigation process

f) Inflicting physical or psychological harm to another person in an attempt to commit any type of academic dishonesty

3. Roles and Responsibilities

Faculties and students play important roles in advocating and upholding the academic integrity.

3.1 Student

The student’s responsibilities are to:

a) Read and understand the academic integrity policy

b) Comply with the stated rules and policies at all time

c) Not commit any sort of academic
misconduct, deliberately or not
d) Not participate, assist, or enable others in actions that result in a breach of the policy
e) Report any knowledge of activities that violate the policy
f) Know the consequences of taking part in academic dishonesty

3.2 Faculty

The faculty’s roles in enforcing the policy are to:

a) Ensure that the students are aware of the academic integrity policy and understand its importance
b) Make every reasonable efforts to prevent any form of cheating or plagiarism in the class
c) Decide the appropriate disciplinary action for the student who commits academic misconduct
d) Maintain adequate records of the incidents
e) Report to the university administration if an incident is deemed severe (morally reprehensible) or if the student is a repeat offender

4. Disciplinary Actions

Professors and administrative staff shall have the discretion and latitude to determine what acts qualify as academic misconduct and to decide the proper disciplinary actions for the student who violates the policy.

An offense is an incident or an attempt of academic dishonesty. These offenses shall be documented as a permanent part of students’ records, and the number of offenses shall be determined based on overall records (not on a per course basis).

Subject to the frequency (number of offenses) and severity of the infractions, the academic sanctions may result in:

a) A stern warning from the professor with the offense being noted on record
b) No credit or score being awarded for the particular assignment, quiz, or exam
c) An “F” grade for the entire course
d) Requirement to perform community services
e) Dismissal from the university

STUDENT DISCIPLINE

Inappropriate Conduct

Inappropriate conduct by students or by applicants for admission is subject to disciplinary action up to and including dismissal from or denial of admission to the university. The following is a non-exhaustive list of examples of inappropriate conduct:

(a) Forgery, alteration, or misuse of campus documents, records, or identification, or knowingly furnishing false information to the University.

(b) Violation of any federal, state, or local law.

(c) Misrepresentation of oneself, another individual, or of an organization to be an agent of the university or another institution.

(d) Obstruction or disruption of the campus educational process, administrative process, or other campus function, whether on or off campus.

(e) Physical abuse on or off campus of the person or property of any member of the campus community or of members of his or her family, or the threat of such physical abuse.

(f) Theft of, or non-accidental damage to, campus property or property in the possession of, or owned by, a member of the campus community.

(g) Unauthorized entry into, unauthorized use of, or misuse of campus property; unauthorized entry into classes.

(h) On campus property, the sale or knowing possession of dangerous drugs, restricted drugs, or narcotics, except when lawfully prescribed pursuant to medical or dental care.

(i) Possession or use of explosives, dangerous chemicals, or weapons on campus property or at a campus function.

(j) Engaging in lewd, indecent, or obscene behavior on or using campus property or at a campus function, either in person or by correspondence.
(k) Abusive behavior directed toward, or hazing of, a member of the campus community.

(l) Violation of any order, rule, or policy of the University.

(m) Failure to cooperate with a university or police investigation.

(n) Endangering the health or safety of others on or from campus property.

POLICIES AND STATEMENTS ADDRESSING THE INVESTIGATION AND TREATMENT OF STUDENTS, STAFF, AND FACULTY REGARDING SEXUAL HARASSMENT AND ASSAULT

Policy Regarding Sexual Harassment

Policy Statement
Northwestern Polytechnic University ("NPU") strives to ensure a safe academic and work environment, free of sexual harassment, for all members of the NPU community. To that end, NPU has a zero tolerance policy for sexual harassment.

Scope
This policy shall apply to all members of the NPU community, including students, faculty, staff, vendors, and contractors. This policy applies equally to all, regardless of sex, gender and gender identity, or sexual orientation. The application of this policy includes NPU programs and activities on and off-campus, overseas programs, conduct occurring in university housing, and off-campus conduct by a member of the NPU community directed at another member of the NPU community.

Definition
Sexual harassment is any unwelcome conduct of a sexual nature, which includes, but is not limited to, unwelcome sexual advances, requests for sexual favors, or other visual, verbal, or physical conduct of a sexual nature that (a) implicitly or explicitly suggests that submission to or rejection of the conduct will affect academic or employment decisions, or (b) has the purpose or effect of unreasonably interfering with an individual’s academic or work performance or creating an intimidating or hostile academic or work environment.

Examples
The following is a non-inclusive list of conduct that may constitute sexual harassment:

(A) Offering or implying an employment-related (e.g., promotion, raise, preferential assignments) or education-related (grades, letter of recommendation, assistance finding employment, admission to a program or activity) reward in exchange for sexual favors or submission to sexual conduct;

(B) Making threats or insinuations that a person's employment or education life may be adversely affected by not submitting to sexual advances;

(C) Unwelcome sexual propositions, invitations, solicitations, and flirtation;

(D) Repeatedly asking someone for a date or accompaniment after the person has expressed disinterest;

(E) Leering, staring, or elevator eyes;

(F) Making sexual gestures;

(G) Unnecessary and unwanted physical conduct (e.g., touching, impeding or blocking movements, patting);

(H) Displaying or transmitting suggestive objects, pictures, cartoons, or other visual media or content;

(I) Making or using derogatory comments, epithets, slurs, and jokes;

(J) Making unwelcome suggestive or insulting sounds (e.g., whistling and cat calls);

(K) Commenting on or asking about a person’s body, dress, appearance, gender, sexual relationships, preferences, activities, or experience; or

(L) Unwelcome personal gifts.

Reporting

Reporting is Highly Encouraged
NPU strongly encourages all individuals to report incidents of sexual harassment to the university’s Human Resources department (“HR”).
Mandatory Reporting for Employees
All NPU employees and any contractors/consultants with teaching or supervisory authority are required to report sexual harassment of which they come aware to HR.

External Reporting
Both state and federal law prohibit sexual harassment. In addition to reporting and within the university, individuals may pursue complaints directly with government agencies that deal with unlawful harassment and discrimination claims, such as the State of California Department of Fair Employment and Housing (“DFEH”). Please see the DFEH website for DFEH contact information (http://www.dfeh.ca.gov/Contact.htm).

Complaint Process and Disciplinary Action
General Process
Generally, the NPU complaint process begins with an individual’s submission of a written statement to HR. One or more members of HR, or, in the event of a conflict, other university representatives or external investigators, will review the complaint and then commence a fact-finding investigation as soon as practicable. The investigator(s) will afford the complainant an opportunity to describe his or her allegations and present supporting witnesses or other evidence. The investigator(s) will also afford the alleged wrongdoer an opportunity to respond to the allegations and present supporting witnesses or other evidence. To the extent possible, the investigators will preserve the privacy and confidentiality of all persons involved. The one or more university administrators will review the investigation findings and render a decision.

Complainants have the right to simultaneously file and pursue a criminal complaint with law enforcement or other government agencies. Complainants may report violations of this policy anonymously by emailing compliance@npu.edu. Please note that if the complainant requests anonymity or is reluctant to proceed with a complaint, NPU’s ability to respond to the allegations may be limited. Notwithstanding the preceding, NPU reserves the right to take appropriate action in certain circumstances, such as where there are concerns for the safety or well-being of the broader NPU community, even if the complainant requests to remain anonymous or is reluctant to proceed.

Interim Measures
NPU may provide reasonable interim accommodations or remedies to a complainant to ensure a safe environment pending investigation and resolution of a complaint.

Disciplinary Action
Violations of this policy will result in disciplinary actions, including, but not limited to, written warning, loss of privileges, community service, mandatory training/counseling, probation/suspension, demotion, exclusion, expulsion, and termination.

Confidentiality
NPU will respect confidentiality and privacy to the extent reasonably possible during the investigation and thereafter, but NPU cannot promise complete confidentiality. Additionally, in some circumstances, the university may be unable to maintain confidentiality, such as when disclosure is required by law or university policy.

Retaliation
NPU will not tolerate any retaliatory action against any individual who in good faith reports information about behavior that may be a violation of this policy. Retaliatory action is in itself a violation of this policy, and any individual engaging in retaliatory action may be subject to disciplinary action, including and up to termination of employment or dismissal from the university.

Duty to Cooperate
All members of the NPU community shall cooperate to the fullest extent possible with any internal investigation, or investigation conducted by external investigators due to a conflict of interest, of an alleged violation of this policy. Failure to cooperate is in itself a violation of this policy and may subject the uncooperative individual to disciplinary action, including and up to termination of employment or dismissal from the university.

Contacts and External Resources

Contacts
Individuals with concerns about or information to report pertaining to sexual harassment may contact any member of HR in person in the Administrative Building, or by emailing hr@npu.edu.
**External Resources**
The following external resources are available to discuss sexual harassment and assault. Please note that these resources are external to the university, therefore, (1) disclosing information to these resources does not constitute reporting to NPU and will not result in any formal action by NPU, and (2) NPU makes no warranties or representations regarding these resources.

A. YMCA Silicon Valley, Sexual Assault Counseling

B. SFWAR, 24-hour Crisis Line
   (415) 647-7273
   [http://www.sfwar.org/resources.html](http://www.sfwar.org/resources.html)

C. Berkeley Free Clinic, Peer Counseling
   [http://www.berkeleyfreeclinic.org/pages/pec](http://www.berkeleyfreeclinic.org/pages/pec)

**Policy History, Authority, and Review**
This policy was approved by the university president and went into effect on January 1, 2003. It was amended March 16, 2017. It is subject to periodic review, and any comments or suggestions should be forwarded to HR.

 Thrones of Complaints

The Administrative Office will call for a special committee to handle harassment complaints. The committee’s treatment of complaints will be guided by the following principles, which are intended to protect the legitimate interest of all persons.

Next, committee members will decide if there is any conflict of interest that requires any of them to withdraw from consideration of the complaint. The committee will then decide on a course of action.

Should the committee decide to take no action, the committee will inform the student and explain what, if any, other course of action the student might take.

Should the committee decide that the complaint requires formal institutional action (i.e. notification of the police) the committee will transmit the complaint directly to the President.

If a less serious complaint is judged to fall under the committee’s mandate, then one or more members of the committee, one of whom is a member of the faculty or the administration, will speak with the person(s) involved in order to obtain further information and report the results to the committee.

The committee will limit its informal investigation to what it deems necessary to resolve the complaint or to make a recommendation to the President. Should it appear necessary for the committee to address any persons other than the parties involved in the complaint, the committee will do so only after informing the involved parties.

After review, the committee may decide (1) that there is no basis on which to pursue the complaint, or (2) that the complaint has been resolved, or (3) that the complaint is to be forwarded with recommendations to the President. The President will inform the committee of the final disposition of complaints forwarded.

One responsible member of the committee will be in communication with the student making the complaint until the complaint is resolved. The student will be informed of general actions taken, although not of specific conversations held with the person named in the complaint.

If either the person making the complaint or the person named in the complaint is not satisfied with the recommendations of the committee, she or he may discuss the matter with the President.

**Sexual Assault**

An allegation of sexual assault must promptly be reported to administration, who will, in turn, report the allegation to the Police Department. The University will not attempt to adjudicate allegations of felonious acts.

**STUDENT GRIEVANCE POLICY AND PROCEDURE**

NPU takes complaints regarding the institution seriously. Students have the right to file a grievance that concerns NPU, whether it is with personnel, the course of study, general university policies, or other related matter. This policy describes the grievance procedure available to students.
1) INFORMAL RESOLUTION

NPU highly encourages students to attempt to informally resolve any situations directly with the aggrieved party or department.

With regard to academic grievances (e.g., academic integrity, faculty grievance), students must attempt to informally resolve the matter with his or her instructor.

With regard to appeals of disciplinary action and other complaints, no student is obligated to attempt informal resolution and may bring a formal complaint to the administration as outlined in this policy.

2) TIMING

Academic grievances and appeals of disciplinary action must be received by the administration within 30 days of the close of the academic term in which the first incident giving rise to the grievance occurred or the notice date of the disciplinary action.

There is no deadline for other types of complaints.

3) COMPLAINTPROCEDURE AND RESOLUTION

All complaints and supporting documentation shall be submitted in writing to the NPU Compliance Department. The complaint should be made using the NPU Grievance Form, which is available on the NPU website.

Please note that if a complaint is an appeal of disciplinary action, the complaint should include a description of the basis of appeal. The following are the only valid bases of appeal: (i) inaccurate findings, (ii) new clear and convincing evidence, and (iii) inequitable process. Any new evidence not mentioned in the complaint form or supporting documentation will not be considered. The complaint may be sent via email to compliance@npu.edu or delivered in person to the front desk of the NPU Administrative Building during normal business hours. If the complaint is regarding NPU Compliance or its personnel, then the complaint may be sent to the Executive Vice President via in person delivery to the front desk of the NPU Administrative Building during normal business hours. In such case, complainant should specify that the complaint is regarding compliance or its personnel.

Intake personnel, generally a member of NPU Compliance, will review the form. If the form is complete, intake personnel will, within 5 business days of receipt, acknowledge receipt of the complaint and forward it to the appropriate party for review and resolution. Matters are generally forwarded as follows:

a. Academic matters are forwarded to the Chief Academic Officer, or the Chief Academic Officer’s designee.
b. Appeals of disciplinary action are forwarded to the Executive Vice President, or the Executive Vice President’s designee.
c. All other complaints are assigned to a member of NPU Compliance.

Depending upon the type and complexity of the grievance, the appropriate party may, in their discretion, adjudicate the matter or assign the matter to a Grievance committee.

Within 60 days of receipt of the complaint, NPU shall provide a written response to the complaint via email. If further investigation is needed, the complainant will be provided with a written response to the complaint within 10 business days after completion of the investigation.

The complainant may appeal NPU’s resolution by filing a statement of appeal that clearly describes the grounds of appeal within 5 business days of the date of the written response. The President of NPU shall adjudicate the appeal within 30 days of NPU’s receipt of complainant’s statement of appeal.

If a complainant has exhausted all grievance procedures provided under NPU’s policies, the complainant may contact:

a. The Accrediting Council for Independent Colleges and Schools at 750 First Street NE, Suite 980, Washington, DC 20002
b. The Bureau for Private Postsecondary Education by calling (888) 370-7589 or by completing the complaint form, which can be obtained on the bureau’s internet website address www.bppe.ca.gov
4) NO RETALIATION

No member of the NPU community shall be subject to adverse action by NPU based upon the reasonable good faith filing or participation in a complaint.

5) MAINTENANCE OF RECORDS

Records for student complaints are maintained for at least 6 years. Records for complaints made by non-students are maintained in accordance with applicable university policy.

STUDENT LIFE

Our mission at Northwestern Polytechnic University is to provide a welcoming and supportive environment for students, while maximizing their opportunities for career growth and personal development. We believe that student life is not only an integral part of the campus community but also a fundamental part of the educational process. Student services at the University are designed to meet the needs of our student body. These include both academic and non-academic issues and activities. Many of our students work part-time or full-time in local industries and come from a variety of social and ethnic backgrounds. As such, our services are tailored to meeting the needs and concerns of a mature and multicultural student body.

University Orientation

All new students are required to attend the new student orientation program offered before the beginning of each trimester. Orientation packages are distributed to the new students prior to the orientation workshop; presentation materials cover essential information for the students, including the facility and learning resources information, administrative services provided to the students, and important rules and policies for the students to stay focused on their academic objectives. The staff advisors also assist the new students to register in classes. International students are provided a health insurance plan and information on particular regulations they must observe in compliance with the Federal regulations for international students. All NPU students are welcome to attend the orientation to welcome the new students and receive current university information.

Housing

NPU HAS NO RESPONSIBILITY TO FIND OR ASSIST A STUDENT IN FINDING HOUSING. That being said, the University does provide a limited number of student housing units, generally university-owned condominium units within a two-mile radius of the instructional buildings. Residence in university-owned student housing is optional and generally assigned on a first-come-first-served basis. NPU makes no guarantees regarding housing preferences. Student housing commitments are for one trimester. To be eligible for student housing, a student must be regularly enrolled, full-time NPU student. Room reservation is effective only after submission of the housing application and NPU’s receipt of the required rent and deposit.

Non-university housing in the immediate area is available in the form of house and apartment rentals, but students are advised that housing is highly competitive. Monthly rent for a one-bedroom unit is approximately $2,000.

AC Transit Bus Pass; Public Transportation

Full-time NPU students are eligible for an annual bus pass from AC Transit. For more information regarding the pass, please see: http://www.npu.edu/transportation-easypass
Other public transportation information is included in the Student Handbook posted on the MyNPU student portal.

Non-academic Counseling

The Student Services Office offers assistance with personal and interpersonal issues such as relationships, cultural differences, assertiveness, and self-esteem. If a student needs a professional counselor, the Student Services Office will help the student find a suitable counselor. Additionally, the Student Services Office helps students with educational/vocational concerns such as coping with university life, academic performance, test anxiety, reentry adjustment, and determining life goals. Students are encouraged to seek assistance from a counselor in dealing
with any problems that might affect their success at NPU.

❖ Professional Development Seminars

Offering professional development seminars is an integral part of the Student Services. The seminars are intended to enhance the students’ abilities in their professional lives—in cultural, communicative, and technical aspects. The seminar information is posted on the NPU website, social media pages as well as the digital display board on campus.

❖ Career Services

As a key component of Student Services, career placement services help the students in the following areas: (1) resume preparation and interview skills enhancement, (2) conducting career seminars and job fairs, (3) provision of information regarding internship opportunities, and (4) provide library materials and an online tool (via the MyNPU student portal) for the students to gain access to various sources of job related information. The Career Center, in collaboration with the library, provides the students with access to a collection of books, articles, magazines, brochures, and videotapes about employment opportunities. The students may also use the computer facility in the Career Center for job searches. Employment information can be found on the online job posting board through the eCareer Center on the MyNPU student portal.

The service provides career planning and job search assistance prior to and after students’ graduation.

❖ Student Handbooks

The NPU Student Handbook describes important policies and regulations that affect the students’ status at NPU. It also provides relevant information affecting the students’ lives during their studies at NPU.

The Student Handbook and the International Student Handbook are posted on the MyNPU student portal. In the New Student Orientation Workshop, the students are informed and receive handouts pointing to the online location for these handbooks. The handbooks complement the information contained in the University Catalog. All students are urged to read and refer to the information in the most current editions of both the student handbooks and the University Catalog - all are also available online.

❖ Affiliation to Professional Societies

To expand and enrich student life on campus, NPU students are encouraged to get involved in a variety of professional organizations. Such involvement also takes the students a step closer to the professional world. Examples include activities sponsored by the IEEE local chapter and various other professional activities regularly held in Silicon Valley.

- IEEE

The Institute of Electrical and Electronics Engineers, Inc. (IEEE) is the world's largest technical professional society. A non-profit organization, IEEE promotes the development and application of electro-technology and applied sciences for the benefit of humanity, the advancement of the profession, and the well-being of its members. IEEE members participate in its activities in approximately 150 countries. The technical objectives of the IEEE focus on advancing the theory and practice of electrical, electronics and computer engineering and computer science.

Students are encouraged to join the IEEE student club on-campus. The club provides students the opportunities to participate in IEEE activities. The participants are able to connect with the latest technical information, research, career opportunities, and a community of innovators who inspire the students to strive for success in their chosen profession. This connection enables the engineering students to have convenient access to valuable IEEE publications and participate in organized IEEE activities, particularly the ones held in Silicon Valley. Several faculty members serve as senior advisors to enroll the students.

- Business Students

Students in the School of Business and Information Technology are encouraged to join at least one of the following professional organizations or others:
- Institute of Management Accountants
- American Institute of CPAs
- California Society of CPAs
- United States Association for Small Business and Entrepreneurship
- Project Management Institute

• Toastmasters Club

Students interested in improving their public speaking skills are welcome to join the on-campus Toastmasters Club. The Club holds weekly meetings and is supervised by a designated administrator. A number of students in the club have participated in regional competitions and won awards. Refer to the NPU website for more information.

◆ Student Organizations

The purpose of student organizations is to foster student involvement for a common purpose or goal to enhance academic, career, personal and/or community development. They are created to enhance student engagement, promote leadership and learning, and foster shared interests.

◆ Student Health Insurance

Health insurance coverage is mandatory for all students while enrolled at NPU. The NPU student health insurance plan is provided by Aetna Student Health Insurance. Detailed information can be found on the NPU website.

DONATIONS TO THE UNIVERSITY

From time to time we receive calls from generous individuals, representing themselves or corporations, wishing to donate funds or items useful to the academic development of the University. We appreciate their consideration and altruistic action. Northwestern Polytechnic University enjoys tax-exempt status with the IRS; therefore, gifts of money and items of value are tax deductible. We encourage individuals to consult their personal or company tax advisors for details on how these gifts may benefit the giver as well as the University.
FACILITIES

◙ Campus Description

In accordance with the University's curricular emphasis on technology and business, NPU's campus is located in a high-technology R&D and business development area in southern Fremont, occupying six modern research and development building complexes and their surrounding areas.

The University is located in a peaceful setting, conveniently accessible from highways I-880 and I-680 via Mission Boulevard and Warm Springs Boulevard. The abundant and fully-landscaped parking areas provide smooth traffic flow and easy building access.

The campus facilities provide an environment conducive to learning and development, including computer and physics labs, library services, study areas, dining areas, student lounges, a Career Center, teaching assistant service stations, recreation areas, classrooms, and conference rooms, as well as administrative and faculty offices.

Each classroom has energy-efficient LED lighting and temperature control units and is equipped with an LCD projector connected to the instructor’s demo computer, which has access to the campus network system and the internet, in addition to other standard classroom provisions.

To expand professional quality sports facility services to NPU, the school regularly contracts with nearby sports facilities to allow NPU students, faculty, and staff access to its high-quality facilities with minimal cost.

• Health, Security, and Safety

The University and its campus sites are compliant with all local and state fire and safety codes, and regulations in reference to NFPA 25, CFC, Cal OSHA, and the City of Fremont.

Building and classroom occupancies are all within the stated guidelines of CBC/IBC/CFC 1006.2, 1004 codes.

◙ Teaching and Research Facilities

NPU’s teaching, research, and laboratory facilities are equipped with required hardware and software tools. Keeping pace with the advancement of information technology, NPU’s IT Department provides a modern digital campus environment to students, faculty, and administrative staff.

To support teaching activities, classrooms are set up at the beginning of each trimester according to the hardware and software requirements of each course. Modern design, simulation, and testing tools are installed for instructors to use in class. Outside teaching resources may be set up to provide faculty members with additional teaching and research tools.

A number of classrooms are also equipped with computer systems and internet facility for students to use. Practice laboratories are readied for students to gain hands-on experience after class or during lab sessions.

Computer Networks: There are a variety of high-performance computers on campus to support teaching and learning, including high-capacity servers, advanced workstations, and modern PCs. Wireless and wired network connections for high-speed internet access are provided to students on campus. The campus networks are connected to the internet via Comcast Internet service, allowing faculty and students to access email and various websites. Each student and faculty member has an individual computer account for accessing the MyNPU portal, the intranet resources, and various servers on campus.

Examples of modern CAD/CAE tools include Cadence EDA tools suite, Synopsys EDA tools suite, Xilinx and Altera design tools, and Mentor Graphics tools. Matlab software and Xmanager are also provided to support students’ needs.

Examples of available computer science teaching and learning software tools and packages include Oracle server/client tools, Microsoft .NET Framework, Microsoft SQL server/client tools, Microsoft Visual Studio, JDK, MS Office, and various popular software QA and testing programs such as Selenium. In addition to the MS Windows system, Mac computers and
CentOS Linux are provided to students for iPhone development and other learning needs. The embedded systems labs cover Embedded Linux, Raspberry Pi, and the Android System.

Examples of available School of Business teaching and learning software tools and packages include: QuickBooks (accounting software), Matlab (numerical computing) SPSS (statistical analysis), Adobe, and Excel.

- **Learning Resources and Laboratories**

Designated learning laboratories are open for students to conduct after-class hands-on practice as well as to take laboratory courses. Practice focuses on the following:

- Big data, data mining, and machine learning
- The Internet of Things (IoT)
- Mobile Apps design
- Computer networking, systems administration, and network security
- Database administration and database design
- VLSI/SOC design
- DSP/multimedia and interface design
- ASIC/FPGA design
- Embedded systems design
- e-Business, business logic design, and digital system development and implementation
- QuickBooks
- Digital media and graphics

Other applications: Students also use the computer laboratory facility to do homework and projects in areas such as object-oriented design and programming, Unix/Linux system programming, Java/C++/Python programming, .NET web programming, .NET Windows programming, website design, e-business programming, software testing, digital media and graphics, and business auditing.

- **The University Library and Digital Campus**

The NPU administration strives to provide an up-to-date digital campus facility to the students and faculty to increase their learning/teaching effectiveness. The university library not only maintains traditional service functions but also provides commercially available digital libraries easily accessible online by students and faculty.

The MyNPU portal is the gateway for students and faculty to access NPU’s unique online environment. Faculty members use the portal to manage their courses, and students use the portal to submit online requests to administrative staff as well as to access learning resources, personal records, career information, and library information. The MyNPU portal is maintained by the NPU IT Department.

- **Library Services**

Besides learning in class, students are encouraged to pursue independent research using resources provided by the Northwestern Polytechnic University Library. NPU’s physical collections comprise books, periodicals, and audio/visual materials, and its online resources include Directory of Open Access Journals (DOAJ) and ProQuest databases. In addition to using NPU’s proprietary library materials, students are encouraged to visit local community libraries such as the Alameda County Public Library in Fremont and the Dr. Martin Luther King, Jr. Library in San Jose, which is co-managed by the San Jose City government and San Jose State University.

In support of NPU’s educational programs and for the purpose of developing students’ professional skills, the collections at the NPU Library focus on electronics, computer, and business disciplines, with additional academic support in general education subjects. NPU Library materials are available for checkout by NPU students and faculty; length of time allowed for materials to be checked out varies.

Northwestern Polytechnic University Library aims to continuously adapt and increase its resources in response to the educational and research needs and interests of NPU students and faculty. The NPU Library welcomes suggestions from faculty and students on new acquisitions.

All NPU Library staff are trained to assist library users and visitors with general inquiries and information requests.

To access the library catalog, library patrons have two options:

1) Using the computer in the library lobby whose home page is the catalog
2) Access the catalog from the library’s website:
   a. Go to:  
      http://www.npu.edu/academics/library
   b. Click “Search for Books and Materials” at the top left

To access the library’s electronic collection, library users have three options:

1) Using the computer in the library lobby
2) Access the e-library via the link on the student/faculty portal:
   a. Go to: https://my.npu.edu/
   b. Click e-Services tab, top right
   c. Select e.library > ProQuest
3) 24/7 access from anywhere is provided via EZProxy:
   a. Go to:  
      https://elib.npu.edu/login
   b. Enter your on-campus computer login information
   c. Click on “ProQuest Digital Library”

✦ MyNPU portal for Faculty and Students

Faculty members use the MyNPU faculty portal as a tool to help them manage their courses online, including maintaining their students’ academic and attendance records, posting and updating course syllabi, assignments, instructions, and handout materials. Teaching Assistants access the system to post homework-related information and useful learning materials for individual courses. Faculty members and teaching assistants can also send messages to their students through this online facility.

Each current student is assigned an account to access the MyNPU student portal. The system is designed such that student users can access all general information but only their own personal data and academic records. Using the MyNPU student portal, students can obtain their course-related information, update their personal contact data, and check their own study plan, financial records, and attendance records.

Audio/Video/Photographic Recording

Students wishing to take photographs or make any type of video and/or audio recordings of lectures presented by NPU faculty members and/or visiting lecturers must obtain the written consent of those faculty members or lecturers.
ACADEMIC PROGRAMS

NPU’s undergraduate and graduate programs are designed to prepare students for the practice of electrical engineering, embedded systems engineering, computer science, and business administration at a professional level. In particular, the degree curricula are designed to keep pace with the development of Silicon Valley’s major industries, including electronics, computer engineering, information technology, enterprise management, and global business development.

As Silicon Valley is a dynamic and fast changing high-technology hub where the only constant is fierce competition among the employers, the employers in the Valley are more demanding on workers’ qualifications. Therefore, job seekers in the Valley are required to be well prepared in their background training and have the understanding that continued education is a general requirement in the workplace.

NPU’s program committees in various disciplines hold regular meetings to ensure that the curriculum design and facility support in hardware and software can meet the industry standards. Furthermore, faculty members who teach major and related courses must have had previous or current industry experience and are equipped with up-to-date knowledge and skills in their teaching subjects.

Degree programs are offered by two schools: The School of Engineering and the School of Business and Information Technology. Each School offers degree programs at two levels: bachelor’s, and master’s levels. The following are program information divided by School and, within each School, by degree level.

SCHOOL OF ENGINEERING

The School of Engineering offers degree programs in two disciplinary areas: Electrical Engineering and Computer Science. The Chief Academic Officer, School Dean, program advisory committees, as well as the faculty members of the School of Engineering are responsible for the School’s academic affairs. The program advisory committees are comprised of industry professionals, potential employers, and community leaders who advice, review, and provide recommendations on the undergraduate and graduate programs. Practical applications are emphasized throughout the students’ learning process although theoretical background is taught in each course subject as fundamentals.

Purpose

Degree programs offered by the School of Engineering are designed for students who intend to become professional engineers in the high-technology electronics or computer industry, as well as for those who desire a modern, general education based on the problems and the promises of a technological society. The environment in which students are educated is as important in shaping their future as their classroom experiences. The School of Engineering offers a friendly atmosphere and a variety of academic programs that have made NPU engineering graduates highly valued in high-tech firms and Bay Area communities.

Faculty

All NPU engineering faculty members possess the following qualities: advanced degrees earned in engineering and science disciplines, high-tech work experience, and enthusiasm in teaching and helping the students. Engineering is not a homogeneous discipline; it requires many special talents. Some faculty members in the School are goal-oriented designers, concerned with teaching students how to solve problems - how to synthesize relevant information and ideas and apply them in a creative, feasible design. Other engineering faculty members function more typically as method-oriented scientists, using the techniques of their disciplines in their teaching and research to investigate various natural and artificial phenomena.
Objectives

The course offerings and hands-on experiences offered to the engineering students aim to achieve the following objectives:

- To provide each student a goal-oriented education by tailoring each student's study plan based on the student’s background and interests.
- To provide in-depth professional training with state-of-the-art learning resources to the student.
- To provide relevant laboratory experience throughout each program as an integral part of the education.
- To provide undergraduate students well-rounded and balanced undergraduate studies.
- To nurture a learning environment which leads to professional values recognizing high quality and integrity in a true engineer.
- To provide graduate students an opportunity to pursue advanced training and professional development to practice their profession with increased competence.

Undergraduate Programs

The School of Engineering offers one undergraduate degree program: Bachelor of Science in Computer Science (BSCS).

Credential Requirements

The undergraduate programs accept qualified high school graduates and college transfer students.

- Freshmen Applicants: Undergraduate applicants who have not completed at least 30 semester units of college credit are considered freshmen.

Application Requirements

To apply for admission into a bachelor’s degree program, the applicant is required to submit the following to the NPU Admissions Office:

1. An Application Form (online).
2. A nonrefundable application fee.
3. A copy of passport or a government issued I.D.
4. Official transcripts from previously attended colleges; freshman applicant is required to submit his/her official high school transcript and document certifying high school completion.
   - a high school/college CGPA of 2.5 or above meets minimum CGPA requirement
   - a high school/college CGPA between 2.0 to 2.49 requires an interview with the Academic team, and a review of the last two semester grades (high school and/or college).
5. An English proficiency document is required for non-native English speakers: An official transcript with English course records or TOEFL/IELTS/PTE Academic score report or the Cambridge FCE Certificate or equivalent will suffice. See English Proficiency Requirement below for detailed information on the English entrance requirement.

- International Students: In addition to the above general application requirements, an international applicant is also required to submit the following additional documents:

1. An Entrance assessment test: SAT/ACT for freshman applicants. There is no minimum requirement, however, the score is a factor affecting admissions decision.
2. A financial support document – provide a recent financial support document indicating a minimum amount of $30,000 available to pursue his/her study in the first academic year at NPU.
   - a current bank letter and bank statement; or
   - a loan letter from a lending institution; or
   - a property deed valuation report; or
   - Copies of fixed deposits.
   An affidavit of support or sponsor letter is required if the funds are not in his/her name.
3. A transfer student (from a U.S. institution) is required to submit a photocopy of his/her
   - previous I-20 form,
   - visa, and
   - I-94 (U.S. Department of Homeland Security issued arrival / departure form). The student will be asked to show an identification document attesting his/her official name, if applicable.

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GED: NPU recognizes the General Educational Development (GED) tests and accepts the GED graduates.
- GED score of 456 or above meets minimum score requirement
- GED score between 401 to 445 requires an interview with the Academic team

Applicants interested to apply for scholarships need to provide additional documentation. Please refer to the section on Scholarships in this catalog and on the website.

- **English Proficiency Requirement**

  Non-native English speakers are considered meeting the entrance English proficiency requirement if they meet any of the following requirements:

  - completed secondary school or a college degree program where English was the language of instruction.
  - completed and passed a college English credit course in an institution located in the U.S., U.K. Australia, New Zealand, or Canada, and where English is the language of instruction for the institution
  - submitted an official TOEFL, IELTS or PTE Academic test score report to NPU and the score meets the minimum score detailed below, which is subject to modification by the NPU admissions office.
    - IELTS: 5.5; TOEFL: 59; PTE: 50; Cambridge FCE Certificate
  - NPU may accept the English assessment reports from a few U.S. English language institutions recognized by major universities in the U.S.
  - Successfully completed NPU’s IEP Level 5, or upon completion of all level 4 courses with a minimum grade of A.

- **Entrance Assessment Test**

  The entrance assessment test, SAT/ACT, is required for freshmen students who earned their high school diploma from a foreign institution. There is no minimum requirement, however, the score is a factor affecting admissions decision.

  NPU's Institution Code for reporting

  - SAT score is 4335.
  - ACT score is 1750.

SAT/ACT Waiver applies to students with
- A U.S. high school diploma; or
- 30 or more transferrable units from previous college/s

- **General Background Requirements for Pursuing Bachelor’s Degrees**

  Remedial courses are not offered at NPU except for English as a Second Language classes. Applicants to all programs are required to have completed pre-calculus subjects in algebra, trigonometry, and geometry prior to admission into any program.

- **Transfer of Credit from Other Institutions**

  Course credit earned at other institutions of higher education may be transferable. Credit transfer is made by the admission evaluators while conducting the admission evaluation. The transfer of credit is done at the program-of-study level, on a case-by-case basis dependent on relevancy match of related course content. The following statements apply to all transfer credits:

  - The NPU Admissions Office must receive all official transcripts prior to the student’s joining a degree program. Without preapproval, transcripts received after the student joins NPU cannot be used in transferring credits, except for records from the term immediately preceding the student’s starting trimester at NPU.
  - The student was officially enrolled in the course.
  - Courses eligible for transfer will be evaluated based on the comparability in content, quality and rigor of NPU’s courses. The transfer evaluation will include, but is not limited to, course descriptions, course syllabi, and/or general public information. Students may be asked to provide course catalogs or syllabi if needed.
  - When evaluating any foreign transcript, the admission evaluators may accept or transfer credit based on their knowledge of the course
- Courses for transfer to NPU may not be completed concurrently at another institution while attending NPU.

- College English courses taken at an institution where English is not an official language cannot be transferred for general education credit.

- The credits contemplated for transfer must be earned at (1) institutions approved by the Bureau for Private Postsecondary Education, (2) public or private institutions of higher learning accredited by an accrediting association recognized by the U. S. Department of Education, or (3) any institution of higher learning, including foreign institutions, offering degree programs equivalent to degree programs approved by the Bureau or accredited by an accrediting association recognized by the U.S. Department of Education. With regarding to foreign institutions, if NPU cannot determine that the institution is offering degree programs equivalent to degree programs approved by the Bureau or accredited by an accrediting association recognized by the U.S. Department of Education, the student may obtain a credential evaluation from a National Association of Credential Evaluation Services (NACES) member.

- Professional Development Units (PDUs) offered by professional/industry organizations cannot be transferred to NPU for academic credit.

- Continuing Education Units (CEUs) offered on a non-academic basis by other academic institutions cannot be transferred to NPU for academic credit.

- The total credits transferred from other institutions to meet the student’s undergraduate program requirements are limited to 75 trimester units.

- Credits transferred, performed at the time of admission evaluation, will reduce the program length. Credit transferred from any outside institution is excluded from the maximum program length and has no effect on the calculation of the student’s GPA or CGPA.

- Credits are transferred by the following conversion:

  a. Definition of a Trimester Unit:
  One trimester credit hour equals, at a minimum, 15 contact classroom hours of lecture, 30 contact hours of laboratory, or 45 contact hours of practicum.

  b. Conversion Factor:
  1 quarter unit = 0.66 trimester unit

- Grades Required for Transfer Credit
  In the bachelor's degree programs, applicable courses completed with an equivalency of a letter grade of “C” or better are transferable. Courses completed with Pass/No Pass are not transferable unless the transcript states that the general grading policy is not based on letter grades. This policy must be in writing from the institution (transcript key or a letter of verification).

- Other Types of Undergraduate Transfer Credit
  The following other types of credit may be transferable:

  a. AP course credit earned which is considered to be equivalent to college credit.

  b. Credit by Examination - CLEP
  NPU grants credit to those students who pass examinations in English, natural sciences, humanities, and social science subjects offered by the College Level Examination Program (CLEP). Only General Education credits will be granted. Students should consult with the Admissions Office for information on acceptable CLEP scores and units. The CLEP Institution Code for NPU is 7569.

  c. Transfer of Credit from Defense Activity for Nontraditional Education Support (DANTES) and Military Services
  Credits will be allowed for DANTES Subject Standardized Tests and professional military education evaluated by the American Council on Education (ACE). The maximum transferable credits follow the same
policies as specified above. NPU’s evaluation of an application is made prior to the student’s admission to a program unless otherwise approved by the authorizing VA office. The DANTES Institution Code for NPU is 9670.

- **Proficiency Exams:** A student may be required to demonstrate proficiency in a subject taken more than ten years prior to application with NPU by successful completion of a proficiency examination.

- **Experiential Learning**

NPU does not award credit for prior experiential learning.

- **Tuition**

Tuition is charged per unit. Tuition for courses taken to fulfill the undergraduate degree requirement is $330.00 per unit.

- **Tuition per Unit for Courses Audited**

For courses audited (without earning credit), the tuition is half the regular unit rate. Not all courses can be taken with “audit” status.

- **Estimated Total Charges for On-time Completion of Entire Educational Program**

  - Tuition: $42,570
  - Fees: $4,400
  - Graduation Petition Fee: $300
  - Textbooks Costs: $6,450
  - Health Insurance Premium: $4,587

- **BSCS:** $58,307

Please note that this estimate includes tuition, fees, textbooks costs, and health insurance premium, which is subject to change. All students are required to pay current rates for tuition and fees each trimester. Additional fees may apply, depending on the services requested (see Tuition and Fee section). The cost of textbooks is estimated to be approximately $150 per course. The actual cost of textbooks can vary significantly from course to course.

- **Graduation Requirements**

Each program requires coursework in the following areas:

1. **General education,**
2. **Major study,** and
3. **Electives.**

An overall G.P.A. of 2.0 or better and a D grade or higher on all courses towards the degree are required. The student must be in good standing with the University and have an approved petition to graduate on file.

1. **General Education Requirements**

All undergraduate students in the engineering programs must complete at least 39 trimester units in general education (GE). GE courses cover subjects in the following areas: English and communications, humanities, engineering mathematics and natural sciences, and social sciences.

Examples of courses that fall under each area of general education are as follows:

A. English and Communications: Expository Writing, Speech, Communication, Composition, Creative Writing.

B. Humanities: Foreign Languages (excluding native language), Philosophy, Music Appreciation, Fine Art, Religion.

C. Mathematics and Natural Sciences: Calculus, Statistics, Physical Sciences, Physics, Biological Science.


**General Education Student Learning Outcomes**

NPU has determined that the first five institutional learning outcomes will also serve as general education outcomes, with one modification: The general education outcome for critical thinking has been modified to include an introductory phrase, “Using various disciplinary perspectives, explore and analyze issues, ideas, artifacts, and/or events to formalize an opinion or conclusion.” This inclusion allows for a clear
mapping between general education courses in natural sciences, social sciences, communications, and humanities.

All undergraduate students are expected to demonstrate the following general education student learning outcomes:

Written Communication - Write sustained, coherent arguments or explanations.
Oral Communication - Utilize effective oral communication strategies.
Quantitative Reasoning - Utilize mathematical concepts and methods to analyze, and explain issues in quantitative terms.
Information Literacy - Identify, locate, evaluate, and effectively and responsibly use and share information in support of academic, personal, and professional needs.
Critical Thinking - Utilizing various disciplinary perspectives, explore and analyze issues, ideas, artifacts, and / or events to formalize an opinion or conclusion.

2. Major Study Requirements

Each undergraduate program is designed to include a series of major study coursework. The courses provide the student the foundation and training in electronics and circuits, computer technology, and engineering mathematics and science areas.

Professional Development: The Professional Development course prepares the engineering students for their professional careers.

3. Electives

Electives are built in each program to promote breadth as well as depth in the study program. The student must complete a sufficient number of elective courses to meet the graduation requirements.

The following is a suggested study flow for the first five trimesters of any undergraduate engineering program, followed by the description of the objectives and the graduation requirements for each undergraduate engineering degree program.

Course numbers: Courses numbered in the 100s and 200s are lower-division courses; courses numbered in the 300s and 400s are upper-division courses.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL101</td>
<td>Expository Writing</td>
</tr>
<tr>
<td>IT200</td>
<td>Introduction to Computers and Digital Media</td>
</tr>
<tr>
<td>MATH201</td>
<td>Calculus – I</td>
</tr>
<tr>
<td>MATH208</td>
<td>Statistics</td>
</tr>
<tr>
<td>PHYS101</td>
<td>Introduction to Physical Sciences</td>
</tr>
<tr>
<td>CS200</td>
<td>Discrete Logic: required for BSCS program only</td>
</tr>
<tr>
<td>CS230</td>
<td>Introduction to Unix/Linux, and lab course CS230L</td>
</tr>
<tr>
<td>ENGL102</td>
<td>Critical Thinking</td>
</tr>
<tr>
<td>HU210</td>
<td>Introduction to Philosophy</td>
</tr>
<tr>
<td>MATH202</td>
<td>Calculus – II</td>
</tr>
<tr>
<td>CS204</td>
<td>Program Design and Analysis in C Language, and lab course CS204L</td>
</tr>
<tr>
<td>ENGL115</td>
<td>Public Speaking</td>
</tr>
<tr>
<td>PHYS201</td>
<td>Physics – I, and lab course PHYS201L</td>
</tr>
<tr>
<td>MATH203</td>
<td>Linear Algebra</td>
</tr>
<tr>
<td>SOC201</td>
<td>California History</td>
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</tbody>
</table>

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<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL420</td>
<td>Intercultural Communication</td>
</tr>
<tr>
<td>HU240</td>
<td>Music Appreciation</td>
</tr>
<tr>
<td>PHYS202</td>
<td>Physics – II, and Lab course PHYS202L</td>
</tr>
<tr>
<td>EE205</td>
<td>Fundamentals of Digital Electronics, and lab course EE205L</td>
</tr>
<tr>
<td>SOC245</td>
<td>Health Psychology</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HU280</td>
<td>Principles of Ethics</td>
</tr>
<tr>
<td>MATH205</td>
<td>Differential Equations</td>
</tr>
<tr>
<td>SOC400</td>
<td>Early American History</td>
</tr>
</tbody>
</table>

Begin to take upper-division major courses and electives
The following is the description of the undergraduate engineering program.

- Bachelor of Science in Computer Science (BSCS)

Program Objectives: The Bachelor of Science in Computer Science curriculum is designed to provide in-depth professional training in a range of current computer science subjects, including structured programming, object-oriented analysis and program design, computer organization principles and industry-wide operating systems, database principles and applications, and principles of computer networks. It is designed to equip the student with both a theoretical background and hands-on experience. The curriculum provides training in software engineering and prepares the students for employment in computer software related areas, such as computer software design and development, and computer software applications in computer networks and Internet systems. After completing the undergraduate degree, a student is also prepared to enter an advanced degree program in a computer science related field if he/she desires.

Program Learning Outcomes: Students graduating with a BSCS degree are expected to demonstrate the following program learning outcomes -

Written & Oral Communication - Communicate proficiently on topics that are related to computer science and computer systems with a range of audiences.
Quantitative Reasoning & Problem Solving - Utilize general knowledge in areas such as data management, algorithms, networking, or quantitative analysis to solve computing problems.
Information Literacy - Search, locate, and utilize information pertaining to current computing practices, technology used in the industry, and software tools to fulfill specified requirements.
Inquiry, Analysis, & Critical Thinking - Demonstrate rational thinking over the selection and application of suitable computing solutions appropriate to the discipline.
Specialized Knowledge & Foundations/Integrative Learning - Apply computer science principles and skills acquired in the degree program to work on programming assignments and projects.

Graduation Requirements: A minimum of 129 units are required for graduation. They include the following:

1) 39 units of general education courses including 12 units in English and communications, 9 units in humanities, 9 units in mathematics and natural sciences, and 9 units in social sciences,
2) 75 units of major courses, and
3) 15 units of electives.

Notice to Prospective Degree Program Students

This institution is provisionally approved by the Bureau for Private Postsecondary Education to offer degree programs. To continue to offer this degree program, this institution must meet the following requirements:

- Become institutionally accredited by an accrediting agency recognized by the United States Department of Education, with the scope of the accreditation covering at least one degree program.
- Achieve accreditation candidacy or pre-accreditation, as defined in regulations, by October 16, 2019 and full accreditation by October 16, 2022.

If this institution stops pursuing accreditation, it must:

- Stop all enrollment in its degree programs, and
- Provide a teach-out to finish the educational program or provide a refund.

An institution that fails to comply with accreditation requirements by the required dates shall have its approval to offer degree programs automatically suspended.
# BSCS Curriculum

(Total 129 units)

1. General Education (minimum 39 units)

   The purpose of general education is to give breadth to the student’s education. With a general background in English and communications, humanities, mathematics, natural sciences, and the social sciences, the student will be prepared for his/her roles both in society and at work. Students who have not completed the general education requirements upon entering a degree program at NPU are required to observe the following curriculum to meet the general education requirements.

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) English and Communications (12 units)</td>
</tr>
<tr>
<td>ENGL101 Expository Writing (3)</td>
</tr>
<tr>
<td>ENGL102 Critical Thinking (3)</td>
</tr>
<tr>
<td>ENGL115 Public Speaking (3)</td>
</tr>
<tr>
<td>ENGL220 Small Group Communication (3)</td>
</tr>
<tr>
<td>ENGL420 Intercultural Communication (3)</td>
</tr>
<tr>
<td>(b) Humanities (9 units)</td>
</tr>
<tr>
<td>HU210 Introduction to Philosophy (3)</td>
</tr>
<tr>
<td>HU230 Art Appreciation (3)</td>
</tr>
<tr>
<td>HU240 Music Appreciation (3)</td>
</tr>
<tr>
<td>HU250 News Reading (3)</td>
</tr>
<tr>
<td>HU280 Principles of Ethics (3)</td>
</tr>
<tr>
<td>(c) Mathematics and Natural Sciences (9 units)</td>
</tr>
<tr>
<td>PHYS101 Introduction to Physical Sciences (3)</td>
</tr>
<tr>
<td>PHYS301 Introduction to Device Physics (3)</td>
</tr>
<tr>
<td>MATH201 Calculus – I (3)</td>
</tr>
<tr>
<td>MATH208 Statistics (3)</td>
</tr>
<tr>
<td>(d) Social Sciences (9 units)</td>
</tr>
<tr>
<td>SOC201 California History (3)</td>
</tr>
<tr>
<td>SOC215 Introduction to Sociology (3)</td>
</tr>
<tr>
<td>SOC235 Multiculturalism in the United States (3)</td>
</tr>
<tr>
<td>SOC245 Health Psychology (3)</td>
</tr>
<tr>
<td>SOC250 Public Administration (3)</td>
</tr>
<tr>
<td>SOC260 Civilization and Urbanization (3)</td>
</tr>
<tr>
<td>SOC275 The American Experience (3)</td>
</tr>
<tr>
<td>SOC400 Early American History (3)</td>
</tr>
</tbody>
</table>

2. Major Requirements (minimum 75 units)

   [Engineering mathematics, science, digital circuits basics, and computer science; a course to prepare for professional career]

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Engineering mathematics, science, digital circuits basics, and computer science (54 units)</td>
</tr>
<tr>
<td>(b) Computer Science (30 units)</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT200</td>
<td>Introduction to Computers and Digital Media</td>
<td>(3)</td>
</tr>
<tr>
<td>MATH202</td>
<td>Calculus – II</td>
<td>(3)</td>
</tr>
<tr>
<td>MATH203</td>
<td>Linear Algebra</td>
<td>(3)</td>
</tr>
<tr>
<td>MATH205</td>
<td>Differential Equations</td>
<td>(3)</td>
</tr>
<tr>
<td>PHYS201</td>
<td>Physics – I</td>
<td>(3)</td>
</tr>
<tr>
<td>PHYS201L</td>
<td>Physics Lab – I</td>
<td>(1)</td>
</tr>
<tr>
<td>PHYS202</td>
<td>Physics – II</td>
<td>(3)</td>
</tr>
<tr>
<td>PHYS202L</td>
<td>Physics Lab – II</td>
<td>(1)</td>
</tr>
<tr>
<td>CS200</td>
<td>Discrete Logic</td>
<td>(3)</td>
</tr>
<tr>
<td>CS204</td>
<td>Program Design and Analysis in C Language</td>
<td>(3)</td>
</tr>
<tr>
<td>CS204L</td>
<td>C Programming Lab</td>
<td>(1)</td>
</tr>
<tr>
<td>CS230</td>
<td>Introduction to Unix/Linux</td>
<td>(3)</td>
</tr>
<tr>
<td>CS230L</td>
<td>Unix/Linux Lab</td>
<td>(1)</td>
</tr>
<tr>
<td>EE205</td>
<td>Fundamentals of Digital Electronics</td>
<td>(3)</td>
</tr>
<tr>
<td>EE205L</td>
<td>Digital Electronics Lab – I</td>
<td>(1)</td>
</tr>
<tr>
<td>CE305</td>
<td>Computer Organization</td>
<td>(3)</td>
</tr>
<tr>
<td>CS350</td>
<td>Data Structures</td>
<td>(3)</td>
</tr>
<tr>
<td>CS350L</td>
<td>Data Structures Lab</td>
<td>(1)</td>
</tr>
<tr>
<td>CS360</td>
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<td>CS380</td>
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<td>CS385</td>
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<td>CE450</td>
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<td>CS457</td>
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<td>CS480L</td>
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3. Electives (minimum 15 units)

The student may select courses in any discipline to fulfill this requirement to promote breadth as well as depth in their study program. Course prerequisite requirements must be met. When applicable, the student may take curricular practicum courses and engage in practical training to work on company projects that are directly related to the student’s course of study.
Course Descriptions
Bachelor Degree Programs, School of Engineering

For undergraduate programs, lower division courses are numbered in the 100s and 200s, and upper division courses are numbered in the 300s and 400s.

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Each course description is followed by its prerequisite information expressed in course numbers.

Each 1-unit lab course requires at least 2 contact hours of lab work each week. Each 1 unit of a practicum course requires at least 45 contact hours of practical experience related to the student’s program curriculum.

Business

BUS400 Business Communication (3 units)
This course instructs and develops business communication skills that are essential for daily business and professional activities. Topics include professional memo writing, e-mail format and filing, business letters and correspondence, and business reports. Attention will also be devoted to improving students’ active listening, speaking and nonverbal communication skills. 
Prerequisite: ENGL101

BUS445 Professional Development (3 units)
This course instructs the student to develop his/her professional career. Topics cover personality assessment, professional ethics, understanding the business professional world, recognizing company culture and organizational structure, how to survive office politics, career paths and pitfalls, resume writing and cover letters, and interview techniques. 
Prerequisite: ENGL101

Computer Systems Engineering

CE305 Computer Organization (3 units)
This course is designed to provide a fundamental understanding of the issues and challenges involved in designing and implementing modern computer systems. The primary goal is to help students become more skilled in their understanding of computer systems, including how the hardware and software interact with each other. This course will also provide an understanding of where computers came from and where they are going, as well as understanding their strengths and weaknesses, such as why compiled code will always execute faster than JAVA code. Subjects will include: RISC vs. CISC CPU design approach, instruction sets, pipelining, instruction scheduling (branch prediction, speculative and out-of-order execution, etc.), cache, and storage hierarchy design. Additional key focuses will be on modern I/O architectures such as PCI, PCI-X, SATA, SCSI, USB, etc., and their importance on performance and compatibility. 
Prerequisite: CS204

CE450 Fundamentals of Embedded Engineering (3 units)
This is the first in a series of embedded systems courses designed for students who are interested in learning real-time embedded systems and practicing real-time programming of embedded systems. Topics include hardware issues including platform, microprocessors commonly used in these systems and how a microprocessor works in such systems, concept of memory, registers, I/O; interrupt generation and handling in an embedded system; the concept of real-time programming, multi-task, concurrency, mutual exclusion; overview of real-time kernel/OS, drivers; system initialization and startup, and debug issues. Hands-on exercises are required. 
Prerequisite: CS204

CE450L Embedded Engineering Lab (1 unit)
This is a drill course designed to be taken with the course CE450 Fundamentals of Embedded Engineering. The students gain hands-on experience with embedded systems programming and design. They are also guided to work on projects involving controller systems. 
Prerequisite: CS204L

Computer Science

CS200 Discrete Logic (3 units)
This course is designed to introduce students to discrete logic concepts related to computer science...
and a broad spectrum of applications. Topics include logic set theory, Boolean matrix algebra, relations, structures, combinatorics, computational methods, elements of logic design, graphs theory and its applications to computer science and telecommunications, and design and analysis of efficient algorithms.

Prerequisite: Pre-calculus subjects.

CS204 Program Design & Analysis in C Language (3 units)
This course is designed to teach C language syntax rules and the analysis of a structured programming language, with emphasis on practical applications in engineering and business problems. Methods of testing and debugging well-structured programs in C are also covered. Topics include problem specification and analysis, writing-editing-compiling-linking a C program, data types, operators and expressions, selection and repetition, arrays, pointers, functions, text files, dynamic memory allocation, strings, structures and unions, binary files, and bitwise manipulation and preprocessor directives. Hands-on exercises are required and the weekly lab session is an integral part of this course.

CS204L C Language Lab (1 unit)
This course is designed to be taken with the course CS204 Program Design & Analysis in C Language. The students learn to design and program in C language through practical hands-on exercises. They also learn to debug the codes, document programs, and test applications using Visual C++ tools.

CS230 Introduction to UNIX/Linux (3 units)
This course is designed to familiarize the students with the UNIX/Linux environment. Topics include concepts of the UNIX/Linux operating system, Shell commands, Visual editor, file manipulation and security, UNIX utility commands, Shell features and Shell environment, online manual, controlling user processes and managing jobs, introduction of Regular Expression and its usage with grep, sed, awk, UNIX power utilities, basic Shell programming techniques, large file management, and the user programming environment customization. Hands-on exercises are required.

CS230L Unix/Linux Lab (1 unit)
This course is designed to be taken with the course CS230 Introduction to Unix/Linux. The students gain hands-on experience with Unix/Linux commands, vi editor, Unix/Linux utility, Shell programming, security issues, and managing long files and customization of user environment.

CS350 Data Structures (3 units)
This course is designed to teach efficient use of data structures and algorithms to solve problems. Students study the logical relationship between data structures associated with a problem and the physical representation. Topics include introduction to algorithms and data organization, arrays, stacks, queues, single and double linked lists, trees, graphs, internal sorting, hashing, and heap structures. Hands-on exercises are required.

Prerequisite: CS204

CS350L Data Structures Lab (1 unit)
This course is designed to be taken with the course CS350 Data Structures. C language - a structured programming language - is further investigated. Topics include pointer structure, structure and union, stack, queue, linked list, sort, binary tree, and heaps.

Prerequisite: CS204L

CS360 Object-Oriented Programming in C++ (3 units)
This course is designed to develop the students' abilities to design, code, and document application programs using object-oriented design and analysis concepts and methodology. Emphasis is on establishment of design objectives, criteria and specifications, processes of synthesis, analysis, construction, testing, and evaluation of open-ended problems. Topics include an introduction to general object-oriented programming as implemented in C++, data types, expression, statements, functions, program scope, run-time memory allocation, function overloading, template functions, class mechanism, derivation, inheritance, and migration from C to C++. Labs may accompany lectures in partial class meetings during the trimester. Hands-on exercises are required.

Prerequisite: CS204

CS360L Object-Oriented Programming in C++ Lab (1 unit)
This course is designed to be taken with the course CS360 Object-oriented programming in C++ to practice and develop the programming skills in C++. 

Prerequisite: CS204L

CS380 Operating Systems (3 units)
This course covers the fundamental concepts and implementation techniques of modern operating systems. Topics include processes, threads, concurrency, memory management, file systems, I/O systems, security, and OS virtualization. Popular operating systems will be selected for case studies including Linux/UNIX, Windows, Android, and VMWare hypervisors. Hands-on exercises and projects are required.

Prerequisite: CS204

CS385 UNIX/Linux Shell and Python Scripting (3 units)
This course covers the fundamentals of and techniques involved in UNIX/Linux shell and Python programming. Topics include UNIX/Linux shells (Bourne, Korn, C shell and bash), shell programming, and Python programming and environments, basic UNIX/Linux file system, and resource management. The students will be able to write shell scripts to
accomplish routine tasks for software development and testing.

Prerequisite: CS230

CS385L Unix/Linux Shell and Python Scripting Lab (1 unit)

This course is designed to be taken with the course CS385 Unix/Linux Shell and Python Scripting. The students gain hands-on experience with Shell, Perl and Python scripting languages. Topics include Unix/Linux OS usage and commands, Shell programing, Perl programing, Python programing and Python OOP methodology.

Prerequisite: CS230L

CS453 Compiler Design (3 units)

This course is designed to give students a fundamental knowledge of compilers and interpreters for modern computer languages. Topics include a study of modern computer languages, regular expressions, lexical analysis, parsing techniques, context-free grammars, and syntax-directed translation. Hands-on exercises and trimester projects are required.

Prerequisite: CS385

CS457 Data Modeling and Implementation Techniques (3 units)

This is the first of a series designed to teach relational database concepts, design, and applications. Topics include database architecture, relational model, structured query language (SQL), data manipulation language (DML), data definition language (DDL), database design, ER modeling, database normalization, denormalization, and physical database design. Popular database systems, such as Oracle and Microsoft SQL server, are used for hands-on exercises and projects.

Prerequisite: CS204

CS457L Database Technologies Lab (1 unit)

This is a drill course designed to be taken with the course CS457 Data Modeling and Implementation Techniques. The students gain hands-on experience in database applications using popular database systems including Oracle database and Microsoft SQL server. They are also guided in working on database design projects.

Prerequisite: CS204L

CS464 Software Design and Implementations (3 units)

This course is designed to use C/C++ to achieve the goal of teaching the students the design methodology for algorithm development. The objective is to develop the students’ programming ability with proper logical and object-oriented thinking processes. The course covers two main topics: (1) Problem specification and analysis - understand the problem, analyze it, and translate the human thinking into a computer program; (2) Object-oriented design and analysis - understand data abstraction, encapsulation, aggregation, and inheritance. These concepts are the foundation for modern object-oriented programming languages such as C, C#, and Java. Hands-on practices are required.

Prerequisite: CS204

CS470 Network Engineering and Management (3 units)

This course is designed to introduce network communications. Topics include network layered models (OSI, TCP/IP), architecture, principles, service models and protocols; data communication basics, switching, routing, security, network management, and wireless and mobile networks. Modern Internet technologies and implementations are presented in case studies. Hands-on exercises are required.

Prerequisite: CS204

CS470L Network Engineering Lab (1 unit)

This is a drill course designed to be taken with the course CS470 Network Engineering and Management. The students learn network communications through weekly hands-on drill sessions. They learn protocols used in network data communication, routing design, and network management. The students will gain the experience of using popular routers and switches in their exercises.

Prerequisite: CS204L

CS480 Java and Internet Applications (3 units)

This course introduces students to the Java language, programming with object-oriented construct, GUI design and graphics programming, and core Java libraries. Students will learn Java language basics such as syntax and classes, inheritance, interfaces, reflection, graphics programming, event handling, user-interface components with Swing, Java applets, exception handling, stream, and files. Hands-on exercises are required.

Prerequisite: CS360

CS480L Java Programming Lab (1 unit)

This is a drill course designed to be taken with the course CS480 Java and Internet Applications. The students gain Java programing skills through hands-on exercises in this weekly lab course. Weekly hands-on exercises normally correspond with the lecture material offered in each week.

Prerequisite: CS360L

Curricular Practicum

CPT401 Curricular Practicum (1 unit)

Curricular practicum, or curricular practical training, is a supervised practical experience that is the application of previously studied theory. It is defined as alternative work/study, internship, cooperative education, or any other type of required internship or practicum that is offered by sponsoring employers through cooperative agreements with the school and the course is an integral part of an established
Curriculum. At least three hours of work in a practical setting has the credit equivalency of one hour of classroom lecture (1 unit). To be eligible to take this course, the student must have completed at least two trimesters of coursework required in his/her degree program, obtained a written agreement that outlines the arrangement between the institution and the practicum site (including specific learning objectives, course requirements, and evaluation criteria), and received approval by a designated advisor. International students must follow additional rules required by the U.S. Immigration and Customs Enforcement. The student must use NPU’s online tool to submit his/her application for taking this course before meeting with a designated advisor for an assessment of eligibility. Information and instructions concerning this course are provided in the application form. This is a part-time practicum course taken by the undergraduate student to work no more than twenty hours each week during the approved practicum period. Failure in this course will prevent the student from taking any curricular practicum course afterwards. Prerequisite: Refer to the instructions on the application and agreement documents.

CPT402 Curricular Practicum (2 units)
Curricular practicum, or curricular practical training, is a supervised practical experience that is the application of previously studied theory. It is defined as alternative work/study, internship, cooperative education, or any other type of required internship or practicum that is offered by sponsoring employers through cooperative agreements with the school and the course is an integral part of an established curriculum. At least three hours of work in a practical setting has the credit equivalency of one hour of classroom lecture (1 unit). To be eligible to take this course, the student must have completed at least two trimesters of coursework required in his/her degree program, obtained a written agreement that outlines the arrangement between the institution and the practicum site (including specific learning objectives, course requirements, and evaluation criteria), and received approval by a designated advisor. International students must follow additional rules required by the U.S. Immigration and Customs Enforcement. The student must use NPU’s online tool to submit his/her application for taking this course before meeting with a designated advisor for an assessment of eligibility. Information and instructions concerning this course are provided in the application form. This is a full-time practicum course taken by the undergraduate student to work more than twenty hours but not to exceed forty hours each week during the approved practicum period. Failure in this course will prevent the student from taking any curricular practicum course afterwards. Prerequisite: Refer to the instructions on the application and agreement documents.

Electrical Engineering

EE205 Fundamentals of Digital Electronics (3 units)
This course is designed to be the first of the digital circuits series. It provides the fundamentals of digital circuit operations so that students can be ready for practical design considerations in digital electronics, and it includes hands-on experience with digital logic elements and testing and measuring equipment. Topics include number systems and codes, logic gates and Boolean algebra, combinational logic circuits, flip-flops and related devices, digital arithmetic, counters and registers, integrated-circuit logic families, A/D and D/A converters. Laboratory experiments will accompany the class topics. Prerequisite: MATH201

EE205L Digital Electronics Lab – I (1 unit)
This course is designed to be taken with the course EE205 Fundamentals of Digital Electronics. Topics include introduction to power and ground, basic IC chips with enable/disable control, implementing a 1-bit adder and connecting two 1-bit adders to create a 2-bit adder, measuring voltage and current and power, connecting multiple outputs; divide by 2, 4 circuit; using the oscilloscope, design an oscillator using the 555, design a programmable mod-8 up/down counter, digital clock, IC UP decade counter with LS7447 and 7-segment display, D/A conversion design, memory writing and reading, and night rider design. Prerequisite: MATH201

English

(GE in English and Communication area)

ENGL101 Expository Writing (3 units)
This fundamental level college writing course is based on a systematic approach to address students' needs to acquire knowledge and skills in written communication. It explores an integrated approach to the mechanics of communication, encompassing a full range of basic concerns in informative writing, going from its processes to its forms, to the popular techniques writers have used to make their works outstanding. Students enhance their writing skills through the process of prewriting, organizing, drafting, revising, and editing of expository essays. By the end of the trimester, students should be able to use grammar and punctuation correctly and to write effective informative/explanatory essays in both academic and professional settings.

ENGL102 Critical Thinking (3 units)
This course focuses on learning to be an effective provider and consumer of ideas in our information-saturated society. Students will learn to identify the intent of the message, to judge the soundness of the argument, and to evaluate the validity of the evidence. Rigorous training will help learners go beyond feelings and personal biases to clear, impartial, and
accurate problem solving and decision making that are essential to all human communication: speaking, writing, debating, and persuading.

Prerequisite: ENGL101

ENGL115 Public Speaking (3 units)
This course is designed to develop effective skills in extemporaneous speaking, formal presentations, and listening. Students will learn about nonverbal communication, cultural differences in communication, and research methodology.

Prerequisite/Corequisite: ENGL101

ENGL220 Small Group Communication (3 units)
This course is designed to accomplish the following learning goals: 1) to help the students understand theories and principles of small group decision making and problem solving, 2) to provide students with hands-on experience working in small groups, the most powerful tool in modern industry, and 3) to offer students opportunities to observe the development and operation of real-life task-oriented groups.

Prerequisite: ENGL101

ENGL420 Intercultural Communication (3 units)
This course introduces theories and practices regarding intercultural relationships and communication. It helps students adapt to a rapidly diversified workforce both in Silicon Valley and in other parts of the world. From the vantage point of this course, students will see the forces that shape cultures and influence intercultural contacts. They will be enabled to build harmonious and productive relationships with individuals from all national, ethnic, and linguistic backgrounds.

Prerequisite: ENGL101

Humanities

(GE in Humanities area)

HU210 Introduction to Philosophy (3 units)
This course is an introduction to the great questions of philosophy, using an historical approach. The class covers Western and non-Western traditions from the pre-Socratic and Confucius to modern times.

Prerequisite: ENGL101

HU230 Art Appreciation (3 units)
A crash course in western art aesthetic from ancient art to post-modernism, this course gives the student a historical western art background that makes comparisons to the East, as well as the tools to analyze paintings through their own cultural point of view.

Prerequisite/Corequisite: ENGL101

HU240 Music Appreciation (3 units)
This course is designed for students to explore the fundamentals of music through easy listening examples from all aspects of sound: tone, color, harmony, rhythm, mood, dynamics, tempo, themes, and forms. Students will analyze music in respect to the historical and cultural context as well as to daily life.

Prerequisite/Corequisite: ENGL101

HU250 News Reading (3 units)
This course will give students a skill that they will be able to use and benefit from for the rest of their lives: the ability to read and understand an English-language newspaper, magazine or other journalistic materials. It will enable the students to launch from their general English reading capability into a subject area which is more specialized and yet intimately woven with every-day happenings that concern and motivate every ordinary man and woman -- the news reports.

Prerequisite: ENGL101

HU280 Principles of Ethics (3 units)
This course is designed to teach students ethical principles and problems applicable to their lives. Topics include application of ethical principles, background and philosophical principles of ethics, ethical practices, and practical ethical problems and solutions.

Prerequisite: ENGL101

Information Technology

IT200 Introduction to Computers and Digital Media (3 units)
This is an introductory computer literacy course introducing the students to the basics of computer hardware structure, the World Wide Web, and MS Windows software tools. Topics include an introduction to computer components, input/output, data storage, the internet and the WWW, operating systems, data management, and a few Adobe Photoshop software tools. Students also learn to use the latest Microsoft Office tools – Word, Excel, Access, PowerPoint, and the use of the internet and browsers. Hands-on exercises are required.

Mathematics

MATH201 Calculus - I (3 units)
This course is the first of a series in calculus designed for students to build up the fundamental background of calculus and to learn its applications to very basic problems. Topics include functions, limits, continuous functions, derivatives and applications, antiderivatives, composite functions and chain rule, graphing techniques using derivatives, implicit differentiation, finite integrals, and fundamental theorems of calculus.

(ge – in Mathematics area)

Prerequisite: pre-calculus subjects
MATH202 Calculus - II (3 units)
This course is the second of the calculus series designed for students to understand integration techniques and extend the differentiation notion and methods to functions of multiple variables. Topics include logarithmic and exponential functions and their derivatives, inverse trigonometric functions and derivatives, L'Hôpital's rule, integration techniques and their applications, sequence, series, partial derivatives, and improper integrals.
Prerequisite: MATH201

MATH203 Linear Algebra (3 units)
Linear Algebra is one of the topics to prepare students for higher-level math courses as Differential Equations. It is also relevant to computer and business students interested in Data Science since linear problems are often the simplest models of the natural world. In this course students learn the language, concepts, and techniques, from the ground up; the course starts with geometric representation of systems by equations, and later manipulation of abstract ideas as Singular Value Decomposition.
Prerequisite: MATH201

MATH205 Differential Equations (3 units)
This course is designed for engineering students to learn differential equations and their applications. Topics include ordinary differential equations at first, second, and higher orders; applications of ordinary differential equations in electrical circuits and motions, partial differential equations and boundary problems, eigenvalues and eigenfunctions, Green's function, and applications of partial differential equations in electromagnetic waves and scalar and vector potential problems.
Prerequisite: MATH201

MATH208 Statistics (3 units)
This course is designed for students to understand the concepts, theory, and applications of probability and statistics. Topics include permutation, combination, random variables, distribution, means and variance, normal distribution, random sampling, estimation, confidence interval, hypothesis testing, linear correlation and regression.
Prerequisite: Pre-calculus subjects

Physics and Physical Sciences

PHYS101 Introduction to
Physical Sciences (3 units)
This is an introductory course to expose the students to physical science subjects including the basics of astronomy, chemistry, earth science, and physics.
Prerequisite: Pre-calculus subjects

PHYS201 Physics - I (3 units)
This course is designed to be the first of a series in physics for engineering students. Topics include vectors, motion and Newton’s laws, gravitation, work and energy, momentum, mechanics of rigid bodies, oscillations, kinetic theory of gases, waves and sound, and thermodynamics. Laboratory practices are conducted formally each week.
Prerequisite: MATH201

PHYS201L Physics Lab – I (1 unit)
This course is designed to be taken with the course PHYS201 Physics - I. The student first learns to use the general measuring equipment, the proper experimental procedures, and lab safety issues. The student is expected to gain skills in data analysis and lab report writing throughout the trimester. Lab topics include measurements of position and velocity, kinematics, Newton's laws of motion, energy, momentum, conservation laws of energy and momentum, collisions, torque, rotational dynamics, waves, and thermodynamic behaviors.
Prerequisite: MATH201

PHYS202 Physics - II (3 units)
This course is the second of a series in physics for engineering students. Topics include Coulomb's law and electric fields, currents and DC circuits, magnetic fields, time-varying EM fields, AC circuits, optics, interference, diffraction, and an introduction to modern physics. Laboratory practices are conducted formally each week.
Prerequisite: PHYS201

PHYS202L Physics Lab – II (1 unit)
This course is designed to be taken with the course PHYS202 Physics - II. The student learns to use electrical measuring equipment to conduct the first several experiments related to electromagnetism. Lab safety as well as skills in data analysis and lab report writing are stressed. Lab topics include measurement of electric field and potential, simple circuits, resistors, DC circuits, Kirchhoff's laws, capacitors, RC circuits, magnetic effects, inductors, AC circuits, electromagnetic induction, RLC circuits, geometrical optics, lenses, and light as a wave.
Prerequisite: PHYS201

PHYS301 Introduction to Device Physics (3 units)
This course provides a basis for understanding the characteristics, operation, and limitations of semiconductor devices. The course covers the fundamental concepts of quantum mechanics, the quantum theory of solids, semiconductor material physics and semiconductor device physics. All of these components are vital to the understanding of both the operation of present day devices and future development in the field.
Prerequisite: PHYS202
Social Science
(GE – in Social Sciences area)

SOC201 California History (3 units)
This course is designed to expose the students to the uniqueness of California history and its evolution. Topics include the social, economic, and political development of the “Golden State” over the last three centuries, spanning the Native-American, Spanish, Mexican, and American periods. Lectures, case studies, and field trips for research are the forms of study in this course.
Prerequisite: ENGL101

SOC215 Introduction to Sociology (3 units)
This course provides a study of culture, social organization, and social relations. Additional topics include the major social problems in society, with an emphasis on how those problems are interrelated and the role of society in their creation and perpetuation. Issues and problems related to cross culture and diversity will also be addressed.
Prerequisite: ENGL101

SOC235 Multiculturalism in the United States (3 units)
This course looks into various aspects of multiculturalism in American society, exploring issues related to race, ethnicity, gender, sexual orientation, disability, and other social group identities.
Prerequisite: ENGL101

SOC245 Health Psychology (3 units)
This survey course will ask: What is health, how do you know you are well, when should you seek professional services, where do I find the right doctor, why should I take good care of myself, and whom do I go to and for what? Concepts and facts will be given to understand and apply to: the body and its systems, the brain and the mind, physical diseases, chronic pain, mental illnesses, personality disorders, sleep and relaxation, positive thinking, emotional intelligence, behavioral health, nutrition, exercise, health care treatments, alternative and complementary medicine, medications and adverse side effects, medical specialties, national costs, insurance, programs, aging and longevity, quality of life, dying with dignity, and healthcare providers ethics.
Prerequisite: ENGL101

SOC250 Public Administration (3 units)
This course serves as an introduction to public administration. Early key thinkers in the development of public administration will be examined. During the trimester, topics such as public policy formation, public management, human resources, reinvention, privatization, e-Government, public finance, performance measurement, and ethics will be reviewed. Students will become familiar with the primary issues and challenges facing public administrators today.

SOC260 Civilization and Urbanization (3 units)
This is an introductory course designed to cover the 5,000 year shift from rural to urban throughout the world. The city is civilization’s greatest work of art but has many challenges. The ancient walled cities, utopian writings, urban theories, religious experiments, English Garden Cities and new towns, American Greenbelt Towns, company towns, flight to the suburbs, Neo-traditional planning, the New Urbanism, and current sustainable development, Smart Growth, to the more recent Greening and Healthy Cities will be described and the actual city and regional planning practices are shown.
Prerequisite: ENGL101

SOC275 The American Experience (3 units)
This course is designed to lead the students to examine the 20th century rise of the United States as a modern multietnic society with emphasis on the socioeconomic and political forces that have shaped its development.
Prerequisite: ENGL101

SOC400 Early American History (3 units)
This course is designed to lead the students to examine the early periods of American history that shaped the development of the nation, including America before Columbus, European expansion, the founding era and Revolution, the Constitution and the new republic, and subsequent periods of civic and political growth up to the Civil War.
Prerequisite: ENGL101
Master’s Degree Programs

The School of Engineering offers two master’s degree programs:

- Master of Science in Electrical Engineering (MSEE)
- Master of Science in Computer Science (MSCS)

Objective

The objective of the master’s degree programs is to provide advanced engineering training to those who wish to practice their profession with increased competence in the high-technology electronics and computer industries. Each program emphasizes both mastery of subject matter and an understanding of related research and research methodology. This emphasis implies development of the student’s ability to integrate and apply the subject matter.

Committee Oversight

The responsibility for developing, modifying, and maintaining each master’s degree program is performed by the Academic Committee for this School. The Academic Committee is led by a designated group of members who invite inputs from qualified students, faculty, administrators, employers, as well as the Advisory Committee members to conduct their duties.

Credential Requirements

The master’s degree program applicants must hold a valid bachelor’s degree and meet the minimum cumulative grade point average requirement for consideration of acceptance.

- a CGPA of 2.5 or above for applicants with a U.S. bachelor’s degree
- a CGPA of 3.0 or above for applicants with a bachelor’s degree from a foreign institution

Application Requirements

To apply for admission into a master’s degree program, the applicant is required to submit the following to the NPU Admissions Office:

1. An online Application Form.
2. A nonrefundable application fee.
3. A copy of passport or a government issued I.D.
4. Official transcripts from previously attended colleges;
5. A document certifying completion of a bachelor’s degree; a transcript printed with degree completion information will suffice;
6. An English proficiency document is required for non-native English speakers: an official transcript with English course records or TOEFL/IELTS/PTE Academic score report or the Cambridge FCE Certificate or equivalent will suffice. See English Proficiency Requirement below for detailed information on the English entrance requirement.

International Students: In addition to the above general application requirements, an international applicant is also required to submit the following additional documents:

1. Entrance assessment test: GRE (General test score). There is no minimum requirement, however, the score is a factor affecting admissions decision.
2. A financial support document – provide a recent financial support document indicating a minimum amount of $30,000 available to pursue his/her study in the first academic year at NPU.
   - A current bank letter and bank statement; or
   - A loan letter from a lending institution; or
   - A property deed valuation report; or
   - Copies of fixed deposits. An affidavit of support or sponsor letter is required if the funds are not in his/her name.
3. A transfer student (from a U.S. institution) is required to submit a photocopy of his/her
   - previous I-20 form, visa, and
   - I-94 (U.S Department of Homeland Security issued arrival / departure form). The student will be asked to show an identification document attesting his/her official name, if applicable.

Applicants interested to apply for scholarships need to provide additional documents. Please refer to the section on Scholarships in this catalog and on the website.
• **English Proficiency Requirement**

Non-native English speakers are considered meeting the entrance English proficiency requirement if they meet any of the following requirements:

- completed secondary school or a college degree program where English was the language of instruction.
- completed and passed a college English credit course in an institution located in the U.S., U.K. Australia, New Zealand, or Canada, and where English is the language of instruction for the institution.
- submitted an official TOEFL, IELTS or PTE Academic test score report to NPU and the score meets the minimum score detailed below, which is subject to modification by the NPU admissions office.
  - For applicants with a CGPA of 3.5 and above
    - IELTS: 5.5; TOEFL: 59; PTE: 50; Cambridge FCE Certificate
  - For applicants with a CGPA between 3.0 to 3.49
    - IELTS: 6.0, TOEFL: 78, PTE Academic: 58, or the Cambridge FCE Certificate
- NPU may accept the English assessment reports from a few U.S. English language institutions recognized by major universities in the U.S.
- Successfully completed NPU’s IEP Level 6, or upon completion of all level 5 courses with a minimum grade of A.

• **Entrance Assessment Test**

The entrance assessment test, GRE, is required from students who earned their bachelor’s degree from a foreign institution. There is no minimum requirement, however, the score is a factor affecting admissions decision.

NPU’s institution Code for reporting the GRE score is 5485.

**GRE Waiver** applies to students with a U.S. bachelor’s degree.

• **General Background Requirements for Pursuing Master’s Degrees**

**Background Preparation:** The background preparation for each graduate program is described at the beginning of each program. Background deficiencies are identified in the admission evaluation report received by each applicant. The student is required to clear the deficiencies early in his/her study at NPU.

**How to Clear Deficiencies:** The graduate student may clear each background deficiency by taking and passing the subject course (an undergraduate course) at NPU. The student may earn graduate elective credit when taking **mezzanine courses** to clear deficiencies at NPU. With advance approval by the Admissions Committee, the student may be allowed to clear a deficiency by taking a **proficiency exam** on the subject.

**Courses taken elsewhere after joining the degree program at NPU will not waive a deficiency requirement. Students may not take the deficiency courses at another institution while attending NPU.**

• **Transfer of Credit from Other Institutions**

Graduate course credit earned at other accredited higher education institutions may be transferable to meet the student’s graduation requirements if the courses are closely related to the engineering course requirements in the student’s intended program of study and the grade earned meets the requirement stated below. Such course credits are considered qualified transfer credits. Credit transfer is made by the admission evaluators while conducting the admission evaluation.

The following statements apply to qualified transfer credits:

- The NPU Admissions Office must receive all **official transcripts** prior to the student’s joining a degree program. Without preapproval, transcripts received after the student joins NPU cannot be used in transferring credits, except for records from the term immediately preceding the student’s starting trimester at NPU.

- The student was officially enrolled in the course.
Courses eligible for transfer will be evaluated based on the comparability in content, quality and rigor of NPU’s courses. The transfer evaluation will include, but is not limited to, course descriptions, course syllabi, and/or general public information. Students may be asked to provide course catalogs or syllabi if needed.

- No more than 7 units of qualified graduate-level course credits may be transferred.

- Courses for transfer to NPU may not be completed concurrently at another institution while attending NPU.

- The credits contemplated for transfer must be earned at (1) institutions approved by the Bureau for Private Postsecondary Education, (2) public or private institutions of higher learning accredited by an accrediting association recognized by the U. S. Department of Education, or (3) any institution of higher learning, including foreign institutions, offering degree programs equivalent to degree programs approved by the Bureau or accredited by an accrediting association recognized by the U.S. Department of Education. With regarding to foreign institutions, if NPU cannot determine that the institution is offering degree programs equivalent to degree programs approved by the Bureau or accredited by an accrediting association recognized by the U.S. Department of Education, the student may obtain a credential evaluation from a National Association of Credential Evaluation Services (NACES) member.

- Professional Development Units (PDUs) offered by professional/industry organizations cannot be transferred to NPU for academic credit.

- Continuing Education Units (CEUs) offered on a non-academic basis by other academic institutions cannot be transferred to NPU for academic credit.

- Credits transferred, performed at the time of admission evaluation, will reduce the program length. Credit transferred from any outside institution is excluded from the maximum program length and has no effect on the calculation of the student’s GPA or CGPA.

- Credits are transferred by the following conversion:

  a. **Definition of a Trimester Unit:**
     One trimester credit hour equals, at a minimum, 15 contact classroom hours of lecture, 30 contact hours of laboratory, or 45 contact hours of practicum.

  b. **Conversion Factor:**
     1 quarter unit = 0.66 trimester unit

- **Grades Required for Transfer Credit**
  In the master’s degree programs, qualified courses completed with an equivalency of a letter grade of "B" or better are transferable. Courses completed with Pass/No Pass are not transferable unless the transcript states that the general grading policy is not based on letter grades. This policy must be in writing from the institution (transcript key or a letter of verification).

- **Proficiency Exams:** A student may be required to demonstrate proficiency in an undergraduate background subject taken more than ten years prior to application with NPU by successful completion of a proficiency examination.

  A student may also select to take proficiency exams to clear his/her background deficiencies in order to satisfy the background preparation required by his/her program. Rules for taking proficiency exams must be observed by the student. Of particular importance is timing for taking each proficiency exam. Clearance of a background subject must be completed early enough to meet two conditions: (1) There must be sufficient time for administrative processing of the exam and (2) Processing of the exam must be completed prior to the student’s registration in any course with the deficiency subject as a prerequisite for the course.

- **Experiential Learning**
  NPU does not award credit for prior experiential learning.

- **Tuition**
  Tuition is charged per unit. Tuition for courses taken to fulfill the master’s degree requirement is $450.00 per unit.
• **Tuition per Unit for Courses Audited**

For courses audited (without earning credit), the tuition is half the regular unit rate. Not all courses can be taken with “audit” status.

• **Estimated Total Charges for On-time Completion of Entire Educational Program**

- Tuition: $16,200
- Fees: $1,600
- Graduation Petition Fee: $300
- Textbooks Costs: $1,800
- Health Insurance Premium: $1,668

- MSCS: $21,568
- MSEE: $21,568

Please note that this estimate includes tuition, fees, textbooks costs, and health insurance premium, which is subject to change. All students are required to pay current rates for tuition and fees each trimester. Additional fees may apply, depending on the services requested (see Tuition and Fee section). The cost of textbooks is estimated to be approximately $150 per course. The actual cost of textbooks can vary significantly from course to course.

• **Graduation Requirements**

A minimum of 36 units of graduate-level coursework are required for each master’s degree program. Additional coursework may be required for a student whose undergraduate degree program was in a different field or who is required to clear his/her background deficiencies by taking these courses at NPU.

The following are required for graduation:

- A graduate student entered with undergraduate deficiencies must clear the deficiencies as soon as possible. The student may clear a subject by either taking the course and earning a passing grade or passing a proficiency exam on the subject,
- Maintain a grade of C or better for all courses taken towards the degree requirements,
- Maintain an overall G.P.A. of 3.0 or better,
- Maintain good standing with the University – with clear financial, library, and other school records,
- The student is approved to graduate after filing a petition for graduation.

✦ **Capstone Course**

The capstone course in each engineering master’s degree program is intended to integrate the knowledge and hands-on experience that the student has acquired from the coursework taken in the program. The capstone course instructor determines the course objectives and scope based on the degree curriculum and technology trend. With this learning experience, the student is prepared to pursue his/her career in the high-technology industry.

The student shall take the capstone course near the end of his/her program of study.

✦ **Career Planning**

The students are encouraged to gain real-world experience by engaging in curricular practicum when applicable. For career planning, the students may utilize the online eCareer Center and work with the Career Center staff to prepare their resumes and participate in job search activities when they are ready for such a pursuit.
The following are descriptions of the master’s engineering degree programs, each with a statement of objectives, a description of the background preparation for the program, and the program curriculum.

**Course Numbers:** Courses numbered in the 200s, 300s, and 400s are undergraduate background courses; courses numbered from 450G to 499G are mezzanine courses; courses numbered in the 500s and above are graduate level courses. Mezzanine and graduate level courses are to meet the graduation requirements.

- **Master of Science in Electrical Engineering (MSEE)**

**Program Objectives:** The MSEE degree program is designed to provide students with advanced knowledge and hands-on experience in electronics engineering. Through the learning process, the students not only acquire knowledge in modern electronics technologies but also cultivate abilities in designing, simulating, and integrating the engineering subjects learned. They are encouraged to apply their knowledge and skills to course projects that match industry trends.

**Program Learning Outcomes:** Students graduating with an MSEE degree are expected to demonstrate the following program learning outcomes -

  - **Written Communication & Critical Thinking** - Create reports for engineering projects that demonstrate an advanced level of proficiency and evidence-based decision making ability.
  - **Specialized Knowledge & Written/Oral Communication** - Apply the specialized skills relevant to graduate level work to examine problems, synthesize the data/information, and communicate the requirements and the solutions effectively.
  - **Quantitative Reasoning** - Prepare engineering prototype models, conduct experiments, collect measurements, analyze the data, and effectively interpret the results.
  - **Information Literacy** - Demonstrate the expertise and resourcefulness in utilizing multiple sources of information to research and strategize solutions necessary to complete engineering projects.
  - **Integrative Learning, Problem Solving & Creative Thinking** - Produce robust hardware/software solutions to meet industry needs in the modern technology areas by utilizing existing technology in a novel manner.

**Background Preparation**

Students admitted into the MSEE degree program are required to have the following background preparation.

1. Engineering Mathematics: MATH201, MATH202, MATH203, MATH205, and MATH208;
2. Engineering Sciences: PHYS201 & Lab, PHYS202 & Lab, PHYS301;
3. Electrical and Computer Engineering Subjects: CS204 & Lab, EE205 & Lab, Circuit Theory, Logic Design;
4. The following mezzanine courses are also required for background preparation. Credit earned at NPU can meet the Electives requirement for the program: CE450L/G, EE461L/G, and P450G.

The above background preparation subjects will satisfy the prerequisites for the courses listed in the following Foundation Requirements as well as graduate courses in the study areas of Internet of Things (IoT), embedded systems, multi-core computing, and modern IC technologies.

**Notice to Prospective Degree Program Students**

This institution is provisionally approved by the Bureau for Private Postsecondary Education to offer degree programs. To continue to offer this degree program, this institution must meet the following requirements:

- Become institutionally accredited by an accrediting agency recognized by the United States Department of Education, with the scope of the accreditation covering at least one degree program.
- Achieve accreditation candidacy or pre-accreditation, as defined in regulations, by October 16, 2019 and full accreditation by October 16, 2022.

If this institution stops pursuing accreditation, it must:
• Stop all enrollment in its degree programs, and
• Provide a teach-out to finish the educational program or provide a refund.

An institution that fails to comply with accreditation requirements by the required dates shall have its approval to offer degree programs automatically suspended.

**MSEE Curriculum**

A minimum of 36 trimester units of graduate study are required for the MSEE program. They include a few required foundation courses, a number of engineering courses based on the student’s selection of technical pursuit, a required capstone course, and electives. The engineering coursework in the ranges of electronics and computer engineering will develop technical skills beneficial to the student for career planning. The student also has the opportunity to take elective courses outside of the electronics or computer engineering areas to broaden the student’s skillset.

The student must meet prerequisite requirements when taking any course. Upon clearing background preparation work, the student starts to take courses to meet the degree requirements. The student must begin his/her graduate study with the subjects listed in the Foundation Requirements section.

I. **Foundation Requirements** (9 units)
   (Required subjects)
   - **CE450G** Fundamentals of Embedded Engineering
   - **EE461G** Digital Design and HDL
   - **EE468G** Microelectronics Circuit Design and Analysis

II. **Engineering Course Requirements** (12 units)

   The student is advised to consider industry trends when selecting electronics and computer engineering courses. Before taking the Capstone Course near the end of the program, the student will take a minimum of 12 units of graduate level engineering courses and 12 units of electives. Choices of field of study include the following: Internet of Things (IoT), embedded systems, multi-core computing, and modern IC technologies.

   The following are examples of cluster courses for each area of interest area:

   **Internet of Things (IoT) and Embedded Systems:**
   - **EE517** Introduction to the Internet of Things (IoT)
   - **CE521** Real-time Systems and Programming
   - **CE522** Embedded Design in Networking Environment
   - **CE523** Embedded Design in Device Driver Environment
   - **CE530** Embedded Software Design in Linux

   **Multi-core Computing:**
   - **EE504** Advanced Computer Architecture
   - **EE553** System on Chip (SoC) Design

   **Modern IC Technologies:**
   - **EE505** Advanced Digital IC Design
   - **EE511** Advanced Analog IC Design
   - **EE520** Advanced FPGA Design and Implementations
   - **EE577** Design Verification with System Verilog
Each trimester when the course offering list is published, instructions on graduate level courses belonging to various areas of interest are also published along with the course offering list. Every graduate student is advised to refer to these instructions to select courses and build his/her expertise area. In addition, a cross disciplinary study of engineering areas of interest can be desirable as the fast changing electronics and computer industries have become more demanding on engineers to have multidisciplinary skillsets.

III. Electives (12 units)

The student may take any graduate-level courses, even outside of engineering, to meet the electives requirement of 12 units. When applicable, the student may take Curricular Practicum courses and engage in practical training to work on company projects that are directly related to the student’s field of study. No more than 6 units of practicum coursework may be counted towards degree requirements.

IV. Capstone Course (3 units)

(A required subject)

Upon completing all or most of the coursework for this program, the student is required to take the capstone course and, under the guidance of the course instructor, integrate the knowledge and skills learned from all of the courses taken during the program.

EE595 Electrical Engineering Capstone Course

- Master of Science in Computer Science (MSCS)

**Program Objectives:** The MSCS degree program is designed to provide advanced knowledge and hands-on experience in computer science to students who are interested in gaining expertise in software engineering as well as modern Internet technologies and applications. Through the learning process, the students not only acquire knowledge in modern computer technologies but also cultivate abilities in software design, development, deployment, and integration aspects of professional learning. They are encouraged to apply their knowledge and skills to course projects that match industry trends.

**Program Learning Outcomes:** Students graduating with an MSCS degree are expected to demonstrate the following program learning outcomes -

- **Written & Oral Communication** - Effectively present the concepts, designs, and outcomes for software development projects in written and oral forms.
- **Quantitative Reasoning & Problem Solving** - Employ current computer science technologies, methodologies, and quantitative analysis to examine modern industry challenges and formulate suitable solutions.
- **Information Literacy** - Demonstrate the proficiency and resourcefulness in utilizing multiple sources of information to research, design, or implement complex programming projects.
- **Critical Thinking, Analysis & Creative Thinking** - Apply critical thinking and problem solving skills to analyze computing problems and derive at solutions based on evidences and practicality.
- **Specialized Knowledge, Integrative Learning & Creative Thinking** - Practice specialized knowledge relevant to the area of expertise and the skills attained in the program study to complete required tasks in professional manners.

**Background Preparation**

Students admitted into the MSCS degree program are required to have the following background preparation. A student with any deficiency is required to clear it by either (1) taking the course at NPU and earning a grade of at least **C or higher**, or (2) taking and passing a proficiency exam on the subject. The student must clear prerequisites before attempting to enroll in graduate level courses.

1. **Computer Science Subjects:** CS350 & Lab, CS360 & Lab, CS385 & Lab;
2. The following mezzanine courses are also required for background preparation. Credit earned at NPU can meet the Electives requirement for the program: CS457LG, CS480LG, and P450G.
The above background preparation subjects will satisfy the prerequisites for the courses listed in the following Foundation Requirements as well as graduate courses in the study areas of cloud computing and big data, mobile application technologies, QA engineering, and network engineering.

**Notice to Prospective Degree Program Students**

This institution is provisionally approved by the Bureau for Private Postsecondary Education to offer degree programs. To continue to offer this degree program, this institution must meet the following requirements:

- Become institutionally accredited by an accrediting agency recognized by the United States Department of Education, with the scope of the accreditation covering at least one degree program.
- Achieve accreditation candidacy or pre-accreditation, as defined in regulations, by October 16, 2019 and full accreditation by October 16, 2022.

If this institution stops pursuing accreditation, it must:

- Stop all enrollment in its degree programs, and
- Provide a teach-out to finish the educational program or provide a refund.

An institution that fails to comply with accreditation requirements by the required dates shall have its approval to offer degree programs automatically suspended.

**MSCS Curriculum**

A minimum of 36 trimester units of graduate study are required for the MSCS program. They include a few required foundation courses, a number of software engineering courses based on the student’s selection of technical pursuit, a required capstone course, and electives. The software engineering coursework is to develop technical skills beneficial to the student for career planning. The student also has the opportunity to take elective courses outside of computer science to broaden the student’s skillset.

The student must meet prerequisite requirements when taking any course. Upon clearing background preparation work, the student starts to take courses to meet the degree requirements. The student must begin his/her graduate study with the subjects listed in the Foundation Requirements section.

**I. Foundation Requirements** (9 units)

(Required subjects)

- CS457G Data Modeling and Implementation Techniques
- CS480G Java and Internet Applications
- CS501 Advanced Structured Programming and Algorithms

**II. Software Engineering Course Requirements** (12 units)

The student is advised to consider industry trends when selecting computer science courses. Before taking the Capstone Course near the end of the program, the student will have taken a minimum of 12 units of graduate level software engineering courses and 12 units of electives. Choices of field of study include the following: cloud computing and big data, mobile application technologies, QA engineering, and network engineering.

The following are examples of cluster courses for each area of interest:

**Cloud Computing and Big Data:**

- CS550 Data Mining and Business Intelligence
CS570  Big Data Processing – MapReduce Programming
CS571  Cloud Management – Hadoop Administration

Mobile Application Technologies:

CS548  Web Services Techniques and REST Technologies
CS551  Mobile Computing for Android Mobile Devices
CS556  Mobile Applications on iPhone Platform
CS557  Web Front-end Programming

QA Engineering:

CS521  Software Project Management
CS522  Software Quality Assurance and Test Automation
CS548  Web Services Techniques and REST Technologies
CS575  Network Analysis and Testing

Network Engineering:

CS515  UNIX/Linux Network Programming
CS535  Network Security Fundamentals
CS565  Advanced Network Management
CS575  Network Analysis and Testing

Selecting any four (4) courses from the above lists will meet the Software Engineering Course Requirements. Taking four (4) courses in a cluster area will also help the student develop desirable skills in that specialized software engineering profession.

Each trimester when the course offering list is published, instructions on graduate level courses belonging to various area of interest are also published along with the course offering list. Every graduate student is advised to refer to these instructions to select courses and build his/her expertise area. In addition, a cross disciplinary study of areas of interest can be desirable as the fast changing computer industry has become more demanding on engineers to have multidisciplinary skillsets.

III. Electives (12 units)

The student may take any graduate-level courses, including those outside of software engineering, to meet the electives requirement of 12 units. When applicable, the student may take Curricular Practicum courses and engage in practical training to work on company projects that are directly related to the student’s course of study. No more than 6 units of practicum coursework may be counted towards graduation.

IV. Capstone Course (3 units)
(A required subject)

Upon completing all or most coursework for this program, the student is required to take the capstone course and, under the guidance of the course instructor, integrate the knowledge and skills learned from all of the courses taken during the program.

CS595  Computer Science Capstone Course
• Course Descriptions

Master’s Degree Programs, School of Engineering

Master’s degree courses are numbered in the 500s. Each master’s degree program allows for a limited number of credits for 400 level courses with a “G” suffix.

Course No. Description
450G-490G Mezzanine courses for graduates
500-599 Graduate level courses

For information on prerequisite subjects numbered below 450, refer to the section on Course Descriptions for the Undergraduate Degree Programs, School of Engineering.

Courses are listed by subject: Embedded Systems Engineering, Computer Science, Curricular Practicum, Electrical Engineering, Professional Development.

Each course description is followed by its prerequisite information expressed in course numbers.

Each 1 unit of a practicum course requires at least 45 contact hours of practical experience related to the student’s program curriculum.

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Embedded Systems Engineering

CE450G Fundamentals of Embedded Engineering (3 units)
This is the first in a series of embedded systems courses designed for students who are interested in learning real-time embedded systems and practicing real-time programming of embedded systems. Topics include hardware issues including platform, microprocessors commonly used in these systems and how a microprocessor works in such systems, concept of memory, registers, I/O; interrupt generation and handling in an embedded system; the concept of real-time programming, multi-task, concurrency, mutual exclusion; overview of real-time kernel/OS, drivers; system initialization and startup, and debug issues. Hands-on exercises are required. 
Prerequisite: CS204

CE522 Embedded Design in Networking Environment (3 units)
This course is designed for the students to learn protocol stack implementation/porting in a real-time operating system (RTOS) kernel environment. Students learn the concept of network protocol stack implementation/porting, embedded real-time system software architecture, and real-time operating systems. They also learn to design and write programs as a collection of independent and concurrent tasks, non-preemptive and preemptive multi-tasking, task scheduling, and task synchronization and intertask communication including semaphores and message queues. Industry standard RTOS will be used for practice and projects. 
Prerequisites: CE450

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CE450LG Embedded Engineering Lab (1 unit)
This is a drill course designed to be taken with the course CE450 Fundamentals of Embedded Engineering. The students gain hands-on experience with embedded systems programming and design. They are also guided to work on projects involving controller systems.
Prerequisite: CS204L

CE523 Embedded Design in Device Driver Environment (3 units)
This course investigates the operating system (Windows NT, Linux, or Unix) components that interact with device drivers, the device driver building and debugging process, device driver implementations. Specific topics include a review of embedded system design, the concept of real-time systems, real-time specification and design techniques, real-time kernels, system performance analysis, memory management, task management, time management, synchronization of inter-task communication, queuing models, real-time operating system tools for embedded systems, and real-time programming examples. Hands-on exercises are required. 
Prerequisite: CE450
architecture, functionality and the relevant kernel APIs. Topics include: operating system architecture; I/O API; operating system kernel; building, loading and debugging device drivers; device driver entry points; device driver data structures; I/O request processing; plug, play and power management; interrupts and timers; memory management; direct memory access; and timing. The goal of the course is to present comprehensive coverage of the operating system kernel, HAL, device drivers and the related APIs. Upon completion of the course, the student should be able to develop, build, install and test basic device drivers, as well as to port existing drivers from one operating system to another. Hands-on practice is required.

Prerequisite: CE450

CE530 Embedded Software Design in Linux (3 units)
This course prepares students to enter the challenging world of embedded Linux. It covers the following key topics: comparing Linux and traditional embedded environments, comparing leading embedded Linux processors, understanding the details of the Linux kernel initialization process, learning the basic concepts about Linux drivers, learning about the special role of bootloaders in embedded Linux systems - with specific emphasis on U-Boot, using embedded Linux file systems, understanding the Memory Technology Devices subsystem for flash (and other) memory devices, mastering debugging tools such as gdb, KGDB, learning many tips and techniques for debugging within the Linux kernel, learning how to maximize productivity in cross-development environments, learning to prepare an entire development environment, including TFTP, DHCP, and NFS target servers; and learning to configure, build, and initialize BusyBox to support a set of unique requirements. Hands-on exercises are required.

Prerequisite: CE450

Computer Science

CS453G Compiler Design (3 units)
This course is designed to give students a fundamental knowledge of compilers and interpreters for modern computer languages. Topics include a study of modern computer languages, regular expressions, lexical analysis, parsing techniques, context-free grammars, and syntax-directed translation. Hands-on exercises and trimester projects are required.

Prerequisite: CS350

CS457G Data Modeling and Implementation Techniques (3 units)
This is the first of a series designed to teach relational database concepts, design, and applications. Topics include database architecture, relational model, structured query language (SQL), data manipulation language (DML), data definition language (DDL), database design, ER modeling, database normalization, denormalization, and physical database design. Popular database systems, such as Oracle and Microsoft SQL server, are used for hands-on exercises and projects.

Prerequisite: CS204

CS457LG Database Technologies Lab (1 unit)
This is a drill course designed to be taken with the course CS457 Data Modeling and Implementation Techniques. The students gain hands-on experience in database applications using popular database systems including Oracle database and Microsoft SQL server. They are also guided to work on database design projects.

Prerequisite: CS204L

CS464G Software Design and Implementations (3 units)
This course is designed to use C/C++ to achieve the goal of teaching the students the design methodology for algorithm development. The objective is to develop the students’ programming ability with proper logical and object-oriented thinking processes. The course covers two main topics: (1) Problem specification and analysis - understand the problem, analyze it, and translate the human thinking into a computer program; (2) Object-oriented design and analysis - understand data abstraction, encapsulation, aggregation, and inheritance. These concepts are the foundation for modern object-oriented programming languages such as C, C#, and Java. Hands-on practices are required.

Prerequisite: CS360

CS470G Network Engineering and Management (3 units)
This course is designed to introduce network communications. Topics include network layered models (OSI, TCP/IP), architecture, principles, service models and protocols; data communication basics, switching, routing, security, network management, and wireless and mobile networks. Modern Internet technologies and implementations are presented in case studies. Hands-on exercises are required.

Prerequisite: CS204

CS470LG Network Engineering Lab (1 unit)
This is a drill course designed to be taken with the course CS470 Network Engineering and Management. The students learn network communications through weekly hands-on drill sessions. They learn protocols used in network data communication, routing design, and network management. The students will gain the experience of using popular routers and switches in their exercises.

Prerequisite: CS204L
CS480G Java and Internet Applications (3 units)
This course introduces students to the Java language, programming with object-oriented construct, GUI design and graphics programming, and core Java libraries. Students will learn Java language basics such as syntax and classes, inheritance, interfaces, reflection, graphics programming, event handling, user-interface components with Swing, Java applets, exception handling, stream, and files. Hands-on exercises are required.
Prerequisite: CS480

CS480LG Java Programming Lab (1 unit)
This is a drill course designed to be taken with the course CS480 Java and Internet Applications. The students gain Java programming skills through hands-on exercises in this weekly lab course. Weekly hands-on exercises normally correspond with the lecture material offered in each week.
Prerequisite: CS360L

CS501 Advanced Structured Programming and Algorithms (3 units)
This course provides an in-depth analysis and efficient use of algorithms to solve problems. Well-structured programs are studied; modular, top-down design is emphasized. Topics include the use of data structures techniques to design efficient algorithms and analyze their complexity, efficient implementation of combinatorial algorithms, sorting, searching, and geometric problems, and branch and bound algorithms. Hands-on exercises are required.
Prerequisite: CS480

CS510 Advanced UNIX/Linux Programming (3 units)
This course is designed for students to gain fundamental knowledge of and hands-on experience with programming in the UNIX/Linux environment. Students will learn to program in C with UNIX/Linux system calls and other advanced topics such as the UNIX file system, process control, signals and inter-process communications. Students are required to do a term project with a substantial amount of programming. Upon completion of this course, students should be able to develop real-world UNIX/Linux applications. Hands-on practice and projects are required.
Prerequisite: CS204 and CS230

CS515 UNIX/Linux Network Programming (3 units)
This course is designed for graduate students to gain hands-on experience in UNIX/Linux network programming. The students will learn to develop UNIX/Linux network applications using a number of UNIX/Linux network programming interface techniques including Sockets, XTI, and RPC. Topics include: an overview of transport layer (TCP/UDP), TCP sockets, UDP sockets, threads and client-server design, XTI, RPC, and Streams. Hands-on exercises and projects are required.
Prerequisite: CS470

CS521 Software Project Management (3 units)
This course teaches students to apply current software development approaches to managing modern complex software projects. Practical strategies, tactics, and designs are discussed together with realistic exercises. Topics include software development process, project planning, requirements definition, design specification, usability engineering, verification and validation, project and change management, and process quality improvement. Students are required to participate in all course activities to develop a real-world software product.
Prerequisite: CS360

CS522 Software Quality Assurance and Test Automation (3 units)
This course teaches students to learn practical static and dynamic techniques that allow software development teams to engineer high quality products. The course begins with an overview of modern software development approaches. It then introduces quality management and test development based on preventive and agile principles as well as quality risk analysis. It covers system, unit, integration, performance, and automated testing techniques. Quality improvement models for software development and testing are discussed. Several test automation tools are demonstrated in class. Students gain hands-on experience through homework assignments and exercises and learn to test real-world applications.
Prerequisite: CS480

CS526 Advanced Web Programming (3 units)
This course teaches students to learn how to build modern web applications with web application frameworks. It helps students understand how the web application framework performs, and shows students how to use various features of the framework to solve many problems in real-world development scenarios they’re likely to face. In the process, students will learn how to work with HTML, CSS, JavaScript, the Object-relational Mapping Framework, and other web technologies. Students will start by learning core concepts such as the Model-View-Controller architectural pattern, and then work their way toward advanced topics as well as mobile web development techniques.
Prerequisite: CS360

CS531 Python Applications Programming (3 units)
This course introduces the fundamental and advanced features of Python programming language and how to utilize them to develop Python applications. The students will start by learning about the development environment, basic syntax,
variable types, basic operators, control flows and loops, functions, modules, files I/O, and exceptions. The course further progresses to include advanced topics such as classes/objects, object-oriented programming, regular expressions, multithreading, interface with Linux commands and C programs. Upon completion, the students will be able to develop Python applications that involve CGI programming, database access, networking, XML processing, GUI programming, and functional programming.

**Prerequisites:** CS204 and CS230

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**CS532 Advanced Internet Programming and Design (3 units)**

This course is designed to give the students an in-depth understanding of Java programming techniques. The course focuses on advanced Java language features and packages which are essential for building a variety of application architectures. Topics include Java techniques of XML, JNI, thread, network programming, generic programming concepts of JDK-1.5 and beyond, and internalization. Upon completion of this course, the students should be well prepared to create enterprise-wide, Java-centric solutions to client/server problems involving Java and networks. Each technology topic will cover its uses, implementation, and language issues. Students are required to implement a project for each Java technique. Hands-on exercises are required.

**Prerequisite:** CS480

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**CS535 Network Security Fundamentals (3 units)**

This course addresses the security issues on the internet and the web. Major topics include issues related to internet infrastructure and applications running on the internet, techniques to reduce security risks, and an introduction to the role of security as an enabling technology for electronic commerce. The course includes an overview of internet and web security, its applications and legal issues, encryption and cryptography, SSL and browsers, web servers, and Java security.

**Prerequisite:** CS470

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**CS540 Advanced Database Administration (3 units)**

This course provides an in-depth understanding of the Oracle Database Management System. Emphasis is on the latest Oracle database architecture, database configuration and administration. Topics include logical/physical database layout, database server processes, database creation, various database physical objects; client/server configuration, multi-threaded server configuration, database storage management, database security, database utilities, database monitoring, partitions, and database backup/recovery methods. Hands-on practice is required.

**Prerequisite:** CS457

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**CS547 Advanced Database Design and Analysis (3 units)**

This course is intended for graduate students to further explore database server development and database tuning. The course specifically details procedural extensions to SQL to develop stored procedures, functions, packages and database triggers. In addition, it covers database performance tuning from an application development point of view by exploring query optimizer, database hints, and various database access methods. Hands-on exercises are required.

**Prerequisite:** CS457

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**CS548 Web Services Techniques and REST Technologies (3 units)**

This course covers the fundamental concepts of the 3-tier model commonly used in Enterprise Application development. Topics include the Spring Framework, JDBC with database applications, JPA (Java Persistence API), Hibernate, Spring MVC, Java Servlets, and JavaBeans. In addition, the students will learn the best practice development approach using the Sprint Framework with JDBC or ORM (Object Relational Mapping) tools to map business domain object models to the underlying relational database. At the end of this course, the students shall have a fresh view on both the fundamental and advanced skills to implement large scale enterprise systems. Hands-on exercises are an integral part of the course.

**Prerequisite:** CS480

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**CS550 Data Mining and Business Intelligence (3 units)**

This course introduces methods and techniques for using stored business data to make business decisions. The student will learn data types including operational or transactional data such as data for sales, cost, and inventory; nonoperational data such as forecast data and macroeconomic data; and meta data, and learn their patterns, associations, or relationships, and how to use this information for decision making. Modern datamarket concepts will also be introduced. Specific examples of businesses using data mining techniques will be given in the course. The student is required to work on course projects by using modern data analysis software and referring to cases studied.

**Prerequisite:** CS457

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**CS551 Mobile Computing for Android Mobile Devices (3 units)**

Google's Android mobile phone software platform may be the next major opportunity for application software developers. Android has the potential for removing the barriers to successful development and sales of a new generation of mobile phone application software. Just like PCs which have created markets for desktop and server software, Android will create a new market for mobile applications by providing a standard mobile phone applications.
application environment. This hands-on course focuses on developing applications for Android, including map-based applications, camera-based applications, SMS, etc. Advanced development topics are also covered, including security, IPC, and certain advanced graphics and user interface techniques.

Prerequisite: CS480

CS556 Mobile Applications on iPhone Platform (3 units)
This course provides an in-depth study of the design, development and publication of object-oriented applications for the iPhone and iPod Touch platforms using the Apple SDK. Students will learn to utilize Objective-C and the various SDK frameworks to build iPhone & iPod touch applications under Mac OS X.

Prerequisite: CS360

CS557 Web Front-end Programming for Mobile Devices (3 units)
This course focuses on cross-platform software development techniques. Topics include Javascript, HTML5, Cascading Style Sheets(CSS3), jQuery Mobile, AJAX, mobile platforms, mobile website development, and mobile applications development using PhoneGap, etc. Hands-on practices are required.

Prerequisite: CS360

CS565 Advanced Network Management (3 units)
This course is designed to give graduate students an in-depth understanding of and a hands-on experience in the management of network systems and applications. Emphases are on simple network management protocol (SNMP) management, MIB, management tools, system and applications. Current widely-used applications by industry will be used to demonstrate the management concepts. Computer-based training software will be used to check/verify the students’ network management skills in order to ensure they are prepared for the industry challenges. Topics include Network Management fundamentals; OSIMAN, SNMP and TMN standards; RMON and ITU TMN architecture; inside structure and practical applications of SNMP, SNMP2, SNMP3, RMON, RMON2, and MIBs. Hands-on exercises are required.

Prerequisite: CS470

CS570 Big Data Processing – MapReduce Programming (3 units)
This course introduces the Hadoop framework in depth, teaching the MapReduce concurrent programming paradigm. Students will learn how to use different MapReduce patterns using Hadoop, and apply these techniques to big data analytic problems, such as PageRank, machining, and social network graph mining. Hands-on programming skills on Apache Hadoop are emphasized in this course.

Prerequisite: CS480

CS571 Cloud Management – Hadoop Administration (3 units)
This course provides a practical approach to developing Java applications on top of the Hadoop platform. It presents the material as small building blocks with a coverage of each component in the Hadoop stack. Students will learn Hadoop's architecture and its underlying parts with top-down identification of component interactions within the Hadoop ecosystem. The course then provides in-depth coverage of the Hadoop Distributed FileSystem (HDFS), HBase, MapReduce, Oozie, Pig, Hive, and several other tools. To reinforce concepts, each section is followed by a set of hands-on exercises.

Prerequisite: CS480

CS575 Network Analysis and Testing (3 units)
This course covers computer network analysis, testing techniques, and experience-based strategies to isolate and solve network problems. Topics include wiring and cable testing issues, transmission encoding techniques, dissecting the IEEE 48-bit MAC address, the impact of different types of broadcast traffic, operational details and analysis considerations for switches, Ethernet and Token Ring operational details and analysis, the IEEE 802.2 LLC protocol, datagrams and routing, IP specifics, protocol analysis and troubleshooting, baselining throughput and latency. Hands-on exercises using protocol analyzer are required to reinforce the topics.

Prerequisite: CS480

CS579 Special Topics (3 units)
Special topics courses are offered to graduate students in the Computer Science program by current faculty members or invited guest speakers to expose the students to emerging technologies related to their studies. These courses are conducted the same way as regular courses.

Prerequisite: Depending on topic

CS595 Computer Science Capstone Course (3 units)
The capstone course is intended to integrate the knowledge and hands-on experience that the student has acquired from the foundation, core, and elective coursework required for the program in the course under the guidance of the course instructor. The instructor determines the course objectives and scope based on the computer science curriculum and technology trend. The instructor guides the students to develop their integration ability. The student shall take the capstone course near the end of his/her program of study.

Prerequisite: Must be in the final trimester of the program.
Curricular Practicum

CPT501 Curricular Practicum (1 unit)
Curricular practicum, or curricular practical training, is a supervised practical experience that is the application of previously studied theory. It is defined as alternative work/study, internship, cooperative education, or any other type of required internship or practicum that is offered by sponsoring employers through cooperative agreements with the school and the course is an integral part of an established curriculum. At least three hours of work in a practical setting has the credit equivalency of one hour of classroom lecture (1 unit). To be eligible to take this course, the student must have obtained a written agreement that outlines the arrangement between the institution and the practicum site (including specific learning objectives, course requirements, and evaluation criteria), and received approval by a designated advisor. International students must follow additional rules required by the U.S. Immigration and Customs Enforcement. Information and instructions concerning this course are provided in the online application form. This is a part-time practicum course taken by the graduate student to work no more than twenty hours each week during the approved practicum period. Failure in this course will prevent the student from taking any curricular practicum course afterwards. Prerequisite: Refer to the instructions on the application and agreement documents.

CPT502 Curricular Practicum (2 units)
Curricular practicum, or curricular practical training, is a supervised practical experience that is the application of previously studied theory. It is defined as alternative work/study, internship, cooperative education, or any other type of required internship or practicum that is offered by sponsoring employers through cooperative agreements with the school and the course is an integral part of an established curriculum. At least three hours of work in a practical setting has the credit equivalency of one hour of classroom lecture (1 unit). To be eligible to take this course, the student must have obtained a written agreement that outlines the arrangement between the institution and the practicum site (including specific learning objectives, course requirements, and evaluation criteria), and received approval by a designated advisor. International students must follow additional rules required by the U.S. Immigration and Customs Enforcement. Information and instructions concerning this course are provided in the online application form. This is a part-time practicum course taken by the graduate student to work no more than twenty hours each week during the approved practicum period. Failure in this course will prevent the student from taking any curricular practicum course afterwards. Prerequisite: Refer to the instructions on the application and agreement documents.

Electrical Engineering

EE461G Digital Design and HDL (3 units)
This course develops the students' ability to design commonly used basic building blocks of modern digital systems and provides them with a fundamental knowledge of the state-of-the-art design methodology, design considerations, and verification strategies for complicated digital hardware design. Topics include Verilog HDL basics, Logic modeling, state machine design and memory modeling using Verilog HDL. Additional topics on FPGA architectures, device vendors, FPGA design tools, FPGA applications and latest trend in the programmable logic industry are also covered. Students can use Verilog tools such as Synopsys VCS, Mentor Modelsim, Cadence NC Verilog, and Silo III Verilog Simulator from SimuCAD for their homework and design projects. Hands-on practice is required. Students are encouraged to take the HDL based sequence of courses EE461 and EE512 to gain knowledge and experience in semi-custom IC design using industry grade EDA design tools. Prerequisite: Logic Design

EE461LG Verilog HDL Lab (1 unit)
This is a drill course designed to be taken with the course EE461 Digital Design and HDL. The students gain hands-on experience with Verilog simulation tools to learn logic design. They will have the chance to work on several design projects. They will also learn the essentials of several popular scripting languages: Perl, Python, Unix/Linux Shell. Prerequisite: Logic Design

EE468G Microelectronics Circuit Design and Analysis (3 units)
This course provides an in-depth understanding of electronic circuit design and analysis at the transistor level. It is in preparation for studying more advanced analog or digital courses. The topics include differential and multistage amplifiers, current source and bias circuits, amplifier frequency response and feedback, output stages, operational amplifier, inverter, combinational logic, and sequential logic. The lab is run in conjunction with the course material and industry standard CAD tools are applied. Prerequisite: Circuit Theory

EE488G Computer Architecture (3 units)
This course introduces the organization, design, and applications of modern computer architectures from both hardware and software perspectives. Topics include performance benchmark, instruction set (for both RISC and CISC), computer arithmetic, memory, parallelism (instruction, data, and thread levels), I/O and storage, multicore processors and programming and GPU (Graphics Processing Unit). Hands-on labs involving HDL and SPIM simulations, assemblers, linkers, and multithread
programming are required to enhance classroom learning.

Prerequisite: EE461 and CS204

EE504 Advanced Computer Architecture (3 units)
This course is designed to further investigate modern computer design. Topics include an in-depth study of multiprocessor architecture and interconnection networks, pipeline, data flow, algorithm structures, memory system design, cache memory design, and a comparison of the performance and design among various computer architectures. Hands-on project experience is required.

Prerequisite: EE461

EE505 Advanced Digital IC Design (3 units)
EE505 is an advanced course in digital circuit design that applies the knowledge of advanced circuit design concepts to Digital IC in state-of-the-art CMOS technologies. It emphasizes the design and optimization of circuit/layout for combinational logic gates, sequential logic circuits, arithmetic building blocks, and memory circuits. The challenges of today’s digital integrated circuit design, such as scaling, process variation, signal integrity, timing issues, interconnectivity, and power consumption will be addressed specially. The circuit simulation tool (HSPICE), layout design tool (Virtuoso), and schematic entry tool (Composer) are used for homework assignments and projects.

Prerequisite: EE468

EE508 VLSI Design - Place and Route (3 units)
This course is the third in the VLID Design series and introduces ASIC place and route. The course introduces the students to state-of-the-art physical design automation tools and techniques. Topics include design flow, library review, tool graphical interface, floor planning, power planning, timing driven placement, static time analysis (STA), C++Gen, special routing, final routing, engineering change order (ECO), and run batch mode jobs. Hands-on exercises and projects are required.

Prerequisite: EE461

EE509 Mobile and Wireless Communication (3 units)
This course covers the concepts of frequency re-use, wireless communication channel characteristics, modulation and demodulation for wireless communications, equalization and channel coding, speech coding, multiple access techniques such as FDMA, TDMA, CDMA, FDD and TDD, and commercial wireless communication standards such as AMPS, GSM, IS136 (TDMA), IS-95 (CDMA). Hands-on simulations are used to help students gain an in-depth understanding of wireless communication. Familiarity with communication theory and simulation tools such as MATLAB or system view is required.

(Note: This is an introductory course on wireless technologies. Any topic, such as GSM, TDMA, or CDMA can be expanded to a full-trimester course under Special Topics offerings.)

Prerequisite: EE460

EE511 Advanced Analog IC Design (3 units)
This course offers students extensive exposure to concepts and techniques in analysis and design of analog IC, including device modeling, basic circuit building blocks, feedback system, frequency response and noise. EDA tools may be used in homework assignments and projects.

Prerequisite: EE468

EE512 Application Specific Integrated Circuit Design (ASIC) (3 units)
In connection with EE461, this course is designed for students who intend to become logic designers using HDL based design methodologies. Topics include ASIC/CPLD/FPGA Library modeling, cell characterization, static timing analysis, place and route algorithms, design for testability, fault modeling, industry standard formats for design information interchange, and a survey of the most popular EDA tools. Industry grade design tools such as Synopsys Design Compiler, Cadence Verilog-XL, Synopsys DesignTime (under dc_shell), Synopsys Prime Time, Cadence Silicon Ensemble, Mentor Calibre LVS/DRC, and Synplicity Simplify are used for homework assignments and projects.

Prerequisite: EE461

EE517 Introduction to the Internet of Things (IoT) (3 units)
The Internet of Things promises to make “things” including consumer electronic devices or home appliances, such as refrigerator, security cameras, and temperature sensors, etc. part of the Internet environments. To realize the full potential of the IoT paradigm, this introductory course will address challenges and the various solutions available. The course content will cover IoT concepts and architectures, IoT enabler and solutions, IoT data and knowledge management, and IoT security and reliability. The students will need to complete a term project to demonstrate the concept of IoT for a chosen application based on an embedded system or a development platform.

Prerequisites: CS204 and CS230

EE520 Advanced FPGA Design and Implementations (3 units)
Digital design using FPGAs is a very important activity in industries due to reduced cost, compared with ASIC design, and faster time-to-market. In order to design a digital system using FPGA, the designers must understand the architectures of the FPGA as well the accompanying CAD tools. The course will cover two major Xilinx FPGA architectures in detail. The student will learn to build various digital blocks such as combinational logic, sequential logic, finite state machines, RAM and...
DSP by studying the architectures of the FPGAs. Hands-on exercises are required.

Prerequisite: EE461

EE553 System on Chip (SoC) Design (3 units)
System on Chip (SoC) is composed of many functional modules such as processor, memory, digital IPs, analog/mixed signal modules, RF and interfaces on a single chip. This course will focus on ARM based on-chip bus platform, digital IP verification, and the trend and integration of SoC.

Prerequisite: EE488

EE577 Design Verification with System
Verilog (3 units)
This course is designed to cover the design verification methodologies commonly used in system-on-chip (SOC) design. Topics include design verification basics, introduction of various verification strategies, verification of soft and hard IP blocks, verification for networking/communication ASIC, verification for audio/video signal processing ASIC, how to build an efficient and effective verification platform, automation of verification flow, test case coverage, how to create design models using PLI routine, and formal verification, etc. The students will also be informed that design verification is becoming the bottleneck in modern ASIC design cycles, especially in system on chip (SOC) design. The verification cycle could take up to 70% of the design cycle.

Prerequisite: EE461

EE589 Special Topics (3 units)
Special topics courses are offered to graduate students in the electrical engineering program by current faculty members or invited guest speakers to expose the students to emerging technologies related to their studies. These courses are conducted the same way as regular courses.

Prerequisite: Depending on topic

EE595 Electrical Engineering Capstone Course (3 units)
The capstone course is intended to integrate the knowledge and hands-on experience that the student has acquired from the foundation, core, and elective coursework required for the program in the course under the guidance of the course instructor. The instructor determines the course objectives and scope based on the electrical engineering curriculum and technology trend. The instructor guides the students to develop their integration ability. The student shall take the capstone course near the end of his/her program of study.

Prerequisite: Must be in the final trimester of the program.

Professional Development

P450G Career Development (1 unit)
This course is designed for the graduate students to take in preparation for becoming working professionals. Topics include effective communication strategies, emotional intelligence, diversity and cultural awareness, professional behavior, and interview skills.
Standard Occupational Classification (SOC) – 2010 & 2018
(Based on United States Department of Labor - Bureau of Labor Statistics)

For Bachelor of Science in Computer Science

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Software Applications Designer
Software Applications Engineer
Software Engineer
Software Systems Engineer
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Systems Software Developer
Systems Software Specialist
Software Quality Assurance Analysts and Testers
Software Quality Assurance Technician
Software Quality Control Specialist
Software Quality Engineer
Software Test Engineer
Web Applications Developer
Web Architect
Web Content Developer
Web Developer
Web Content Specialist
Automatic Data Processing Planner
Database Administration Manager
Database Coordinator
Database Programmer
Database Security Administrator
Data Architect
Data Integration Specialist
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Network Support Manager
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Wide Area Network Administrator
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### Electronic Sensing Equipment Assembler
51-2023  Electromechanical Equipment Assemblers  Programmable Logic Controller Assembler
51-9141  Semiconductor Processing Technicians  Electronic Semiconductor Processor  Semiconductor Assembler

### For Master of Science in Computer Science

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<tr>
<td></td>
<td></td>
<td>Database Developer</td>
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<tr>
<td>15-1253</td>
<td></td>
<td>Software Quality Assurance Analysts and Testers</td>
<td></td>
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<tr>
<td></td>
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<td>Applications Tester</td>
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<tr>
<td></td>
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<td>Software Quality Assurance Technician</td>
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<td></td>
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<td>Software Quality Control Specialist</td>
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<td></td>
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<td>Software Quality Engineer</td>
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<td></td>
<td></td>
<td>Software Test Engineer</td>
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<tr>
<td>15-1255</td>
<td></td>
<td>Web and Digital Interface Designers</td>
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<td></td>
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<td>Digital Designer</td>
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<td>Web Content Specialist</td>
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<td>15-2051</td>
<td>15-2051</td>
<td>Data Scientists</td>
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<td>Data Visualization Developer</td>
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<td>17-2199</td>
<td>Engineers, All Other</td>
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<td></td>
<td>Calibration Engineer</td>
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<td></td>
<td>Mechatronics Engineer</td>
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<tr>
<td>25-1021</td>
<td>25-1021</td>
<td>Computer Science Teachers, Postsecondary</td>
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<tr>
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<td>C++ Professor</td>
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<td>Computer Information Systems Professor</td>
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<td>Computer Programming Professor</td>
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<td></td>
<td></td>
<td>Information Systems Professor</td>
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<td>IT Professor</td>
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<td>Java Programming Professor</td>
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<tr>
<td>27-3042</td>
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<td>Specifications Writer</td>
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<tr>
<td>41-9031</td>
<td>41-9031</td>
<td>Sales Engineers</td>
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<td></td>
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<td>Data Analysis Assistant</td>
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<tr>
<td>43-9111</td>
<td></td>
<td>Statistical Assistants</td>
<td></td>
</tr>
</tbody>
</table>

*2010 SOC codes are used for ACICS' employment reports.
SCHOOL OF BUSINESS AND INFORMATION TECHNOLOGY

The School of Business and Information Technology offers one degree program at each level: bachelor’s, and master’s. These are educational programs in the business and organizational disciplines intended to prepare individuals to make sustained contributions to organizations and society in a global, diverse, and dynamic environment, focusing on developing an individual’s interdisciplinary problem solving skills, interpersonal and communication skills, ability to adapt to changing information technology and business environments, entrepreneurial innovations, and ethical and professional values. Successful completion requires an understanding of not only the required business subjects but also modern information systems and internet technology pertinent to e-business applications.

The Chief Academic Officer, School Dean, program advisory committees, as well as the faculty members of the School of Business and Information Technology are responsible for the School’s academic affairs. The program advisory committees are comprised of industry professionals, potential employers, and community leaders who advice, review, and provide recommendations on the undergraduate and graduate programs.

Faculty

All the business faculty members possess the following qualities: advanced degrees earned in business disciplines, work experience relevant to their teaching subjects, and enthusiasm in teaching and helping the students. To increase the students’ learning effectiveness, they bring their real-world experience into the classrooms as well as use case studies to stimulate the students’ minds and exemplify various lecture topics.

Objectives

The objectives of the business programs are:

- To prepare students for professional careers in modern-day businesses.
- To equip the students with not only business knowledge but also the ability to make use of the latest information technology in the business environment.
- To provide a simulated enterprise environment as well as professional development opportunities for those who wish to practice the profession of business administration with increased competence.
- The undergraduate program also develops the students’ communication skills, analytical skills, and understanding of organization and cross-culture issues, and increases their awareness of business and social issues for them to be thoroughly grounded in ethical principles.

Undergraduate Program

The School of Business Administration and Information Technology offers an undergraduate degree program: Bachelor of Business Administration and Information Sciences degree (BBAIS).

Credential Requirements

The undergraduate programs accept qualified high school graduates and college transfer students.

Freshmen Applicants: Undergraduate applicants who have not completed at least 30 semester units of college credit are considered freshmen.

Application Requirements

To apply for admission into a bachelor’s degree program, the applicant is required to submit the following to the NPU Admissions Office:

1. An Application Form (online).
2. A nonrefundable application fee.
3. A copy of passport or a government issued I.D.
4. Official transcripts from previously attended colleges; freshman applicant is required to submit his/her official high school transcript and document certifying high school completion.
   - a high school/college CGPA of 2.5 or above meets minimum CGPA requirement
• a high school/college CGPA between 2.0 to 2.49 requires an interview with the Academic team, and a review of the last two semester grades (high school and/or college).

5. An English proficiency document is required for non-native English speakers: An official transcript with English course records or TOEFL/IELTS/PTE Academic score report or the Cambridge FCE Certificate or equivalent will suffice. See English Proficiency Requirement below for detailed information on the English entrance requirement.

- **International Students**: In addition to the above general application requirements, an international applicant is also required to submit the following additional documents:

1. An Entrance assessment test: SAT/ACT for freshman applicants. There is no minimum requirement, however, the score is a factor affecting admissions decision.

2. A financial support document – provide a recent financial support document indicating a minimum amount of $30,000 available to pursue his/her study in the first academic year at NPU.
   • a current bank letter and bank statement; or
   • a loan letter from a lending institution; or
   • a property deed valuation report; or
   • Copies of fixed deposits. An affidavit of support or sponsor letter is required if the funds are not in his/her name.

3. A transfer student (from a U.S. institution) is required to submit a photocopy of his/her
   • previous I-20 form,
   • visa, and
   • I-94 (U.S Department of Homeland Security issued arrival / departure form). The student will be asked to show an identification document attesting his/her official name, if applicable.

**GED**: NPU recognizes the General Educational Development (GED) tests and accepts the GED graduates.

• GED score of 456 or above meets minimum score requirement
• GED score between 401 to 445 requires an interview with the Academic team

Applicants interested to apply for scholarships need to provide additional documentation. Please refer to the section on Scholarships in this catalog and on the website.

- **English Proficiency Requirement**

Non-native English speakers are considered meeting the entrance English proficiency requirement if they meet any of the following requirements:

- completed secondary school or a college degree program where English was the language of instruction.

- completed and passed a college English credit course in an institution located in the U.S., U.K. Australia, New Zealand, or Canada, and where English is the language of instruction for the institution

- submitted an official TOEFL, IELTS or PTE Academic test score report to NPU and the score meets the minimum score detailed below, which is subject to modification by the NPU admissions office.
  ○ IELTS: 5.5; TOEFL: 59; PTE: 50; Cambridge FCE Certificate

- NPU may accept the English assessment reports from a few U.S. English language institutions recognized by major universities in the U.S.

- Successfully completed NPU’s IEP Level 5, or upon completion of all level 4 courses with a minimum grade of A.

- **Entrance Assessment Test**

The entrance assessment test, SAT/ACT, is required for freshmen students who earned their high school diploma from a foreign institution. There is no minimum requirement, however, the score is a factor affecting admissions decision.

NPU’s Institution Code for reporting
• SAT score is 4335.
• ACT score is 1750.

**SAT/ACT Waiver** applies to students with
• A U.S. high school diploma; or
• 30 or more transferrable units from previous college/s

**General Background Requirements for Pursuing the Bachelor’s Degree**

Remedial courses are **not** offered at NPU except for English as a Second Language classes. Applicants to all programs are required to have completed pre-calculus subjects in algebra, trigonometry, and geometry prior to admission into the program.

**Transfer of Credit from Other Institutions**

Course credit earned at other institutions of higher education may be transferable. Credit transfer is made by the admission evaluators while conducting the admission evaluation. The transfer of credit is done at the program-of-study level, on a case-by-case basis dependent on relevancy match of related course content. The following statements apply to all transfer credits:

- The NPU Admissions Office must receive all **official transcripts** prior to the student’s joining a degree program. Without preapproval, transcripts received after the student joins NPU cannot be used in transferring credits, except for records from the term immediately preceding the student’s starting trimester at NPU.

- The student was officially enrolled in the course.

- Courses eligible for transfer will be evaluated based on the comparability in content, quality and rigor of NPU’s courses. The transfer evaluation will include, but is not limited to, course descriptions, course syllabi, and/or general public information. Students may be asked to provide course catalogs or syllabi if needed.

- When evaluating any foreign transcript, the admission evaluators may accept or transfer credit based on their knowledge of the course contents in comparison with similar courses offered in the U.S.

- Courses for transfer to NPU may not be completed concurrently at another institution while attending NPU.

- College English courses taken at an institution where English is not an official language cannot be transferred for general education credit.

- The credits contemplated for transfer must be earned at (1) institutions approved by the Bureau for Private Postsecondary Education, (2) public or private institutions of higher learning accredited by an accrediting association recognized by the U.S. Department of Education, or (3) any institution of higher learning, including foreign institutions, offering degree programs equivalent to degree programs approved by the Bureau or accredited by an accrediting association recognized by the U.S. Department of Education. With regard to foreign institutions, if NPU cannot determine that the institution is offering degree programs equivalent to degree programs approved by the Bureau or accredited by an accrediting association recognized by the U.S. Department of Education, the student may obtain a credential evaluation from a National Association of Credential Evaluation Services (NACES) member.

- Professional Development Units (PDUs) offered by professional/industry organizations cannot be transferred to NPU for academic credit.

- Continuing Education Units (CEUs) offered on a non-academic basis by other academic institutions cannot be transferred to NPU for academic credit.

- The total credits transferred from other institutions to meet the student’s undergraduate program requirements are limited to 75 trimester units.

- Credits transferred, performed at the time of admission evaluation, will reduce the program length. Credit transferred from any outside institution is excluded from the program length and has no effect on the calculation of the student’s GPA or CGPA.

- Credits are transferred by the following conversion:
  
  **Definition of a Trimester Unit:**
  One trimester credit hour equals, at a minimum, 15 contact classroom hours of lecture, 30 contact hours of
laboratory, or 45 contact hours of practicum.

b. **Conversion Factor:**
   
   1 quarter unit = 0.66 trimester unit

- **Grades Required for Transfer Credit**
  
  In the bachelor's degree programs, courses completed with a grade of "C" or better are transferable.

- **Other Types of Undergraduate Transfer Credit**
  
  The following other types of credit may be transferable:
  
  a. **AP course credit earned** which is considered to be equivalent to college credit.
  
  b. **Credit by Examination - CLEP**
     
     NPU grants credit to those students who pass examinations in English, natural sciences, humanities, and social science subjects offered by the College Level Examination Program (CLEP). Only General Education credits will be granted. Students should consult with the Admissions Office for information on acceptable CLEP scores and units. The CLEP Institution Code for NPU is 7569.
  
  c. **Transfer of Credit from Defense Activity for Nontraditional Education Support (DANTES) and Military Services**
     
     Credits will be allowed for DANTES Subject Standardized Tests and professional military education evaluated by the American Council on Education (ACE). The maximum transferable credits follow the same policies as specified above. NPU’s evaluation of an application is made prior to the student’s admission to a program unless otherwise approved by the authorizing VA office. The DANTES Institution Code for NPU is 9670.

- **Proficiency Exams:** A student may be required to demonstrate proficiency in a subject taken more than ten years prior to application with NPU by successful completion of a proficiency examination.

- **Experiential Learning**
  
  NPU does not award credit for prior experiential learning.

- **Tuition**
  
  Tuition is charged per unit. Tuition for courses taken to fulfill the undergraduate degree requirement is $330.00 per unit.

- **Tuition per Unit for Courses Audited**
  
  For courses audited (without earning credit), the tuition is half the regular unit rate. Not all courses can be taken with “audit” status.

- **Estimated Total Charges for On-time Completion of Entire Educational Program**
  
  o Tuition: $41,250
  o Fees: $4,400
  o Graduation Petition Fee: $300
  o Textbooks Costs: $6,300
  o Health Insurance Premium: $4,587
  
  • BBAIS: $56,837

  Please note that this estimate includes tuition, fees, textbooks costs, and health insurance premium, which is subject to change. All students are required to pay current rates for tuition and fees each trimester. Additional fees may apply, depending on the services requested (see Tuition and Fee section). The cost of textbooks is estimated to be approximately $150 per course. The actual cost of textbooks can vary significantly from course to course.

- **Graduation Requirements**
  
  The BBAIS degree program requires course work in the following areas:

  1. General education,
  2. Major study, and
  3. Electives.

  A minimum of 125 units are required for graduation. An overall G.P.A. of 2.0 or better and a D grade or higher on all courses towards the degree are required for meeting the graduation requirements. The student must be in good standing with the University and have an approved petition for graduation on file.
1. General Education Requirements

All students must complete at least **39 trimester units in general education (GE)**. GE courses cover subjects in the following areas: English and communications, humanities, mathematics and natural sciences, and social sciences.

Examples of courses that fall under the general education area are as follows:

A. English and Communications: Expository Writing, Speech, Communication, Composition, Creative Writing.

B. Humanities: Foreign Languages (excluding native language), Philosophy, Music Appreciation, Fine Art, Religion.


General Education Student Learning Outcomes

NPU has determined that the first five institutional learning outcomes will also serve as general education outcomes, with one modification: The general education outcome for critical thinking has been modified to include an introductory phrase, “Using various disciplinary perspectives, explore and analyze issues, ideas, artifacts, and/or events to formalize an opinion or conclusion.” This inclusion allows for a clear mapping between general education courses in natural sciences, social sciences, communications, and humanities.

All undergraduate students are expected to demonstrate the following general education student learning outcomes:

Written Communication - Write sustained, coherent arguments or explanations.

Oral Communication - Utilize effective oral communication strategies.

Quantitative Reasoning - Utilize mathematical concepts and methods to analyze, and explain issues in quantitative terms.

Information Literacy - Identify, locate, evaluate, and effectively and responsibly use and share information in support of academic, personal, and professional needs.

Critical Thinking - Utilizing various disciplinary perspectives, explore and analyze issues, ideas, artifacts, and/or events to formalize an opinion or conclusion.

2. Major Study Requirements

The BBAIS curriculum aims to provide the student the foundation and training in business management and information technology. Students are encouraged to utilize the enterprise resource-planning and management tool provided by the school to gain hands-on experience in a simulated enterprise environment.

Professional Development: The Professional Development course prepares the students for their professional careers.

3. Electives

Electives are built into the program to promote breadth as well as depth in the study program. The student must complete a sufficient number of elective courses to meet the graduation requirements in the program. The following is the description of the BBAIS degree program with a statement of the program objectives, a suggested GE and lower-division major courses study flow, and the program curriculum.

Course Numbers: Courses numbered in the 100s and 200s are lower-division courses; courses numbered in the 300s and 400s are upper-division courses.
### Suggested course sequence in the first four trimesters:
**GE and Lower-Division Courses Study Flow**

<table>
<thead>
<tr>
<th>Trimester 1</th>
<th>Trimester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT200 Introduction to Computers and Digital Media</td>
<td>ACC202 Principles of Accounting II, and the Lab course ACC202L</td>
</tr>
<tr>
<td>ENGL101 Expository Writing</td>
<td>ECON202 Microeconomics</td>
</tr>
<tr>
<td>MATH201 Calculus I</td>
<td>ENGL115 Public Speaking</td>
</tr>
<tr>
<td>MATH208 Statistics</td>
<td>HU240 Music Appreciation</td>
</tr>
<tr>
<td>PHYS101 Introduction to Physical Sciences</td>
<td>SOC245 Health Psychology</td>
</tr>
</tbody>
</table>

### Bachelor of Business Administration and Information Sciences (BBAIS)

**Notice to students and prospective students:** The Bachelor of Business Administration and Information Sciences at Northwestern Polytechnic University has been placed on student achievement show-cause by their accreditor, the Accrediting Council for Independent Colleges and Schools ("ACICS"), due to material noncompliance with its placement rate standard of 60%.

**Program Objectives:** The program is to prepare students with the fundamentals of current business practices, management principles, and leadership skills, as well as modern information technology applied in a real-world business environment. The training will enable the students to work with computers and information technology to manage business in the information age and in the global business setting. After completing the undergraduate degree, a student is also prepared to enter a graduate degree program in business administration or related fields, including using up-to-date information technology and enterprise resource-planning tools.

**Program Learning Outcomes:** Students graduating with a BBAIS degree are expected to demonstrate the following program learning outcomes -

- **Written Communication** - Use written language that communicates complex business concepts and enabling technology approaches.
- **Oral Communication** - Orally explain to one's peers complex business and supporting technology concepts.
- **Quantitative Reasoning** - Apply (computer and non-computer assisted) quantitative methods in a comprehensive manner in a business setting.
- **Information Literacy** - Access, review and then meaningfully apply information in business and management decision making.
- **Critical Thinking** - Analyze business issues and recommend solutions which apply business concepts and technology practices.
- **Specialized Knowledge** - Apply business concepts in the areas of management, finance, accounting, marketing, and information technology to various business scenarios. Evaluate and propose information technology solutions to improve an organization's operational efficiency.

**Graduation requirements:** A minimum of **125 units** are required for graduation. They include the following:

1. **39 units of general education courses** including 12 units in English and communications, 9 units in humanities, 9 units in mathematics and natural sciences, and 9 units in social sciences,
2. **62 units of major courses,** and
3. **24 units of electives.**
Notice to Prospective Degree Program Students

This institution is provisionally approved by the Bureau for Private Postsecondary Education to offer degree programs. To continue to offer this degree program, this institution must meet the following requirements:

- Become institutionally accredited by an accrediting agency recognized by the United States Department of Education, with the scope of the accreditation covering at least one degree program.
- Achieve accreditation candidacy or pre-accreditation, as defined in regulations, by October 16, 2019 and full accreditation by October 16, 2022.

If this institution stops pursuing accreditation, it must:

- Stop all enrollment in its degree programs, and
- Provide a teach-out to finish the educational program or provide a refund.

An institution that fails to comply with accreditation requirements by the required dates shall have its approval to offer degree programs automatically suspended.

BBAIS Curriculum

(Total of 125 Units)

1. General Education (minimum 39 units)

The purpose of general education is to give breadth to the student’s education. With a general background in English and communications, humanities, mathematics, natural sciences, and the social sciences, the student will be prepared for his/her roles both in society and at work. Students who have not completed the general education requirements upon entering a degree program at NPU are required to observe the following curriculum to meet the general education requirements.

(a) English and Communications (12 units)

(ENGL101, ENGL115, AND ENGL420 are required courses. Other listed courses are suggested subjects.)

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL101</td>
<td>Expository Writing (3)</td>
</tr>
<tr>
<td>ENGL102</td>
<td>Critical Thinking (3)</td>
</tr>
<tr>
<td>ENGL115</td>
<td>Public Speaking (3)</td>
</tr>
<tr>
<td>ENGL220</td>
<td>Small Group Communication (3)</td>
</tr>
<tr>
<td>ENGL420</td>
<td>Intercultural Communication (3)</td>
</tr>
</tbody>
</table>

(b) Humanities (9 units)

(The students can select any 9 units from the following suggested subjects.)

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HU210</td>
<td>Introduction to Philosophy (3)</td>
</tr>
<tr>
<td>HU230</td>
<td>Art Appreciation (3)</td>
</tr>
<tr>
<td>HU240</td>
<td>Music Appreciation (3)</td>
</tr>
<tr>
<td>HU250</td>
<td>News Reading (3)</td>
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<tr>
<td>HU280</td>
<td>Principles of Ethics (3)</td>
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</tbody>
</table>

(c) Mathematics and Natural Sciences (9 units)

(MATH208 and PHYS101 are required courses. Other listed courses are suggested subjects.)

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS101</td>
<td>Introduction to Physical Sciences(3)</td>
</tr>
<tr>
<td>PHYS201</td>
<td>Physics –I (3)</td>
</tr>
</tbody>
</table>
PHYS201(L)  Physics Lab – I (3)
PHYS202  Physics - II (3)
PHYS202(L)  Physics Lab – II (3)
PHYS301  Introduction to Device Physics (3)
MATH201  Calculus – I (3)
MATH202  Calculus – II (3)
MATH203  Linear Algebra (3)
MATH205  Differential Equations (3)
MATH208  Statistics (3)

(d) **Social Sciences** (9 units)
SOC400 is a required course. Other listed courses are suggested subjects.
SOC201  California History (3)
SOC215  Introduction to Sociology (3)
SOC235  Multiculturalism in the United States (3)
SOC245  Health Psychology (3)
SOC250  Public Administration (3)
SOC260  Civilization and Urbanization (3)
SOC275  The American Experience (3)
SOC400  Early American History (3)

2. **Major Requirements (minimum 62 units)**
(*Business administration and information technology, a professional development course, a major design experience*)

IT200  Introduction to Computers and Digital Media (3)
ACC201  Principles of Accounting – I (3)
ACC201L  Basic Accounting Lab – I (1)
ACC202  Principles of Accounting – II (3)
ACC202L  Basic Accounting Lab – II (1)
ECON201  Macroeconomics (3)
ECON202  Microeconomics (3)
FIN310  Fundamentals of Finance (3)
IT310  Introduction to Information Technology (3)
IT370  Database Design and Development for Business (3)
LAW310  Introduction to Business Law (3)
MGT310  Principles of Management (3)
MKT310  Principles of Marketing (3)
ACC490  Introduction to Taxation (3)
BUS400  Business Communication (3)
BUS445  Professional Development (3)
DMG450  Fundamentals of Digital Media and Graphics (3)
IT450  Enterprise Information System Fundamentals (3)
MGT450  Organizational Behavior and Management (3)
MGT460  Production and Operations Management (3)
MGT480  Entrepreneurship (3)
MKT450  Marketing Management (3)

3. **Electives (minimum 24 units)**

The student may select courses in any field to fulfill this requirement. Prerequisite requirements must be met when taking any course. When applicable, the student may take curricular practicum courses and
engage in practical training to work on company projects that are directly related to the student’s course of study. The student must observe the rules required for taking the practicum courses.

The student also has the option to select a focused study area and take the suggested courses to gain in-depth knowledge in that area. ACC451L is a hands-on lab course. The following are the available study areas and the suggested courses for each area:

a. Accounting focus: ACC451, ACC451L, ACC452
b. Digital Media and Graphics focus: DMG460, DMG480
Course Descriptions

Bachelor’s Degree Program
School of Business Administration and Information Technology

For the undergraduate program, lower division courses are numbered in the 100s and 200s, and upper division courses are numbered in the 300s and 400s.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Description</th>
<th>Course No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-199</td>
<td>Freshman level courses</td>
<td>200-299</td>
<td>Sophomore level courses</td>
</tr>
<tr>
<td>300-399</td>
<td>Junior level courses</td>
<td>400-499</td>
<td>Senior level courses</td>
</tr>
</tbody>
</table>


Each course description is followed by its prerequisite/corequisite information expressed in course numbers.

Each 1-unit lab course requires at least 2 contact hours of lab work each week. Each 1 unit of a practicum course requires at least 45 contact hours of practical experience related to the student’s program curriculum.

Accounting

ACC201 Principles of Accounting - I (3 units)
This course is the first of a 2-part basic accounting principles series. Topics include an introduction to basic elements of financial accounting, recording and analyzing financial transactions, opening and using accounts of various types, setting up and using a general journal, accounting methods for service businesses, and accounting methods for corporations. Students are required to use popular accounting tools, such as QuickBooks, for homework and exercises. Other PC-based accounting software may also be introduced to the students for practice. Lab work is required.

Prerequisite/Corequisite: ACC201

ACC201L Basic Accounting Lab - I (1 unit)
This lab course is designed to be taken concurrently with the course ACC201 Principles of Accounting - I. Topics include an introduction to QuickBooks and using QuickBooks to manage the sales process, tracking revenue, expenses, bank reconciliation, reports and graphs, company file set up, and maintenance. Hands-on practice is required.

Prerequisite: ACC201L

ACC202 Principles of Accounting - II (3 units)
This course is the second of a 2-part basic accounting principles series. Topics include analysis of accounting information, reporting, cash flows, and financial statements; management accounting and product costing, managerial accounting concepts and principles, manufacturing and job order cost accounting, process cost accounting, cost allocation, performance measurement, cost planning and control, cost-volume-profit analysis, master budgets and planning, and strategic analysis in managerial and cost accounting. Students are required to use popular accounting tools, such as QuickBooks, for homework and exercises. Other PC-based accounting software may also be introduced to the students for practice. Lab work is required.

Prerequisite/Corequisite: ACC201

ACC202L Basic Accounting Lab - II (1 unit)
This lab course is designed to be taken concurrently with the course ACC202 Principles of Accounting- II. Topics include company file setup and maintenance, inventory, sales tax, time and billing, payroll setup, payroll processing, adjustments, and the yearend procedures. Hands-on practice is required.

Prerequisite: ACC201L

ACC450 Managerial Accounting (3 units)
This class applies the essentials of financial accounting to the practice of management. Students will understand cost definitions, cost concepts, cost behavior and cost estimation; also, how cost accounting is applied to manufacturing and service organizations, the principles of planning and control for effective cost-related management, capital budgeting, cash flow statements, and how to analyze financial statements.

Prerequisite: ACC201

ACC451 Intermediate Accounting - I (3 units)
This course is designed for students who are interested in pursuing careers as accounting professionals. This course builds on the knowledge obtained in the Principles of Accounting series. Topics include understanding financial accounting and accounting standards, financial statement preparation, required disclosures, and in-depth study of current assets, revenue recognition and fixed assets.

Prerequisite: ACC202
ACC451L Intermediate Accounting - I Lab (1 unit)
Upon completing this practical lab, students will be able to handle complex accounting situations using real-world examples from the accounting topics covered in ACC451. During class meetings, students will interact with specific issues such as multi-year accrual recognition of delayed revenues, in-depth study of current assets, and determine how to address them both theoretically and in the finer details of recording. Students may have to modify their accounting software configuration in order to properly reflect the given issue according to their accounting needs.
Prerequisite: ACC202L

ACC452 Intermediate Accounting - II (3 units)
This course is a continuation of Intermediate Accounting - I. Subject matter includes current and long-term liabilities, stockholders’ equity, investments, pension and post-retirement benefits, leases and cash flow statements.
Prerequisite/Corequisite: ACC451

ACC490 Introduction to Taxation (3 units)
This course covers taxation concepts applied to individual’s income, deductions, credits, property transactions, and tax accounting methods. An understanding of the concepts will enable students to prepare quality individual income tax returns as a professional. The course will also cover taxation rules governing financial planning.
Prerequisite: ACC201

Business

BUS400 Business Communication (3 units)
This course instructs and develops business communication skills that are essential for daily business and professional activities. Topics include professional memo writing, e-mail format and filing, business letters and correspondence, and business reports. Attention will also be devoted to improving students’ active listening, speaking and nonverbal communication skills.
Prerequisite: ENGL101

BUS445 Professional Development (3 units)
This course instructs the student to develop his/her professional career. Topics cover personality assessment, professional ethics, understanding the business professional world, recognizing company culture and organizational structure, how to survive office politics, career paths and pitfalls, resume writing and cover letters, and interview techniques.
Prerequisite: ENGL101

BUS460 Introduction to Business Analytics (3 units)
This course teaches the basics of business analytics. The students learn to use popular data analysis tools to analyze business data for the purpose of understanding business trends, making business forecast, and improving organization’s decision making and business strategies.
Prerequisite: MATH208

BUS460L Introduction to Business Analytics Lab (1 unit)
This course is designed to be taken with the course BUS460 Introduction to Business Analytics. The students gain hands-on experience with business analytics. The students learn to use popular data analysis tools.
Prerequisite: MATH208

Curricular Practicum

CPT401 Curricular Practicum (1 unit)
Curricular practicum, or curricular practical training, is a supervised practical experience that is the application of previously studied theory. It is defined as alternative work/study, internship, cooperative education, or any other type of required internship or practicum that is offered by sponsoring employers through cooperative agreements with the school and the course is an integral part of an established curriculum. At least three hours of work in a practical setting has the credit equivalency of one hour of classroom lecture (1 unit). To be eligible to take this course, the student must have completed at least two trimesters of coursework required in his/her degree program, obtained a written agreement that outlines the arrangement between the institution and the practicum site (including specific learning objectives, course requirements, and evaluation criteria), and received approval by a designated advisor. International students must follow additional rules required by the U.S. Immigration and Customs Enforcement. The student must use NPU’s online tool to submit his/her application for taking this course before meeting with a designated advisor for an assessment of eligibility. Information and instructions concerning this course are provided in the application form. This is a part-time practicum course taken by the undergraduate student to work no more than twenty hours each week during the approved practicum period. Failure in this course will prevent the student from taking any curricular practicum course afterwards.
Prerequisite: Refer to the instructions on the application and agreement documents.

CPT402 Curricular Practicum (2 units)
Curricular practicum, or curricular practical training, is a supervised practical experience that is the application of previously studied theory. It is defined as alternative work/study, internship, cooperative education, or any other type of required internship or practicum that is offered by sponsoring employers through cooperative agreements with the school and the course is an integral part of an established curriculum. At least three hours of work in a practical setting has the credit equivalency of one
hour of classroom lecture (1 unit). To be eligible to take this course, the student must have completed at least two trimesters of coursework required in his/her degree program, obtained a written agreement that outlines the arrangement between the institution and the practicum site (including specific learning objectives, course requirements, and evaluation criteria), and received approval by a designated advisor. International students must follow additional rules required by the U.S. Immigration and Customs Enforcement. The student must use NPU’s online tool to submit his/her application for taking this course before meeting with a designated advisor for an assessment of eligibility. Information and instructions concerning this course are provided in the application form. This is a full-time practicum course taken by the undergraduate student to work more than twenty hours but not to exceed forty hours each week during the approved practicum period. Failure in this course will prevent the student from taking any curricular practicum course afterwards.

Prerequisite: Refer to the instructions on the application and agreement documents.

Digital Media and Graphics

DMG450 Fundamentals of Digital Media and Graphics (3 units)
In many digital graphics design areas, such as typesetting and logo graphics, vector editing provides smooth and flexible sizing. Adobe Illustrator is a vector graphics editor providing results in the typesetting and logo graphic areas of design. Upon completion of this course, the student will be able to use sophisticated Illustrator tools for drawing, painting, editing, and to efficiently produce artwork for print, the web, digital publication, and business applications. The student will also learn to incorporate Photoshop’s products with Illustrator. Advanced level tools for 3D model design, such as AutoDesk, are explored. Hands-on exercises are required.

DMG460 Introduction to Animation (3 units)
This course focuses on digital animation using Adobe Flash. The student learns to import Photoshop files, build objects with Flash tools, create motion using key frames and tweening with ActionScript. Exploration of other software tools, such as FlipBook, will also be included. Hands-on exercises are required.

DMG480 Introduction to Dreamweaver (3 units)
This course focuses on developing a website using Adobe Dreamweaver. Topics covered include techniques in using Cascading Style Sheets (CSS), creating headings, lists, and block-quotes, creating tables, inserting an image, linking to internal site pages and other external sites, adding interactivity, creating a page layout, use of forms and Flash files, productivity issues, and publishing on the web. Hands-on exercises are required.

Economics

ECON201 Macroeconomics (3 units)
This course teaches economic analysis at the level of the entire economic system or macro perspective. Topics include business cycles, unemployment or lack of demand, inflation, national income and expenditure, aggregate demand and fiscal policy, money and monetary policy, trade and balance of payments deficits, the national debt, productivity and economic growth.
(Lower Division GE – Social Sciences area for non-business majors)

ECON202 Microeconomics (3 units)
This course studies the economic system from the individual decision-maker’s perspective. Topics include demand analysis, economic analysis of production, industry and competition analysis, market and economic analysis of public policies, and labor markets and income redistribution analysis of public policies.
(Lower Division GE – Social Sciences area for non-business majors)

English

ENGL101 Expository Writing (3 units)
This fundamental level college writing course is based on a systematic approach to address students' needs to acquire knowledge and skills in written communication. It explores an integrated approach to the mechanics of communication, encompassing a full range of basic concerns in informative writing, going from its processes to its forms, to the popular techniques writers have used to make their works outstanding. Students enhance their writing skills through the process of prewriting, organizing, drafting, revising, and editing of expository essays. By the end of the trimester, students should be able to use grammar and punctuation correctly and to write effective informative/explanatory essays in both academic and professional settings.

ENGL102 Critical Thinking (3 units)
This course focuses on learning to be an effective provider and consumer of ideas in our information-saturated society. Students will learn to identify the intent of the message, to judge the soundness of the argument, and to evaluate the validity of the evidence. Rigorous training will help learners go beyond feelings and personal biases to clear, impartial, and accurate problem solving and decision making that are essential to all human communication: speaking, writing, debating, and persuading.
Prerequisite: ENGL101
ENGL115 Public Speaking  (3 units)
This course is designed to develop effective skills in extemporaneous speaking, formal presentations, and listening. Students will learn about nonverbal communication, cultural differences in communication, and research methodology.
Prerequisite/Corequisite: ENGL101

ENGL220 Small Group Communication  (3 units)
This course is designed to accomplish the following learning goals: 1) to help the students understand theories and principles of small group decision making and problem solving, 2) to provide students with hands-on experience working in small groups, the most powerful tool in modern industry, and 3) to offer students opportunities to observe the development and operation of real-life task-oriented groups.
Prerequisite: ENGL101

ENGL420 Intercultural Communication  (3 units)
This course introduces theories and practices regarding intercultural relationships and communication. It helps students adapt to a rapidly diversified workforce both in Silicon Valley and in other parts of the world. From the vantage point of this course, students will see the forces that shape cultures and influence intercultural contacts. They will be enabled to build harmonious and productive relationships with individuals from all national, ethnic, and linguistic backgrounds.
Prerequisite: ENGL101

Finance

FIN310 Fundamentals of Finance  (3 units)
This course introduces the student to the world of finance. Financial management is concerned with the efforts of the corporation’s managers to raise and allocate capital in a manner that will maximize and stabilize the firm’s future cash flows. This course examines the concepts and techniques available to financial managers as they address various aspects of the financing and investment questions. Topics include financial background, a review of accounting, financial statements, and taxes; cash flow and financial analysis, the financial system and interest, time value of money, the valuation and characteristics of bonds, the valuation and characteristics of stocks, risk and return, capital budgeting, and international finance. A case study will be applied to assist students’ learning.
Prerequisite: ACC201
cost centers and allocate actual cost and planned cost within different cost centers.
Prerequisite/Corequisite: FIN310

Human Resource Management

HRM452L Human Resource Management Lab  (1 unit)
In this course students will learn how to use software tools to support common Human Resource Management functions such as: Performance management, recruitment and selection, leave management, personnel time management, daily reporting, travel management, expenses, training, compensation and benefits management, HR analytics, etc. Students should be comfortable installing software on their machines and/or using cloud-based services.
Prerequisite/Corequisite: MGT310

Humanities
(GE in Humanities area)

HU210 Introduction to Philosophy  (3 units)
This course is an introduction to the great questions of philosophy, using an historical approach. The class covers Western and non-Western traditions from the pre-Socratic and Confucius to modern times.
Prerequisite: ENGL101

HU230 Art Appreciation  (3 units)
A crash course in western art aesthetic from ancient art to post-modernism, this course gives the student a historical western art background that makes comparisons to the East, as well as the tools to analyze paintings through their own cultural point of view.
Prerequisite/Corequisite: ENGL101

HU240 Music Appreciation  (3 units)
This course is designed for students to explore the fundamentals of music through easy listening examples from all aspects of sound: tone, color, harmony, rhythm, mood, dynamics, tempo, themes, and forms. Students will analyze music in respect to the historical and cultural context as well as to daily life.
Prerequisite/Corequisite: ENGL101

HU250 News Reading  (3 units)
This course will give students a skill that they will be able to use and benefit from for the rest of their lives: the ability to read and understand an English-language newspaper, magazine or other journalistic materials. It will enable the students to launch from their general English reading capability into a subject area which is more specialized and yet intimately woven with every-day happenings that concern and motivate every ordinary man and woman -- the news reports.
Prerequisite: ENGL101

HU280 Principles of Ethics  (3 units)
This course is designed to teach students ethical principles and problems applicable to their lives.
Topics include application of ethical principles, background and philosophical principles of ethics, ethical practices, and practical ethical problems and solutions.

Prerequisite: ENGL101

Information Technology

IT200 Introduction to Computers and Digital Media (3 units)
This is an introductory computer literacy course introducing the students to the basics of computer hardware structure, the World Wide Web, and MS Windows software tools. Topics include an introduction to computer components, input/output, data storage, the internet and the WWW, operating systems, data management, and a few Adobe Photoshop software tools. Students also learn to use the latest Microsoft Office tools – Word, Excel, Access, PowerPoint, and the use of the internet and browsers. Hands-on exercises are required.

Prerequisite/Co-requisite: IT200

IT310 Introduction to Information Technology (3 units)
This is the first of a sequence of IT courses designed to provide students the fundamental knowledge and training in the following areas: (1) concepts and basic principles of management information systems and current information technology for business, and (2) basic business programming and database concepts. Topics of this course include an introduction to current information technology and a tour of computer systems, the internet, and World Wide Web; electronic spreadsheets, database applications for personal productivity, multimedia presentations, developing single-user systems, fundamentals of programming, multi-user and network computing, shared and distributed data, developing shared IT applications, business information systems and IT in industry, issues in information technology, and the information age: next steps. Students will receive assignments for practice on networked PC systems to learn the covered subjects and programming.

Prerequisite/Co-requisite: IT200

IT370 Database Design and Development For Business (3 units)
This is the second of the IT sequence and offers a more in-depth study of database systems. Technical concepts are presented within a managerial context. Students will learn the impact of the database environment on the decision-making process. Topics include introduction to database systems, elements of database systems, data modeling, a framework for database systems design, normalized database design, the relational database model, the structured query language, the technical aspects of database design, and database systems for management decision making. Hands-on exercises and projects are required.

Prerequisite/Co-requisite: IT310

IT450 Enterprise Information System Fundamentals (3 units)
This course provides a general introduction to multiple information systems for business infrastructure with emphasis on system functions, project deployment planning, integration technologies, and life cycle administration. Also, students will receive an overview of enterprise IS applications such as CMS, KM, ERP, CRM, SCM, and related technologies. After completing this course, students will be able to creatively apply the principles and strategies of enterprise information systems to streamline business operations and improve efficiency. Case studies and hands-on practice are required.

Prerequisite/Corequisite: IT310

IT453 Web Site Design and Programming with JavaScript (3 units)
This course teaches the fundamentals of client-side programming for Web pages requiring data Collection or other user interaction. Students will create Web pages that execute on the client machine using JavaScript. Students will also learn more details of UNIX Operating System.

Prerequisite/Corequisite: IT310

Law

LAW310 Introduction to Business Law (3 units)
This course is designed as an introductory-level course in U.S. business law. The focus will be on preparing students to spot potential legal issues in the operation of businesses so they can operate legally and know when to consult an attorney before taking action. The course begins with an overview of the U.S. legal system, its fundamental structures and processes. Emphasis is placed on basic tort and contract law principles. Students will also be exposed to several substantive areas of law affecting business, including employment, environmental, corporate, securities, bankruptcy, intellectual property, and antitrust law.

Prerequisite: ENGL101

Management

MGT310 Principles of Management (3 units)
This course is designed for students to learn the basic skills, applications, and foundations of management. Specifically, students will learn organizational structure and environment, and develop skills in planning, organizing, leadership, motivation, decision-making, communication, negotiation, and managing information for decision making. This course serves as a foundation for a more in-depth study of various aspects of management in other courses.

Prerequisite/Corequisite: ECON201 or ECON202
MGT450 Organizational Behavior and Management (3 units)
This course explores the complex dimension of organizational behavior including examination of experiential and conceptual approaches to communication, self-awareness, perception, motivation, problem solving and culture. Students apply interpersonal and intrapersonal exploration to the management of change, leadership theories and organizational issues. Real case projects are required.
Prerequisite/Corequisite: MGT310

MGT453L Project Management Lab (1 unit)
By the end of this course students will learn how to use software tools in the context of project management to find and optimize a complex project's: Earliest completion date, latest start date, critical path analysis, amount of slack/float time in a project, resource planning, Gantt chart visualization, milestone planning and monitoring and cost estimation. Students should be comfortable installing project management software on their machines and/or using cloud-based Project Management services.
Prerequisite/Corequisite: MGT310

MGT460 Production and Operations Management (3 units)
This course balances theory and practice of Production and Operations Management, covering quantitative, qualitative, and behavioral aspects. Students will learn how to identify and apply strategies, business process design principles, and quantitative techniques. This knowledge will then be applied to optimize business operations, enhance efficiency, and improve competitiveness. Students will develop quantitative models and use software tools such as Microsoft Excel Analysis Toolpak and Solver to create solutions for multivariate operational constraints. Typical control cases include service and product design choices, sales forecasting, scheduling, metrics for production/inventory control, statistical quality control, and logistical constraints.
Prerequisite/Corequisite: MGT310

MGT460L Production and Operations Management Lab (1 unit)
During this hands-on lab course students will learn software-based techniques to solve various time, labor, material, forecasting, capacity, take control of the conversion process from inputs to outputs, and costs optimizations in classic production planning and operations scenarios. Students will be expected to develop their own mathematical models, transform their models into software-based implementations and then determine the optimized best fit business solution. Students should be comfortable with or refresh themselves on solving multivariate simultaneous equations before the first class meeting. Students should be comfortable installing software on their machines and/or using cloud-based services.

Prerequisite/Corequisite: MGT310

MGT480 Entrepreneurship (3 units)
This course explores the full range of the entrepreneurial process including the evaluation, development, and creation of a successful business. It will help the potential entrepreneurs and professionals visualize and experience entrepreneurial development. The course explores the entrepreneurial approach to resources such as the development of an organizational structure, market analysis, financing entrepreneurial ventures, and screening venture opportunities. Individuals will experiment and evaluate what it takes to be an entrepreneur including developing the plan for a new business.
Prerequisite/Corequisite: MGT310

Marketings

MKT310 Principles of Marketing (3 units)
This course introduces the major principles of marketing, marketing's role within the company, and its role in the global economy. Studies will focus on how to find marketing opportunities with market segmentation, how to get information for marketing decisions, the elements of product planning and new product development, wholesalers and retailers and their strategies, pricing, and promotion.
Prerequisite/Corequisite: ECON201 or ECON202

MKT450 Marketing Management (3 units)
This course studies marketing management by analyzing real-world cases. Students will learn to implement and execute the marketing process through situation assessment, strategy formulation, marketing planning, marketing implementation and evaluation.
Prerequisite/Corequisite: MKT310

MKT450L Marketing Management Lab (1 unit)
At the completion of this hands-on course students will use Customer Relationship Management (CRM) software tools to learn how to support various customer interactions, sales quality assurance, increase relationship transparency, improve customer retention rates, and reduce costs by streamlining the operations of Sales and Marketing departments. Students should be comfortable installing CRM software on their machines and/or using cloud-based CRM services.
Prerequisite/Corequisite: MKT310

Mathematics

MATH201 Calculus - I (3 units)
This course is the first of a series in calculus designed for students to build up the fundamental background of calculus and to learn its applications to very basic problems. Topics include functions, limits,
continuous functions, derivatives and applications, antiderivatives, composite functions and chain rule, graphing techniques using derivatives, implicit differentiation, finite integrals, and fundamental theorems of calculus.
(GE – in Mathematics area)
Prerequisite: Pre-calculus subjects

MATH202 Calculus - II (3 units)
This course is the second of the calculus series designed for students to understand integration techniques and extend the differentiation notion and methods to functions of multiple variables. Topics include logarithmic and exponential functions and their derivatives, inverse trigonometric functions and derivatives, L’Hospital’s rule, integration techniques and their applications, sequence, series, partial derivatives, and improper integrals.
(GE – in Mathematics area)
Prerequisite: MATH201

MATH203 Linear Algebra (3 units)
Linear Algebra is one of the topics to prepare students for higher-level math courses as Differential Equations. It is also relevant to computer and business students interested in Data Science since linear problems are often the simplest models of the natural world. In this course students learn the language, concepts, and techniques, from the ground up; the course starts with geometric representation of systems by equations, and later manipulation of abstract ideas as Singular Value Decomposition.
(GE – in Mathematics area)
Prerequisite: MATH201

MATH205 Differential Equations (3 units)
This course is designed for engineering students to learn differential equations and their applications. Topics include ordinary differential equations at first, second, and higher orders; applications of ordinary differential equations in electrical circuits and motions, partial differential equations and boundary problems, eigenvalues and eigenfunctions, Green's function, and applications of partial differential equations in electromagnetic waves and scalar and vector potential problems.
(GE – in Mathematics area)
Prerequisite: MATH202

MATH208 Statistics (3 units)
This course is designed for students to understand the concepts, theory, and applications of probability and statistics. Topics include permutation, combination, random variables, distribution, means and variance, normal distribution, random sampling, estimation, confidence interval, hypothesis testing, linear correlation and regression.
(GE – in Mathematics area)
Prerequisite: Pre-calculus subjects

Physical Sciences

PHYS101 Introduction to Physical Sciences (3 units)
This is an introductory course to expose the students to physical science subjects including the basics of astronomy, chemistry, earth science, and physics.
(GE - in Sciences area)
Prerequisite: Pre-calculus subjects

PHYS201 Physics - I (3 units)
This course is designed to be the first of a series in physics for engineering students. Topics include vectors, motion and Newton’s laws, gravitation, work and energy, momentum, mechanics of rigid bodies, oscillations, kinetic theory of gases, waves and sound, and thermodynamics. Laboratory practices are conducted formally each week.
(GE - in Sciences area)
Prerequisite: MATH201

PHYS201L Physics Lab – I (1 unit)
This course is designed to be taken with the course PHYS201 Physics - I. The student first learns to use the general measuring equipment, the proper experimental procedures, and lab safety issues. The student is expected to gain skills in data analysis and lab report writing throughout the trimester. Lab topics include measurements of position and velocity, kinematics, Newton's laws of motion, energy, momentum, conservation laws of energy and momentum, collisions, torque, rotational dynamics, waves, and thermodynamic behaviors.
(GE - in Sciences area)
Prerequisite: PHYS201

PHYS202 Physics - II (3 units)
This course is the second of a series in physics for engineering students. Topics include Coulomb's law and electric fields, currents and DC circuits, magnetic fields, time-varying EM fields, AC circuits, optics, interference, diffraction, and an introduction to modern physics. Laboratory practices are conducted formally each week.
(GE - in Sciences area)
Prerequisite: PHYS201

PHYS202L Physics Lab – II (1 unit)
This course is designed to be taken with the course PHYS202 Physics - II. The student learns to use electrical measuring equipment to conduct the first several experiments related to electromagnetism. Lab safety as well as skills in data analysis and lab report writing are stressed. Lab topics include measurement of electric field and potential, simple circuits, resistors, DC circuits, Kirchhoff’s laws, capacitors, RC circuits, magnetic effects, inductors, AC circuits, electromagnetic induction, RLC circuits, geometrical optics, lenses, and light as a wave.
(GE - in Sciences area)
Prerequisite: PHYS201L
**PHYS301 Introduction to Device Physics** (3 units)
This course provides a basis for understanding the characteristics, operation, and limitations of semiconductor devices. The course covers the fundamental concepts of quantum mechanics, the quantum theory of solids, semiconductor material physics and semiconductor device physics. All of these components are vital to the understanding of both the operation of present day devices and future development in the field.  
*(GE - in Sciences area)*  
*Prerequisite: PHYS202*

**Social Science**  
*(GE – in Social Sciences area)*  

**SOC201 California History** (3 units)
This course is designed to expose the students to the uniqueness of California history and its evolution. Topics include the social, economic, and political development of the “Golden State” over the last three centuries, spanning the Native-American, Spanish, Mexican, and American periods. Lectures, case studies, and field trips for research are the forms of study in this course.  
*Prerequisite: ENGL101*

**SOC215 Introduction to Sociology** (3 units)
This course provides a study of culture, social organization, and social relations. Additional topics include the major social problems in society, with an emphasis on how those problems are interrelated and the role of society in their creation and perpetuation. Issues and problems related to cross culture and diversity will also be addressed.  
*Prerequisite: ENGL101*

**SOC235 Multiculturalism in the United States** (3 units)
This course looks into various aspects of multiculturalism in American society, exploring issues related to race, ethnicity, gender, sexual orientation, disability, and other social group identities.  
*Prerequisite: ENGL101*

**SOC245 Health Psychology** (3 units)
This survey course will ask: What is health, how do you know you are well, when should you seek professional services, where do I find the right doctor, why should I take good care of myself, and whom do I go to and for what? Concepts and facts will be given to understand and apply to: the body and its systems, the brain and the mind, physical diseases, chronic pain, mental illnesses, personality disorders, sleep and relaxation, positive thinking, emotional intelligence, behavioral health, nutrition, exercise, health care treatments, alternative and complementary medicine, medications and adverse side effects, medical specialties, national costs, insurance, programs, aging and longevity, quality of life, dying with dignity, and healthcare providers ethics.  
*Prerequisite: ENGL101*

**SOC250 Public Administration** (3 units)
This course serves as an introduction to public administration. Early key thinkers in the development of public administration will be examined. During the trimester, topics such as public policy formation, public management, human resources, reinvention, privatization, e-Government, public finance, performance measurement, and ethics will be reviewed. Students will become familiar with the primary issues and challenges facing public administrators today.  
*Prerequisite: ENGL101*

**SOC260 Civilization and Urbanization** (3 units)
This is an introductory course designed to cover the 5,000 year shift from rural to urban throughout the world. The city is civilization’s greatest work of art but has many challenges. The ancient walled cities, utopian writings, urban theories, religious experiments, English Garden Cities and new towns, American Greenbelt Towns, company towns, flight to the suburbs, Neo-traditional planning, the New Urbanism, and current sustainable development, Smart Growth, to the more recent Greening and Healthy Cities will be described and the actual city and regional planning practices are shown.  
*Prerequisite: ENGL101*

**SOC275 The American Experience** (3 units)
This course is designed to lead the students to examine the 20th century rise of the United States as a modern multiethnic society with emphasis on the socioeconomic and political forces that have shaped its development.  
*Prerequisite: ENGL101*

**SOC400 Early American History** (3 units)
This course is designed to lead the students to examine the early periods of American history that shaped the development of the nation, including America before Columbus, European expansion, the founding era and Revolution, the Constitution and the new republic, and subsequent periods of civic and political growth up to the Civil War.  
*Prerequisite: ENGL101*
Master’s Degree Program

The School of Business and Information Technology offers one master’s degree program: Master of Business Administration (MBA).

• Objective

The objective of the master’s degree programs is to provide advanced training to those who wish to practice their profession with increased competence in the global business industries. The program emphasizes both mastery of subject matter and an understanding of related research and research methodology. This emphasis implies development of the student’s ability to integrate and apply the subject matter.

• Committee Oversight

The responsibility for developing, modifying, and maintaining the master’s degree program is performed by the Academic Committee for this School. The Academic Committee is led by a designated group of members who invite inputs from qualified students, faculty, administrators, employers, as well as the Advisory Committee members to conduct their duties.

• Credential Requirements

The master’s degree program applicants must hold a valid bachelor’s degree and meet the minimum grade point average requirement for consideration of acceptance.

- a CGPA of 2.5 or above for applicants with a U.S. bachelor’s degree
- a CGPA of 3.0 or above for applicants with a bachelor’s degree from a foreign institution

• Application Requirements

To apply for admission into a master’s degree program, the applicant is required to submit the following to the NPU Admissions Office:

1. An online Application Form.
2. A nonrefundable application fee.
3. A copy of passport or a government issued I.D.
4. Official transcripts from previously attended colleges;
5. A document certifying completion of a bachelor’s degree; a transcript printed with degree completion information will suffice;
6. An English proficiency document is required for non-native English speakers: an official transcript with English course records or TOEFL/IELTS/PTE Academic score report or the Cambridge FCE Certificate or equivalent will suffice. See English Proficiency Requirement below for detailed information on the English entrance requirement.

- International Students: In addition to the above general application requirements, an international applicant is also required to submit the following additional documents:

1. Entrance assessment test: GRE (General test score). There is no minimum requirement, however, the score is a factor affecting admissions decision.
2. A financial support document – provide a recent financial support document indicating a minimum amount of $30,000 available to pursue his/her study in the first academic year at NPU.
   - A current bank letter and bank statement; or
   - A loan letter from a lending institution; or
   - A property deed valuation report; or
   - Copies of fixed deposits.

An affidavit of support or sponsor letter is required if the funds are not in his/her name.

3. A transfer student (from a U.S. institution) is required to submit a photocopy of his/her
   - previous I-20 form,
   - visa, and
   - I-94 (U.S Department of Homeland Security issued arrival / departure form). The student will be asked to show an identification document attesting his/her official name, if applicable.

Applicants interested to apply for scholarships need to provide additional documents. Please refer to the section on Scholarships in this catalog and on the website.
• **English Proficiency Requirement**

Non-native English speakers are considered meeting the entrance English proficiency requirement if they meet any of the following requirements:

- completed secondary school or a college degree program where English was the language of instruction.

- completed and passed a college English credit course in an institution located in the U.S., U.K. Australia, New Zealand, or Canada, and where English is the language of instruction for the institution.

- submitted an official TOEFL, IELTS or PTE Academic test score report to NPU and the score meets the minimum score detailed below, which is subject to modification by the NPU admissions office.
  - For applicants with a CGPA of 3.5 and above
    o IELTS: 5.5; TOEFL: 59; PTE: 50; Cambridge FCE Certificate
  - For applicants with a CGPA between 3.0 to 3.49
    o IELTS: 6.0, TOEFL: 78, PTE Academic: 58, or the Cambridge FCE Certificate

- NPU may accept the English assessment reports from a few U.S. English language institutions recognized by major universities in the U.S.

- Successfully completed NPU’s IEP Level 6, or upon completion of all level 5 courses with a minimum grade of A.

• **Entrance Assessment Test**

The entrance assessment test, GMAT or GRE, is required from students who earned their bachelor’s degree from a foreign institution. There is no minimum requirement, however, the score is a factor affecting admissions decision.

NPU’s institution Code for reporting the GMAT/GRE score is 5485.

**GMAT/GRE Waiver** applies to students with a U.S. bachelor's degree.

• **General Background Requirements for Pursuing Master’s Degree**

**Background Preparation:** The background preparation for the master’s degree program is described at the beginning of the program. Background deficiencies are identified in the admission evaluation report received by each applicant. The student is required to clear the deficiencies early in his/her study at NPU.

**How to Clear Deficiencies:** The graduate student may clear each background deficiency by taking and passing the preparatory module course at NPU. With advance approval by the Admissions Committee, the student may be allowed to clear a deficiency by taking a proficiency exam on individual course or courses the modules are based upon. The student may earn graduate elective credit when taking mezzanine courses to clear deficiencies at NPU.

Courses taken elsewhere after joining the degree program at NPU will not waive a deficiency requirement. **Students may not take the deficiency courses at another institution while attending NPU.**

• **Transfer of Credit from Other Institutions**

Graduate course credit earned at other accredited higher education institutions may be transferable to meet the student’s graduation requirements if the courses are closely related to the business management course requirements in the MBA program and the grade earned meets the requirement stated below. Such course credits are considered qualified transfer credits. Credit transfer is made by the admission evaluators while conducting the admission evaluation. The following statements apply to qualified transfer credits:

- The NPU Admissions Office must receive all official transcripts prior to the student’s joining a degree program. Without preapproval, transcripts received after the student joins NPU cannot be used in transferring credits, except for records from the term immediately preceding the student’s starting trimester at NPU.

- The student was officially enrolled in the course.
Courses eligible for transfer will be evaluated based on the comparability in content, quality and rigor of NPU’s courses. The transfer evaluation will include, but is not limited to, course descriptions, course syllabi, and/or general public information. Students may be asked to provide course catalogs or syllabi if needed.

- No more than 7 units of qualified graduate-level course credits may be transferred.

- Courses for transfer to NPU may not be completed concurrently at another institution while attending NPU.

- The credits contemplated for transfer must be earned at (1) institutions approved by the Bureau for Private Postsecondary Education, (2) public or private institutions of higher learning accredited by an accrediting association recognized by the U. S. Department of Education, or (3) any institution of higher learning, including foreign institutions, offering degree programs equivalent to degree programs approved by the Bureau or accredited by an accrediting association recognized by the U.S. Department of Education. With regard to foreign institutions, if NPU cannot determine that the institution is offering degree programs equivalent to degree programs approved by the Bureau or accredited by an accrediting association recognized by the U.S. Department of Education, the student may obtain a credential evaluation from a National Association of Credential Evaluation Services (NACES) member.

- Professional Development Units (PDUs) offered by professional/industry organizations cannot be transferred to NPU for academic credit.

- Continuing Education Units (CEUs) offered on a non-academic basis by other academic institutions cannot be transferred to NPU for academic credit.

- Credits transferred, performed at the time of admission evaluation, will reduce the program length. Credit transferred from any outside institution is excluded from the program length and has no effect on the calculation of the student’s GPA or CGPA.

- Credits are transferred by the following conversion:
  a. **Definition of a Trimester Unit:**
     One trimester credit hour equals, at a minimum, 15 contact classroom hours of lecture, 30 contact hours of laboratory, or 45 contact hours of practicum.
  b. **Conversion Factor:**
     1 quarter unit = 0.66 trimester unit

- **Grades Required for Transfer Credit**
  In the master’s degree programs, qualified courses completed with an equivalency of a letter grade of "B" or better are transferable. Courses completed with Pass/No Pass are not transferable unless the transcript states that the general grading policy is not based on letter grades. This policy must be in writing from the institution (transcript key or a letter of verification).

  - **Proficiency Exams:** A student may be required to demonstrate proficiency in an undergraduate background subject taken more than ten years prior to application with NPU by successful completion of a proficiency examination.
    A student may also select to take proficiency exams to clear his/her background deficiencies in order to satisfy the background preparation required by his/her program. Rules for taking proficiency exams must be observed by the student. Of particular importance is timing for taking each proficiency exam. Clearance of a background subject must be completed early enough to meet two conditions: (1) There must be sufficient time for administrative processing of the exam and (2) Processing of the exam must be completed prior to the student’s registration in any course with the deficiency subject as a prerequisite for the course.

- **Experiential Learning**
  NPU does not award credit for prior experiential learning.
• Tuition

Tuition is charged per unit. Tuition for courses taken to fulfill the master’s degree requirement is $450.00 per unit.

☐ Tuition per Unit for Courses Audited

For courses audited (without earning credit), the tuition is half the regular unit rate. Not all courses can be taken with “audit” status.

☐ Estimated Total Charges for On-time Completion of Entire Educational Program

- Tuition: $16,200
- Fees: $1,600
- Graduation Petition Fee: $300
- Textbooks Costs: $1,800
- Health Insurance Premium: $1,668

• MBA: $21,568

Please note that this estimate includes tuition, fees, textbooks costs, and health insurance premium, which is subject to change. All students are required to pay current rates for tuition and fees each trimester. Additional fees may apply, depending on the services requested (see Tuition and Fee section). The cost of textbooks is estimated to be approximately $150 per course. The actual cost of textbooks can vary significantly from course to course.

• Graduation Requirements

The Master of Business Administration degree program requires a minimum of 36 units of graduate-level courses. Additional coursework may be required for a student whose undergraduate degree program was in a discipline other than that of the master’s degree program. The MBA degree program requires coursework in the following categories:

1. Foundation Requirements,
2. Core Requirements,
3. Electives, and

The following are required for graduation:

- A graduate student admitted with undergraduate deficiencies must clear the deficiencies in the early terms. The student may clear a subject by either taking the course and earning a passing grade or passing a proficiency exam on the subject,
- Maintain a grade of C or better for all courses taken to clear deficiencies or towards the degree requirements,
- Maintain an overall G.P.A. of 3.0 or better,
- Maintain good standing with the University – with clear financial, library, and other school records,
- The student is approved to graduate after filing a petition for graduation.

✦ Capstone Course

The capstone course is intended to integrate the knowledge and skills that the student has acquired from the courses taken in the program. The capstone course instructor determines the course objectives and scope based on the program curriculum and business trend. With this learning experience, the student is prepared to pursue his/her career in the changing global business arena.

The student shall take the capstone course near the end of his/her program of study.

✦ Career Planning

The students are encouraged to utilize the online eCareer Center and work with the Career Center staff to prepare their resumes and participate in job search activities when they are ready for such a pursuit.

The following is the description of the MBA degree program, with a statement of its objectives, the background preparation required, and the program curriculum.

Course Numbers: Courses numbered as PBUSxx are preparatory module courses to clear undergraduate background deficiencies; courses numbered from 450G to 499G are mezzanine courses; courses numbered in the 500s and above are graduate level courses. Mezzanine and graduate level courses are to meet the graduation requirements.
Master of Business Administration (MBA)

Program Objectives: The primary objectives of the MBA degree program are: (1) to provide a knowledge base of interdisciplinary business theories and techniques to the students, (2) to train and to develop students’ practical skills for career development, and (3) to develop the students’ decision-making and leadership capabilities to face the challenges of a dynamic business world staged with diverse, multicultural, and global business settings. The emphases are in the fields of modern global business management and digital enterprise system management. Specific studies cover the fields of accounting, financial management, project management, modern information management systems, and business marketing.

Program Learning Outcomes: Students graduating with an MBA degree are expected to demonstrate the following program learning outcomes -

- **Written Communication** - In a contextually appropriate manner, write strategic business plans and tactical implementation plans.
- **Oral Communication** - In a business setting, craft and deliver compelling messages, based on logic and variety of supporting materials.
- **Quantitative Reasoning** - Convert relevant information into insightful mathematical portrayals and apply across a wide range of business situations.
- **Information Literacy** - Determine, acquire, and analyze data needed from multiple sources in order to create recommendations for complex business situations.
- **Critical Thinking** - Methodically solve multi-criteria business and managerial problems.
- **Specialized Knowledge** - Synthesize concepts in management, finance, accounting, and marketing to resolve complex business challenges.

Background Preparation

Students admitted into the MBA degree program are required to have proper business background preparation for taking the graduate level coursework. A student with any background deficiency is required to take the specifically designed business preparatory model course to clear it. The student must clear prerequisites before taking the degree required courses. In addition, English proficiency is also required. Refer to the section on “English Proficiency Requirement” in the chapter “Admission Policies” for details.

The following are the business preparatory module courses covering the required background subjects:

- PBUS05 Essentials of U.S. Corporate Business Management
- PBUS06 Essentials of U.S. Corporate Accounting and Finance

Upon clearing background preparation work, the student starts to take courses to meet the degree requirements.

Mezzanine Courses: A number of mezzanine courses are also required for background preparation. These mezzanine courses are designed for the MBA students to receive hands-on training using popular business tools as well as gain understanding of US corporate culture and professionalism. Credits earned from these mezzanine courses taken at NPU meet the Electives requirement in the MBA program. Students who have earned a business degree from an accredited US university/college may request for a waiver of subjects having been taken at the other university/college. The mezzanine courses are:

- BUS460G Introduction to Business Analytics
- BUS460LG Introduction to Business Analytics Lab
- MGT460LG Production and Operations Management Lab
- P450G Career Development

Notice to Prospective Degree Program Students
This institution is provisionally approved by the Bureau for Private Postsecondary Education to offer degree programs. To continue to offer this degree program, this institution must meet the following requirements:

- Become institutionally accredited by an accrediting agency recognized by the United States Department of Education, with the scope of the accreditation covering at least one degree program.
- Achieve accreditation candidacy or pre-accreditation, as defined in regulations, by October 16, 2019 and full accreditation by October 16, 2022.

If this institution stops pursuing accreditation, it must:

- Stop all enrollment in its degree programs, and
- Provide a teach-out to finish the educational program or provide a refund.

An institution that fails to comply with accreditation requirements by the required dates shall have its approval to offer degree programs automatically suspended.

MBA Curriculum

A minimum of 36 trimester units of graduate study are required for the MBA program. The MBA curriculum includes coursework in the following categories: Foundation Requirements, Core Requirements, Electives, and a Capstone Course. A number of areas of interest are shown in the section of Core Requirements; each is listed with a cluster of courses. Students taking courses in an area of interest will gain in-depth knowledge and skills in the corresponding business professional field. Additionally, taking courses in an area of interest can be beneficial to the student for career planning. The student must meet prerequisite/corequisite requirements when taking any course.

I. Foundation Requirements (9 units)

The following required courses provide a knowledge base of interdisciplinary business theories and techniques.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN501</td>
<td>Financial Management</td>
</tr>
<tr>
<td>HRM531</td>
<td>Human Resource Management</td>
</tr>
<tr>
<td>MGT530</td>
<td>Logistics and Operations Management</td>
</tr>
</tbody>
</table>

II. Core Requirements (12 units)

Beyond Foundation Requirements, the student is required to take at least 12 units of business administration coursework. Although not required, the student has the opportunity to select an area of interest and take courses in the chosen area to meet the core requirements. Taking sufficient number of courses in an area of interest is beneficial to the student for entering the corresponding business profession.

Examples of cluster courses in each area of interest are listed below:

Accounting:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC501</td>
<td>Advanced Accounting</td>
</tr>
<tr>
<td>ACC512</td>
<td>Federal Taxation of Business Enterprises</td>
</tr>
<tr>
<td>ACC530</td>
<td>Auditing</td>
</tr>
<tr>
<td>ACC540</td>
<td>Accounting Information Systems</td>
</tr>
</tbody>
</table>

Finance:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN510</td>
<td>Investment Analysis</td>
</tr>
</tbody>
</table>
FIN512  Financial Risk Management  
FIN522  International Trade and Investment  
FIN568  Corporate Finance  
FIN580  Portfolio Management  
FIN585  International Finance

Information Management:

IT510  Advanced e-Business Programming and Design  
IT553  Business Intelligence and CRM  
IT560  Enterprise Resource Planning  
IT589  Special Topics on Information Technology

Project Management:

MGT500  Risk Management  
MGT501  Project Management  
MGT542  Technology and Product Management  
MGT550  Global Outsourcing Project Management

Marketing:

MKT541  Strategic Marketing  
MKT542  Global Marketing  
MKT545  Global Trade and Operations  
GBM510  Green Business Marketing

Notices: Prerequisites for the Accounting area of interest are: ACC202, ACC202L, ACC451G.  
Prerequisites for the Information Management area of interest are IT450G, IT453G.  
Prerequisites for the Marketing area of interest is MKT450G.

III. Electives (12 units)

The student may elect any graduate-level courses (courses numbered 4xxG, 5xx, and higher level courses) to meet the Electives requirement. Required mezzanine courses taken at NPU satisfy the Electives requirement in this program. Credits earned from taking courses ACC451G, ACC452G, IT450G, IT453G, or MKT450G at NPU to meet the prerequisite requirements for core courses listed above also meet the Electives requirement.

Curricular Practicum: When applicable, the student may take curricular practicum courses and engage in practical training to work on company projects that are directly related to the student’s course of study. The student must observe the rules required for taking the practicum courses. No more than 6 units of practicum coursework may be counted towards graduation.

IV. Capstone Course (3 units)  
(A required subject)

Upon completing all or most coursework for this program, the student is required to take the capstone course and, under the guidance of the course instructor, integrate the knowledge and skills learned from all of the courses taken during the program.

MBA595  Business Administration Capstone Course
Course Descriptions

Master of Business Administration Degree Program
School of Business Administration and Information Technology

Master’s degree courses are numbered in the 500s. The MBA degree program allows for a limited number of credits for 400 level courses with a “G” suffix.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>450G-490G</td>
<td>Mezzanine courses for graduates</td>
</tr>
<tr>
<td>500-599</td>
<td>Graduate level courses</td>
</tr>
</tbody>
</table>

For information on prerequisite subjects numbered below 450, refer to the section on Course Descriptions for the Bachelor’s Degree Program, School of Business and Information Technology.

Courses are listed by subject: Accounting, Business, Curricular Practicum, Finance, Green Business Management, Human Resource Management, Information Technology, Law; exclusive MBA courses, Management, Marketing. The course lists are followed by a list of preparatory module courses for business graduate programs.

Each course description is followed by its prerequisite/corequisite information expressed in course numbers.

Each 1 unit of a practicum course requires at least 45 hours of practical experience related to the student’s program curriculum.

ACC450G Managerial Accounting (3 units)
This class applies the essentials of financial accounting to the practice of management. Students will understand cost definitions, cost concepts, cost behavior and cost estimation; also, how cost accounting is applied to manufacturing and service organizations, the principles of planning and control for effective cost-related management, capital budgeting, cash flow statements, and how to analyze financial statements.
Prerequisite/Corequisite: ACC201 or PBUS06

ACC451G Intermediate Accounting - I (3 units)
This course is designed for students who are interested in pursuing careers as accounting professionals. This course builds on the knowledge obtained in the Principles of Accounting series. Topics include understanding financial accounting and accounting standards, financial statement preparation, required disclosures, and in-depth study of current assets, revenue recognition and fixed assets.
Prerequisite/Corequisite: ACC202

ACC451LG Intermediate Accounting - I Lab (1 unit)
Upon completing this practical lab, students will be able to handle complex accounting situations using real-world examples from the accounting topics covered in ACC451. During class meetings, students will interact with specific issues such as multi-year accrual recognition of delayed revenues, in-depth study of current assets, and determine how to address them both theoretically and in the finer details of recording. Students may have to modify their accounting software configuration in order to properly reflect the given issue according to their accounting needs.
Prerequisite/Corequisite: ACC202L

ACC452G Intermediate Accounting - II (3 units)
This course is a continuation of Intermediate Accounting - I. Subject matter includes current and long-term liabilities, stockholders’ equity, investments, pension and post-retirement benefits, leases and cash flow statements.
Prerequisite/Corequisite: ACC451

ACC490G Introduction to Taxation (3 units)
This course covers taxation concepts applied to individual’s income, deductions, credits, property transactions, and tax accounting methods. An understanding of the concepts will enable students to prepare quality individual income tax returns as a professional. The course will also cover taxation rules governing financial planning.
Prerequisite/Corequisite: ACC201 or PBUS06

ACC501 Advanced Accounting (3 units)
This course is designed for accounting track graduate students who want to have a complete understanding of the concept of consolidation requirements,
consolidated financial statements, and accounting techniques relating to particular types of business and non-business entities. The student will also explore various tax aspects of consolidated financial statements and participate in case studies.

Prerequisite/Corequisite: ACC451

ACC512 Federal Taxation of Business Enterprises (3 units)
This course is designed to give students an understanding of the concepts of federal taxation of corporations, partnerships, estates and trusts. An understanding of the concepts will enable students to prepare corporation and partnership tax returns in a professional environment. Also covered are rules governing estates and trusts.
Prerequisite/Corequisite: ACC451

ACC530 Auditing (3 units)
In this course, students learn auditing techniques with an emphasis on the Electronic Data Processing environment, audit procedures, practice and programs; working paper preparation and report writing. The students will experience using electronic auditing software to work on their homework and projects.
Prerequisite/Corequisite: ACC451

ACC540 Accounting Information Systems (3 units)
This course provides a conceptual framework for contemporary accounting information systems and accounting cycles. It covers database concepts, internal controls, transaction cycles and business processes, expenditure cycles, conversion cycles, general ledgers, and enterprise resource-planning systems. The instructor will demonstrate accounting software dashboards in class. Students are expected to generate trial balance, balance sheet and income statement reports, and input sample data. Students may be required to install open source software or trial software or purchase a short term subscription.
Prerequisite/Corequisite: ACC451

BUS589 Special Topics (3 units)
Special topics courses are offered to graduate students in business administration programs by current faculty members or invited guest speakers to expose the students to special topics related to their studies. These courses are conducted the same way as regular courses.
Prerequisite/Corequisite: subject dependent

Curricular Practicum

CPT501 Curricular Practicum (1 unit)
Curricular practicum, or curricular practical training, is a supervised practical experience that is the application of previously studied theory. It is defined as alternative work/study, internship, cooperative education, or any other type of required internship or practicum that is offered by sponsoring employers through cooperative agreements with the school and the course is an integral part of an established curriculum. At least three hours of work in a practical setting has the credit equivalency of one hour of classroom lecture (1 unit). To be eligible to take this course, the student must have obtained a written agreement that outlines the arrangement between the institution and the practicum site (including specific learning objectives, course requirements, and evaluation criteria), and received approval by a designated advisor. International students must follow additional rules required by the U.S. Immigration and Customs Enforcement. Information and instructions concerning this course are provided in the online application form. This is a part-time practicum course taken by the graduate student to work no more than twenty hours each week during the approved practicum period. Failure in this course will prevent the student from taking any curricular practicum course afterwards. 
Prerequisite: Refer to the instructions on the application and agreement documents.

CPT502 Curricular Practicum (2 units)
Curricular practicum, or curricular practical training, is a supervised practical experience that is the application of previously studied theory. It is defined as alternative work/study, internship,
cooperative education, or any other type of required internship or practicum that is offered by sponsoring employers through cooperative agreements with the school and the course is an integral part of an established curriculum. At least three hours of work in a practical setting has the credit equivalency of one hour of classroom lecture (1 unit). To be eligible to take this course, the student must have obtained a written agreement that outlines the arrangement between the institution and the practicum site (including specific learning objectives, course requirements, and evaluation criteria), and received approval by a designated advisor. International students must follow additional rules required by the U.S. Immigration and Customs Enforcement. Information and instructions concerning this course are provided in the online application form. This is a full-time practicum course taken by the graduate student to work more than twenty hours but not to exceed forty hours each week during the approved practicum period. Failure in this course will prevent the student from taking any curricular practicum course afterwards.

Prerequisite: Refer to the instructions on the application and agreement documents.

Finance
FIN501 Financial Management (3 units)
This course is designed to further introduce modern financial theories, tools, and methods used for the analysis of financial problems. The point of view of corporate financial managers will be taken to interact with efficient capital markets. Therefore, while making the best use of constrained resources is necessary, maximizing shareholders’ equity is also vitally important. The primary focus is on analysis and forecast of internal operations and the use of short-term and long-term capital.
Prerequisite/Corequisite: PBUS06

FIN510 Investment Analysis (3 units)
This course covers the foundations of investment management. Topics include theory and empirical evidence related to portfolio theory, market efficiency, asset pricing models, factor models, and option pricing theory. Students are expected to combine market research results and electronic information sources to create optimal investment strategies.
Prerequisite/Corequisite: FIN501

FIN512 Financial Risk Management (3 units)
This course is designed to further introduce modern financial theories, tools, and methods in dealing with financial risks. Financial risk management has become an extremely important discipline for corporations, financial institutions, and many government enterprises, particularly in challenging economical times.
Prerequisite/Corequisite: FIN501

FIN522 International Trade and Investment (3 units)
This course covers the theories of international trade, through comparative advantage and related corporate strategies, the impacts of emerging regional economic blocks, the institutions of the multilateral trading system, and trade barriers. Students will learn the mechanics of international payment, shipping, and distribution.
Prerequisite/Corequisite: FIN501

FIN568 Corporate Finance (3 units)
This course belongs to the accounting/finance area of interest. The first part of the course covers essential corporate finance subjects including executive compensation, corporate governance, and bankruptcy law. Lectures, discussions, and case studies will be the form used for this part of study. The second part of the course consists of discussions of corporate financing such as mergers, acquisitions, valuations; corporate restructuring, LBOs’, MBOs’, and merchant banking.
Prerequisite/Corequisite: FIN501

FIN580 Portfolio Management (3 units)
This course teaches advanced portfolio decision making. Topics include index models, portfolio performance measures, bond portfolio management and interest immunization, stock market anomalies and market efficiency.
Prerequisite/Corequisite: FIN501

FIN585 International Finance (3 units)
This course prepares the students for a career in international finance. The course discusses the financial environment in which the multinational firm and its managers must function. The course focuses on foreign exchange management and financial management in a multinational firm. It points out to the students the basic principles of profit-seeking and risk avoidance practices in the volatile global financial markets.
Prerequisite/Corequisite: FIN501

Green Business Management

GBM500 Green Business Management (3 units)
This course aims to provide the student an understanding of the mounting demand for business management practices to create not just financial value but to effectively respond as well to the environmental sustainability and social responsibility concerns of society. It will provide the student familiarity of the “best practices” of businesses in responding to this demand to create “sustainable value” and an understanding of the basic principles behind these practices. The course will also develop in the student an appreciation and a sense of commitment to practice “greener” business
management practices in their future professional careers.

Prerequisite/Corequisite: PBUS05

GBM505 Green Economics and Policy (3 units)
Green economics represents a transdisciplinary attempt to integrate the social sciences (primarily economics) with the natural sciences (primarily ecology). This course is designed to re-orient the resource allocation decisions of managers in a way that the decision outcome criterion is not simply economic efficiency but sustainability. More specifically, the course seeks to teach the principles of resource allocation that achieve economic, ecological and social sustainability. While economic efficiency is still a paramount decision objective, it should be pursued after measures are taken to guarantee that human activities do not threaten the viability of life on our planet and that all people can secure and produce the means for leading healthy lives (guarantee of basic human rights). The sustainability problems of unregulated markets are also examined.

Prerequisite/Corequisite: GBM500

GBM510 Green Business Marketing (3 units)
In this emerging green era, green business marketing faces unique challenges. On the one hand, it involves dealing with a major trend without formulated requirements; on the other hand, it faces a rapidly growing number of conscious green consumers demanding green business practices. As a result, new marketing strategies, vehicles, and tools are needed by businesses. In this course the students learn to develop marketing plans and business practices that seek a balance among economy and environment, as well as social responsibilities. Case studies and group projects will be conducted as part of the coursework requirements.

Prerequisite/Corequisite: GBM500

Human Resource Management

HRM452LG Human Resource Management Lab (1 unit)
In this course students will learn how to use software tools to support common Human Resource Management functions such as: Performance management, recruitment and selection, leave management, personnel time management, daily reporting, travel management, expenses, training, compensation and benefits management, HR analytics, etc. Students should be comfortable installing software on their machines and/or using cloud-based services.

Prerequisite/Corequisite: PBUS05

HRM531 Human Resource Management (3 units)
This course provides students and practicing managers with a comprehensive overview of essential personnel management concepts and techniques. The focus is on essential topics such as job analysis, candidate screening, interviewing, testing, hiring, evaluating, training, motivating, promoting, compensating and their associated legal constraints. Additional topics covered include global HR, diversity awareness and training, and sexual harassment legal requirements. Practical applications such as how to appraise performance and benefits and handle grievances are explored. Additionally, developing independent work teams that foster creativity and innovation will be discussed.

Prerequisite/Corequisite: PBUS05

HRM532 Strategic Workforce Planning (3 units)
This course begins with the discussion of the need for manpower planning and gives samples of plans developed for various types of organizations such as manufacturing, high-tech, small business, etc. This course would give students an opportunity to learn about and develop a manpower plan which is part of the business plan and also an ongoing dynamic document developed as a part of the strategic planning component of the organization. It also has to do with scheduling, rosters and succession planning which is a process of identifying a long-term plan for the orderly replacement of key employees. The course also explores cases of developing a manpower plan including developing a Gap Analysis to determine manpower needs and budgeting for the manpower needs. Developing new HR manpower configurations such as self-managed teams, telecommuting, outsourcing, temps-to-hire and other methods to make companies more flexible and offer economical solutions to the high cost of knowledge workers. The course includes case studies and actual writing of several manpower plans for various sizes of organizations.

Prerequisite/Corequisite: HRMS31

Information Technology

IT450G Enterprise Information System Fundamentals (3 units)
This course provides a general introduction to multiple information systems for business infrastructure with emphasis on system functions, project deployment planning, integration technologies, and life cycle administration. Also, students will receive an overview of enterprise IS applications such as CMS, KM, ERP, CRM, SCM, and related technologies. After completing this course, students will be able to creatively apply the principles and strategies of enterprise information systems to streamline business operations and improve efficiency. Case studies and hands-on practice are required.

Prerequisite/Corequisite: IT310 or PBUS05
IT453G Web Site Design and Programming with JavaScript (3 units)  
This course teaches the fundamentals of client-side programming for Web pages requiring data Collection or other user interaction. Students will create Web pages that execute on the client machine using JavaScript. Students will also learn more details of UNIX Operating System  
Prerequisite/Corequisite: IT310 or PBUS05

IT501 Business Analytics and Applications (3 units)  
This course is designed to teach business analytics as applied by enterprises to utilize tools to make business data analysis in order to make business strategies and decisions for improving business performance. The students will learn the foundations of business analytics, tools and methods of data analysis, major models and application techniques used to achieve the purpose of making business decisions. The course will also introduce analytics trend by discussing the emerging role of big data and big analytics. Hands-on exercises are required.  
Prerequisite/Corequisite: BUS460

IT510 Advanced e-Business Programming and Design (3 units)  
This course is designed for the students to learn details of Perl and CGI programming and applications. Topics include client/server concept, Perl programming, mechanism of CGI, Apache web server, and creating CGI applications with Perl, HTML, JavaScript, and database. Hands-on exercises throughout the course are required.  
Prerequisite/Corequisite: IT453

IT553 Business Intelligence and CRM (3 units)  
After completing this course, students will be able to recommend various types of business intelligence and customer relationship management architectures, build analytical models, determine various behavior patterns, make predictions, and contrast the economics of competing alternatives. Topics include generating management reports, performing Business Intelligence / Customer Relationship Management (BI/CRM) analytics, and applying data management techniques. The instructor will present various software tools in class. Students are expected to independently build their own computer models and handle data sets.  
Prerequisite/Corequisite: IT450

IT560 Enterprise Resource Planning (ERP) (3 units)  
ERP systems enable accurate and swift business information flow from early stage sales quotations through booking of orders, production, inventory management, shipping, returns, billing, and finally collections. In this course students will learn the business and technical difficulties of integrating multiple business systems. Students will also learn how to analyze and apply optimized processes and unified ERP systems to solve the problems encountered with historic stand-alone software applications. Case studies and hands-on practice are required. Students may need to use trial software or a short term cloud-based subscription.  
Prerequisite/Corequisite: IT450

IT589 Special Topics on Information Technology (3 units)  
Special topics courses are offered to graduate students in the MBA program by current faculty members or invited guest speakers to expose the students to emerging information technologies. These courses are conducted the same way as regular courses.  
Prerequisite/Corequisite: IT450

MBA

MBA595 Business Administration Capstone Course (3 units)  
The capstone course is intended to integrate the knowledge and hands-on experience that the student has acquired from the foundation, core, and elective coursework required for the program in the course under the guidance of the course instructor. The instructor determines the course objectives and scope based on the business curriculum and trends. The instructor guides the students to develop their integration ability. The student shall take the capstone course near the end of his/her program of study.  
Prerequisite/Corequisite: MGT530

Management

MGT450G Organizational Behavior and Management (3 units)  
This course explores the complex dimension of organizational behavior including examination of experiential and conceptual approaches to communication, self-awareness, perception, motivation, problem solving and culture. Students apply interpersonal and intrapersonal exploration to the management of change, leadership theories and organizational issues. Real case projects are required.  
Prerequisite/Corequisite: MGT310 or PBUS05

MGT453LG Project Management Lab (1 unit)  
By the end of this course students will learn how to use software tools in the context of project management to find and optimize a complex project's. Earliest completion date, latest start date, critical path analysis, amount of slack/float time in a project, resource planning, Gantt chart visualization, milestone planning and monitoring and cost estimation. Students should be comfortable installing project management software
on their machines and/or using cloud-based Project Management services.

Prerequisite/Corequisite: MGT310 or PBUS05

MGT460G Production and Operations Management (3 units)
This course balances theory and practice of Production and Operations Management, covering quantitative, qualitative, and behavioral aspects. Students will learn how to identify and apply strategies, business process design principles, and quantitative techniques. This knowledge will then be applied to optimize business operations, enhance efficiency, and improve competitiveness. Students will develop quantitative models and use software tools such as Microsoft Excel Analysis Toolpak and Solver to create solutions for multivariate operational constraints. Typical control cases include service and product design choices, sales forecasting, scheduling, metrics for production/inventory control, statistical quality control, and logistical constraints.

Prerequisite/Corequisite: MGT310 or PBUS05

MGT460LG Production and Operations Management Lab (1 unit)
During this hands-on lab course students will learn software-based techniques to solve various time, labor, material, forecasting, capacity, take control of the conversion process from inputs to outputs, and costs optimizations in classic production planning and operations scenarios. Students will be expected to develop their own mathematical models, transform their models into software-based implementations and then determine the optimized best fit business solution. Students should be comfortable with or refresh themselves on solving multivariate simultaneous equations before the first class meeting. Students should be comfortable installing software on their machines and/or using cloud-based services.

Prerequisite/Corequisite: MGT310 or PBUS05

MGT480G Entrepreneurship (3 units)
This course explores the full range of the entrepreneurial process including the evaluation, development, and creation of a successful business. It will help the potential entrepreneurs and professionals visualize and experience entrepreneurial development. The course explores the entrepreneurial approach to resources such as the development of an organizational structure, market analysis, financing entrepreneurial ventures, and screening venture opportunities. Individuals will experiment and evaluate what it takes to be an entrepreneur including developing the plan for a new business.

Prerequisite/Corequisite: MGT310 or PBUS05

MGT500 Risk Management (3 units)
This course is designed to teach the students risk management concepts, process, strategy making and implementation in a corporate environment. Topics covered include the nature and concept of risks, risk management structure and process flow, information and gathering techniques, data analysis methodology and tools, and risk management techniques. Case studies and a project are required.

Prerequisite/Corequisite: BUS460

MGT501 Project Management (3 units)
This course introduces the principles of project and program management, the roles of project management, matrix organization in both private and public segments, and project management techniques leading to the efficient execution and completion of projects. Proposal development, case studies, and independent projects are required.

Prerequisite/Corequisite: BUS460

MGT530 Logistics and Operations Management (3 units)
The field of Logistics and Operations Management optimizes the management of continuous activities of the processes of production, warehousing, transportation of goods, and the delivery of services. The combination of E-commerce and Globalization has created many challenges with new behaviors, increased product variety, advancement in technology, and deep integration with other functional areas of the business (sales, marketing, finance, etc.). In this course, students will learn how to use quantitative based analytical techniques to make Logistics and Operations decisions.

Prerequisite/Corequisite: BUS460

MGT538 International Business Management (3 units)
This class reviews the classic five functions of management: planning, organizing, staffing, leading, and controlling. Students will compare managerial practices of Europe, Asia, and Latin America. The class also covers the importance of quality and continuous improvement for gaining a competitive edge. Students will learn practical aspects of management from actual case studies, the strategic considerations for management in the international environment, and the roles of the latest information technologies.

Prerequisite/Corequisite: MGT450 or PBUS05

MGT540 Management of Innovation (3 units)
This course is designed to equip the students with the knowledge and management skills to address the needs of new and innovative enterprises in a changing and uncertain environment. Topics include technology forecasting and assessment, program or product selection and control, market development, financial management, and regulations and ethics.

Prerequisite/Corequisite: BUS460

MGT542 Technology and Product Management (3 units)
This course is designed to give students a practical experience in product development, and focuses on...
the management of engineering and technology activities. Topics include technology product design, planning, production, marketing, sales, and maintenance; technological product life cycle from research and development through new product introduction, marketing requirement documentation (MRD), product positioning, channel inventory management, outbound communications, and the organizational role of the product marketing manager. Case studies and project presentations are required.

Prerequisite/Corequisite: BUS460

MGT550 Global Outsourcing Project Management (3 units)
Global outsourcing management is becoming one of the most important new management fields in this highly competitive 21st century global economy. In this course the students will learn the important issues related to global outsourcing management as well as the actual implementation mechanism for a successful global outsourcing management business. Throughout the course, cross-cultural and cross-border considerations and diversity management skills will be heavily emphasized. Case studies will be made on successful and failed global outsourcing projects or businesses. It will be easy for the students to connect to this subject due to Silicon Valley’s business climate.

Prerequisite/Corequisite: BUS460

Marketing

MKT450G Marketing Management (3 units)
This course studies marketing management by analyzing real-world cases. Students will learn to implement and execute the marketing process through situation assessment, strategy formulation, marketing planning, marketing implementation and evaluation.

Prerequisite/Corequisite: MKT310 or PUBS05

MKT450LG Marketing Management Lab (1 unit)
At the completion of this hands-on course students will use Customer Relationship Management (CRM) software tools to learn how to support various customer interactions, sales quality assurance, increase relationship transparency, improve customer retention rates, and reduce costs by streamlining the operations of Sales and Marketing departments. Students should be comfortable installing CRM software on their machines and/or using cloud-based CRM services.

Prerequisite/Corequisite: MKT310 or PUBS05

MKT541 Strategic Marketing (3 units)
This course will teach the students fundamental concepts and practices in marketing research and marketing data analysis, and use of the data and financial analysis to set strategic positioning strategies. Emphasis will be on practical marketing research skills development and basic analysis mechanisms leading to strategic marketing. Students will learn both the primary source (such as surveys) as well as secondary sources (internet, publications, etc.) in research techniques. Students will also engage in their own marketing research projects. Although statistical analysis will be covered in the course, quantitative analysis skills will be the main focus. The course also covers an overview of quantitative and qualitative tools for strategic marketing, market segmentation process, strategic positioning, and channel marketing issues. Case studies and marketing requirements reports are required.

Prerequisite/Corequisite: MKT450

MKT542 Global Marketing (3 units)
This course considers how the culture and environment of different countries affect marketing strategy, how to perform a comprehensive analysis of a country to support marketing plan formulation, the strategic implications of different market groups around the world, and special insights on international marketing from a study of special cases.

Prerequisite/Corequisite: MKT450

MKT545 Global Trade and Operations (3 units)
The course is designed to develop the knowledge and understanding of the global marketing environment and of the concepts, tools, and theory that will prepare the students to take the responsibility for successful global market penetration for his/her business organization. The perspective of the course is managerial, i.e., the ability to identify opportunity, resolve problems, and implement solutions and programs.

Professional Development

P450G Career Development (1 unit)
This course is designed for the graduate students to take in preparation for becoming working professionals. Topics include effective communication strategies, emotional intelligence, diversity and cultural awareness, professional behavior, and interview skills.

Preparatory Module Courses for Business Graduate Students (Non-credit)

PBUS05 Essentials of Corporate Business Management (3 hr/wk)
This course is an overview of current business management theories and techniques, the organizational environment and related issues, economics factors affecting business decision making, marketing’s role in the company as well as in global economy. Students are required to explore,
discuss, and debate the current business practices and ethics.

**PBUS06 Essentials of Corporate Accounting and Finance** (3 hr/wk)
This is an introductory level course in corporate finance and basic accounting principles. Various topics will be covered such as the basic elements of financial accounting, accounting system and laws regulating the corporate accounting practices, recording and analysis of financial transactions, internal control and cash, accounting principles, the efforts of the corporation's managers to raise and allocate capital in a manner that will maximize and stabilize the firm's future cash flows. The student will also examine the concepts and techniques available to financial managers.

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- Financial Risk Specialist
- Financial Risk Analyst
- Bank Compliance Officer
- Bank Examiner
- Financial Compliance Examiner
- Home Mortgage Disclosure Act Specialist
- Payroll Examiner
- Pension Examiner
- Credit Counselor
- Debt Management Counselor
- Student Financial Aid Counselor
- Student Financial Aid Examiner
- Student Loan Counselor
- Branch Lending Officer
- Commercial Lender
- Loan Analyst
- Loan Officer
- Loan Reviewer
- Payday Loan Officer
- Real Estate Loan Officer
- City Collector
- Customs Appraiser
- Income Tax Adjuster
- Internal Revenue Agent
- Internal Revenue Service Agent
- Revenue Collector
- Revenue Enforcement Agent
- Tax Compliance Officer
- Tax Compliance Representative
- Tax Examiner
- Tax Investigator
- Tax Revenue Officer
- Corporate Tax Preparer
- Income Tax Advisor
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### Livestock Buyer

- Oyster Buyer
- Purchasing Agent Cotton Grain Livestock Other Firemen Products
- Tobacco Buyer

### Wholesale and Retail Buyers, Except Farm Products

- Gold Buyer
- Merchandise Buyer
- Retail Buyer
- Tie Buyer
- Wholesale Buyer

### Purchasing Agents, Except Wholesale, Retail, and Farm Products

- Equipment Supplies and Tools Purchasing Agent
- Radio Time Buyer

### Claims Adjusters, Examiners, and Investigators

- Health Claims Examiner
- Health Insurance Adjuster
- Independent Insurance Adjuster
- Medical Claims Analyst
- Medical Claims Examiner
- Property and Casualty Insurance Claims Examiner
- Property Damage Claims Adjuster
- Reinsurance Claims Analyst
- Workers Compensation Claims Adjuster
- Workers Compensation Claims Examiner

### Cost Estimators

- Construction Estimator
- Construction Job Cost Estimator
- Crating and Moving Estimator
- Electrical Estimator
- Job Estimator
- Production Cost Estimator

### Human Resources Specialists

- Corporate Recruiter
- Credentialing Coordinator
- Employee Placement Specialist
- Human Resources Generalist
- Job Placement Officer
- Job Placement Specialist
- Job Recruiter
- Personnel Coordinator
- Personnel Officer
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*2010 SOC codes are used for ACICS' employment reports.
INTENSIVE ENGLISH PROGRAM

The Intensive English Program (IEP) supports NPU’s mission to equip non-native English speakers with language skills required to successfully advance towards their academic and professional goals. By fostering a diverse international community and providing orientation to the American culture, the program helps students to overcome the linguistic difficulties involved in studying a subject in English in a university setting.

>*</p>

### Purpose

The IEP at NPU is open to non-native speakers of English who have a desire to improve their language skills. This program is designed for working professionals as well as for students preparing for university study or professional programs. Classes meet on the NPU campus. The course of study is based on a communicative, student-centered approach with listening, speaking, reading, writing, and grammar components. Fluency and accuracy in both spoken and written English are emphasized. Classes are small, and they will never exceed 15 students. The small class size allows each participant a maximum amount of individual attention and an opportunity to develop conversational skills in an intimate setting.

### Faculty

All IEP faculty members possess the following qualities: Master’s degree in TESOL, Applied Linguistics, English, or closely related field; at least three years of experience teaching in a higher education/postsecondary environment, preferably in an intensive program; knowledge of modern pedagogy and learner-centered approaches, particularly Communicative Language Teaching (CLT) and Task-based Learning (TBL); knowledge of English for Academic Purposes (EAP); excellent proficiency in English, and willingness to work with the IEP team on student success strategies.

### Application Requirements

To apply for the IEP program, applicants must complete and submit the IEP application form online. Please visit our website at www.npu.edu/iep. There is an application fee of $80, which is non-refundable. Upon receiving your application form and the application fee, a student adviser will contact you to advise you on the status of your application and the next steps to take.

### Placement Test

New IEP students must attend a new student orientation before their first class meeting. During the orientation, students will take a placement test to identify the student’s level of English proficiency. Students will be placed in a level based on their results. The placement test might be waived if the original copy of a TOEFL/IELTS test report form, obtained within two years prior to applying, is provided by the student.

### Minimum Entry Requirements

Students must have a proficiency level higher than a true beginner in the English language to be accepted into the IEP. Level 1 is the high elementary, or CEFR A2, level, within IELTS band 4, and it equates approximately to a TOEFL score of 31.

IEP classes are not offered to F-1 non-immigrant students.

### Tuition, Costs, and Refund

IEP is delivered in levels. Students enroll in one level at a time, with no obligation to continue. The estimated total cost to complete a level is $2,405.00. This estimation includes tuition, registration fee, application fee, and books. The IEP offers both full-time and part-time options to meet the needs of students. The breakdown of program costs is as follows:

- **Tuition for full-time students (four courses, 20 hours/week)**
  - $2000 per session.

- **Tuition for part-time students (one course, 5 hours/week)**
  - $500 per session.

- **Tuition for part-time students (two courses, 10 hours/week)**
- $1000 per session.

- **Tuition for part-time students (three courses, 15 hours/week)**
  - $1500 per session.

- **Books**
  
  Registered IEP students have the option of purchasing the books for each level from the IEP office at NPU. The cost of books for each course is estimated at $50 - $110.

- **Student’s Right to Cancel**
  
  Students have the right to cancel the enrollment agreement and obtain a refund of charges paid if notice of cancellation is received by NPU through attendance at the first class meeting, or the 7th day after enrollment, whichever is later. Students shall provide notice of cancellation in writing through the MyNPU Student Portal using the following navigation links: My Requests > Non-Academic > Transfer Out/Withdrawal. Cancellation shall be effective when successfully submitted.

- **Refund Policy**

  Students who withdraw by the end of the first class meeting in a period of attendance, or 7 days after enrollment, whichever is later, will receive a full refund. Following the first class meeting and up through completion of 75 percent of the period of attendance, students may withdraw from NPU and obtain a pro rata refund of unearned institutional charges. The application fee is non-refundable.

  NPU shall refund any credit balance on the student’s account within 45 days after the date of the student’s completion of, or withdrawal from, the student’s educational program.

  A withdrawal may be effectuated preferably by the student’s written notice, as described above under cancellation, or by the student’s conduct, including, but not necessarily limited to, a student’s lack of attendance, as further detailed below.

  A student is deemed to have been withdrawn when any of the following occurs: (1) the student drops all enrolled courses in a period of attendance, (2) the student submits a written notice to withdraw through the portal, as described in the cancellation section, (3) NPU suspends or expels the student due to misconduct, unsatisfactory academic performance, or overdue fees, (4) the student fails to return from a leave of absence, or (5) the student misses a total of five hours or more of any course, based on the decision of the Attendance Committee.

  A student that drops one or more courses, but not all courses, will receive a pro rata refund of tuition for the dropped courses.

- **Calculation of Refund**

  Refund amount = total paid by student minus the amount owed.

  Amount Owed = (total institutional charge/ hours in program) multiplied by the hours attended or scheduled to attend prior to withdrawal.

- **Structure of the Intensive English Program**

  IEP students build practical English skills for general, academic or professional purposes. Following the learning objectives outlined by the Common European Framework of Reference (CEFR), the IEP offers English courses at seven levels, ranging from elementary to advanced – that is, from basic to proficient user. While Levels 1-4 concentrate on General English, there is a deep focus on English for Academic Purposes (EAP) at Levels 5-7.

  - **Levels 1-4**

    In Levels 1-4, students concentrate on developing fundamental English skills in an interactive classroom setting. Course work emphasizes those skills necessary for effective oral and written communication. Instruction covers all areas of language development: practical vocabulary, basic language structures, and the essentials of reading, writing, listening and speaking, and grammar.

  - **Levels 5-7**

    In Levels 5-7, students continue to develop fluency and accuracy. Course work focuses on both comprehensive skills and learning English.
for Academic Purposes (EAP). This includes the fundamentals of essay writing and the development of critical reading, listening and note-taking skills. IEP students are considered to have met the English proficiency requirement for entry into NPU’s bachelor’s degree programs upon successful completion of level 5, or upon completion of all level 4 courses with a minimum grade of A. IEP students are considered to have met the English proficiency requirement for entry into NPU’s master’s degree programs upon successful completion of level 6, or upon completion of all level 5 courses with a minimum grade of A.

Each level is comprised of 4 courses (Listening & Speaking, Reading, Writing and Grammar), and each course consists of 5 hours of classroom instruction per week, making a total of 20 hours.

<table>
<thead>
<tr>
<th>Level</th>
<th>Course</th>
<th>CEFR Level</th>
<th>IELTS</th>
<th>TOEFL</th>
</tr>
</thead>
<tbody>
<tr>
<td>7***</td>
<td>Advanced, CEFR C1</td>
<td></td>
<td>7.0/46</td>
<td>94-101</td>
</tr>
<tr>
<td>6</td>
<td>High upper intermediate, CEFR B2</td>
<td></td>
<td>6.5/46</td>
<td>79-93</td>
</tr>
<tr>
<td>5**</td>
<td>Low upper intermediate, CEFR B2</td>
<td></td>
<td>6.0/46</td>
<td>60-78</td>
</tr>
<tr>
<td>4</td>
<td>High mid-intermediate, CEFR B2</td>
<td></td>
<td>5.5/46</td>
<td>46-59</td>
</tr>
<tr>
<td>3*</td>
<td>Low mid-intermediate, CEFR B1</td>
<td></td>
<td>5.0/46</td>
<td>35-45</td>
</tr>
<tr>
<td>2</td>
<td>Lower intermediate, CEFR B1</td>
<td></td>
<td>4.5/46</td>
<td>32-34</td>
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<tr>
<td>1</td>
<td>High elementary, CEFR A2</td>
<td></td>
<td>4.0/40</td>
<td>31</td>
</tr>
</tbody>
</table>

* Upon completion of level 3, students take the Cambridge PET (B1) exam.
** Upon completion of level 5, students take the Cambridge FCE (B2) exam.
*** Upon completion of level 7, students take the Cambridge CAE (C1) exam.

Each IEP course can be repeated only once, and the total number of repeated courses for the entire program cannot be more than three.

- **Attendance Policy**

Students who miss one class meeting are required to meet with a counselor.

Students who miss a total of five hours or more of any course may be withdrawn from the course, based on the decision of the Attendance Committee.
• Course Descriptions

The courses are listed by levels.

<table>
<thead>
<tr>
<th>Level</th>
<th>Listening &amp; Speaking</th>
<th>Reading</th>
<th>Writing</th>
<th>Grammar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>IEP110</td>
<td>IEP120</td>
<td>IEP130</td>
<td>IEP140</td>
</tr>
<tr>
<td>Level 2</td>
<td>IEP210</td>
<td>IEP220</td>
<td>IEP230</td>
<td>IEP240</td>
</tr>
<tr>
<td>Level 3</td>
<td>IEP310</td>
<td>IEP320</td>
<td>IEP330</td>
<td>IEP340</td>
</tr>
<tr>
<td>Level 4</td>
<td>IEP410</td>
<td>IEP420</td>
<td>IEP430</td>
<td>IEP440</td>
</tr>
<tr>
<td>Level 5</td>
<td>IEP510</td>
<td>IEP520</td>
<td>IEP530</td>
<td>IEP540</td>
</tr>
<tr>
<td>Level 6</td>
<td>IEP610</td>
<td>IEP620</td>
<td>IEP630</td>
<td>IEP640</td>
</tr>
<tr>
<td>Level 7</td>
<td>IEP710</td>
<td>IEP720</td>
<td>IEP730</td>
<td>IEP740</td>
</tr>
</tbody>
</table>

**Elementary (Level 1):**
Students will be able to understand sentences and frequently used expressions related to areas of most immediate relevance. They will be able to communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters. They will also be able to describe in simple terms aspects of his/her background, immediate environment and matters in areas of immediate need.

**IEP110 – Listening & Speaking**
Can understand enough to meet needs of a concrete type if speech is clearly and slowly articulated.

Can understand phrases and expressions related to areas of most immediate priority provided speech is clearly and slowly articulated.

Can interact with reasonable ease in structured situations and short conversations, provided the other person helps if necessary.

Can manage simple, routine exchanges without undue effort.

Can ask and answer questions and exchange ideas and information on familiar topics in predictable everyday situations.

Can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters to do with work and free time.

Can handle very short social exchanges but is rarely able to understand enough to keep conversation going of his/her own accord.

**IEP120 – Reading**
Can understand short, simple texts on familiar matters of a concrete type which consist of high frequency daily or job-related language.

Can understand short, simple texts containing the highest frequency vocabulary, including a proportion of shared international vocabulary items.

**IEP130 – Writing**
Can write a series of simple phrases and sentences linked with simple connectors like ‘and’, ‘but’ and ‘because’.

Can write short, simple formulaic notes relating to matters in areas of immediate need.

**IEP140 - Grammar**
Uses some simple structures correctly, but still systematically makes basic mistakes – for example tends to mix up tenses and forget to mark agreement; nevertheless, it is usually clear what he/she is trying to say.

Can link groups of words with simple connectors like ‘and’, ‘but’ and ‘because’.
Low Intermediate (Levels 2 & 3):
Students will be able to understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc. They will be able to deal with most situations likely to arise whilst travelling in an area where the language is spoken. Can produce simple connected text on topics which are familiar or of personal interest. They will also be able to describe experiences and events, dreams, hopes and ambitions and briefly give reasons and explanations for opinions and plans.

IEP210 and IEP310 – Listening and Speaking
Can understand straightforward factual information about common daily or job related topics, identifying both general messages and specific details, provided speech is clearly articulated in a generally familiar accent.

Can understand the main points of clear standard speech on familiar matters regularly encountered in work, school, leisure etc., including short narratives.

Can communicate with some confidence on familiar routine and non-routine matters related to his/her interests and professional field.

Can exchange, check and confirm information, deal with less routine situations and explain why something is a problem.

Can express thoughts on more abstract, cultural topics such as films, books, music etc.

Can exploit a range of simple language to deal with most situations likely to arise whilst travelling.

Can enter unprepared into conversation on familiar topics, express personal opinions and exchange information on topics that are familiar, of personal interest or pertinent to everyday life (e.g. family, hobbies, work, travel and current events).

IEP220 and IEP320 – Reading
Can read straightforward factual texts on subjects related to his/her field and interest with a satisfactory level of comprehension.

IEP230 and IEP330 – Writing
Can write straightforward connected texts on a range of familiar subjects within his/her field of interest, by linking a series of shorter discrete elements into a linear sequence.

Can convey information and ideas on abstract as well as concrete topics, check information and ask about or explain problems with reasonable precision.

Can write personal letters and notes asking for or conveying simple information of immediate relevance, getting across the point he/she feels to be important.

Can paraphrase short written passages in a simple fashion, using the original text wording and ordering.

IEP240 and IEP340 – Grammar
Communicates with reasonable accuracy in familiar contexts; generally good control though with noticeable mother tongue influence. Errors occur, but it is clear what he/she is trying to express.

Uses reasonably accurately a repertoire of frequently used ‘routines’ and patterns associated with more predictable situations.

Can link a series of shorter, discrete simple elements into a connected, linear sequence of points.
High Intermediate (Levels 4, 5, & 6):
Students will be able to understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialization. They will be able to interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party. They will also be able to produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options. On successful completion of level 5, IEP students are considered meeting the English proficiency requirement for NPU’s bachelor’s degree programs. On successful completion of level 6, IEP students are considered meeting the English proficiency requirement for NPU’s master’s degree programs.

IEP410, IEP510, and IEP610 – Listening & Speaking
Can understand standard spoken language, live or broadcast, on both familiar and unfamiliar topics normally encountered in personal, social, academic or vocational life. Only extreme background noise, inadequate discourse structure and/or idiomatic usage influences the ability to understand.

Can understand the main ideas of propositionally and linguistically complex speech on both concrete and abstract topics delivered in a standard dialect, including technical discussions in his/her field of specialization.

Can follow extended speech and complex lines of argument provided the topic is reasonably familiar, and the direction of the talk is sign-posted by explicit markers.

Can use the language fluently, accurately and effectively on a wide range of general, academic, vocational or leisure topics, marking clearly the relationships between ideas.

Can communicate spontaneously with good grammatical control without much sign of having to restrict what he/she wants to say, adopting a level of formality appropriate to the circumstances.

Can interact with a degree of fluency and spontaneity that makes regular interaction, and sustained relationships with native speakers quite possible without imposing strain on either party.

Can highlight the personal significance of events and experiences, account for and sustain views clearly by providing relevant explanations and arguments.

IEP420, IEP520, and IEP620 – Reading
Can read with a large degree of independence, adapting style and speed of reading to different texts and purposes, and using appropriate reference sources selectively.
Has a broad active reading vocabulary, but may experience some difficulty with low frequency idioms.

IEP430, IEP530, and IEP630 – Writing
Can write clear, detailed texts on a variety of subjects related to his/her field of interest, synthesizing and evaluating information and arguments from a number of sources.
Can express news and views effectively in writing, and relate to those of others.

IEP440, IEP540, and IEP640 – Grammar
Good grammatical control; occasional ‘slips’ or non-systematic errors and minor flaws in sentence structure may still occur, but they are rare and can often be corrected in retrospect.
Shows a relatively high degree of grammatical control. Does not make mistakes which lead to misunderstanding.
Can use a variety of linking words efficiently to mark clearly the relationships between ideas.
Can use a limited number of cohesive devices to link his/her utterances into clear, coherent discourse, though there may be some ‘jumpiness’ in a long contribution.
Advanced (Level 7):
Students will be able to understand a wide range of demanding, longer texts, and recognize implicit meaning. They will be able to express him/herself fluently and spontaneously without much obvious searching for expressions. They will also be able to use language flexibly and effectively for social, academic and professional purposes. In addition, they will be able to produce clear, well-structured, detailed text on complex subjects, showing controlled use of organizational patterns, connectors and cohesive devices.

IEP 710 Listening & Speaking
Can understand enough to follow extended speech on abstract and complex topics beyond his/her own field, though he/she may need to confirm occasional details, especially if the accent is unfamiliar.

Can recognize a wide range of idiomatic expressions and colloquialisms, appreciating register shifts.

Can follow extended speech even when it is not clearly structured and when relationships are only implied and not signaled explicitly.

Can express him/herself fluently and spontaneously, almost effortlessly.

Has a good command of a broad lexical repertoire allowing gaps to be readily overcome with circumlocutions.

There is little obvious searching for expressions or avoidance strategies; only a conceptually difficult subject can hinder a natural, smooth flow of language.

IEP720 Reading
Can understand in detail lengthy, complex texts, whether or not they relate to his/her own area of specialty, provided he/she can reread difficult sections.

IEP730 Writing
Can write clear, well-structured texts of complex subjects, underlining the relevant salient issues, expanding and supporting points of view at some length with subsidiary points, reasons and relevant examples, and rounding off with an appropriate conclusion.

Can express him/herself with clarity and precision, relating to the addressee effectively.

IEP740 Grammar
Consistently maintains a high degree of grammatical accuracy; errors are rare and difficult to spot.

Can show controlled use of organizational patterns, connectors and cohesive devices.

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UNIVERSITY MILESTONES

Northwestern Polytechnic University (NPU) was founded on January 2, 1984 and incorporated as a California nonprofit, public-benefit institution on March 27, 1984. Because of the strong demand in Silicon Valley for qualified engineers, the School of Engineering began to offer the Bachelor of Science in Electrical Engineering degree in November 1984, followed by the Master of Science in Electrical Engineering in 1985. NPU opened the Computer Systems Engineering programs at both the bachelor’s and master’s degree levels in 1987. Under high-spirited teamwork, NPU grew quickly from a budding school of a few students and faculty in 1984 to a well-established school by 1989. February 23, 1989 marked a milestone for the University as NPU attained full institutional approval from the California Department of Education. When the entrepreneurial spirit in Silicon Valley demanded students with business training, NPU established the School of Business and began to offer the Master of Business Administration and Bachelor of Business Administration and Information Sciences degrees in 1995. At the same time, the School of Engineering continued to expand its programs by offering bachelor's and master's degrees in computer science with curricula emphasizing computer software applications in various fields based on the industry trends. In January 1998, the Accrediting Council for Independent Colleges and Schools (ACICS) recognized NPU to award bachelor’s and master’s degrees. In April 2005, ACICS recognized NPU to award two doctorate degree programs: Doctor of Business Administration and Doctor of Computer Engineering. In 2016, new California regulations and ACICS’ loss of recognition from the U.S. Department of Education required NPU to file for a license to operate through the California Bureau of Private Post-Secondary Education (BPPE). On October 16, 2017, BPPE granted NPU its Approval to Operate for an Institution Non-Accredited.

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Semiconductor physics, RF/microwave design, product management, finance

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Internet of Things, cloud computing, big data, robotics.

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Optimization and performance analysis, matlab, VHDL, analog devices, visual DSP++.

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Network management, computer system architecture, firmware, software testing.

Charles Mori
M.S.: Master of Science, Computer Science, Northwestern Polytechnic University, CA, 2001
Software design and development, software quality assurance.

Kevin Nguyen
M.S.: Master of Science, Computer Engineering, San Jose State University, CA, 1993
B.S.: Bachelor of Science, Computer Science, San Jose State University, CA, 1988
Wireless communication, systems integration, and product design.
Design techniques, and software design tools development.

Logic design and synthesis, CAD tools, Verilog and HDL, ASIC and PLD.

**Nels Vander-Zanden**

Ph.D.: Doctor of Philosophy, Electrical Engineering, University of Southern California, CA, 1998

M.S.: Master of Science, Electrical Engineering, University of Southern California, CA, 1994

Wireless communication, semiconductors, embedded systems, digital signal processors.

**Yingli Ren**

D.C.E.: Doctor of Computer Engineering, Northwestern Polytechnic University, CA, 2015

M.S.: Master of Science, Electrical Engineering, Santa Clara University, CA, 1995

B.S.: Bachelor of Science, Electrical Engineering, Stanford University, CA, 1987

Logic design and synthesis, CAD tools, Verilog and HDL, ASIC and PLD design techniques, and software design tools development.

**Hua-Yu Su**

M.S.E.E.: Master of Science in Electrical Engineering, University of Maryland, MD, 1982

B.S.: Bachelor of Science, Electrical Engineering, National Cheng-Kung University, Taiwan, 1975

Integrated circuit design, analog circuits, digital circuits, mobile systems.

**Kenny Teng**

D.C.E.: Doctor of Computer Engineering, Northwestern Polytechnic University, CA, 2014

M.S.: Master of Science, Software Engineering, International Technological University, CA, 2002

B.S: Bachelor of Science, Computer Science, International Technological University, CA, 2001

Database system administration, SAP security administration, SOX ITGC and PCI control.

**Siu Ming Tong**

D.C.E.: Doctor of Computer Engineering, Northwestern Polytechnic University, CA, 2015

M.S.: Master of Science, Computer Science, San Jose State University, CA, 1998

B.E: Bachelor of Engineering, Computer Engineering, Hefei University of Technology, China, 1982

DSP firmware for real-time video conferencing in Windows NT environment, designing Windows NT audio device drivers, designing SCSI and IDE drivers, designing BIOS, VGA driver, algorithm design.

**Nels Vander-Zanden**

Ph.D.: Doctor of Philosophy, Computer Science, University of Illinois - Urbana-Champaign, IL, 1991

M.S.: Master of Science, Computer Science, University of Illinois- Urbana-Champaign, IL, 1986

B.S.: Bachelor of Science, Computer and Information Science, Ohio State University, OH, 1984

Software design and development, hardware/software co-design automation, microarchitecture optimization, and VHDL synthesis.

**Jagadeesh Vasudevamurthy**

Ph.D.: Doctor of Philosophy, Electrical Engineering, McGill University, Canada, 1991

Logic design, logic synthesis, and technology mapping tools for both FPGA and ASIC architecture.

**Chris White**

D.C.E.: Doctor of Computer Engineering, Northwestern Polytechnic University, CA, 2015

M.S.: Master of Science, Electrical Engineering, Northwestern Polytechnic University, CA, 1999

B.S.: Bachelor of Science in Electrical Engineering, Northwestern Polytechnic University, CA, 1997

Logic design, microprocessor and digital systems, EDA tools, logic synthesis, computer architecture.

**Alex Yang**

M.B.A.: Master of Business Administration, Northwestern Polytechnic University, CA, 2014

M.S.: Master of Science, Electrical Engineering, Northwestern Polytechnic University, CA, 2004

B.S.: Bachelor of Science, Mechatronics, Northeastern University, China, 1993

Digital/Analog IC design, logic design & functional verification in verilog/system verilog, embedded system design, board level design (PCB Design).

**Bin Zhang**

D.C.E.: Doctor of Computer Engineering, Northwestern Polytechnic University, CA, 2015

M.S.: Master of Science, Computer Science, Fudan University, China, 1988

B.S.: Bachelor of Science, Computer Science, Fudan University, China, 1985

Networking and real-time embedded systems network protocol, inter-process communication and distributed database in cross platform environments.

**School of Business and Information Technology**

**Michael Aquilina**

M.B.A.: Master of Business Administration, San Jose State University, CA, 1998

B.S.: Bachelor of Science, Computer Science, San Francisco State University, CA, 1989

Product marketing and positioning, e-commerce, strategic marketing.

**Michael Bailey**

Degree of Engineer: Electrical Engineering, Stanford University, Stanford, CA, 1992

M.B.A.: Master of Business Administration, Finance, Santa Clara University, CA, 2001

M.A.: Master of Arts, Physics, University of California, Santa Barbara, CA, 1981

B.A.: Bachelor of Arts, Physics, University of California, San Diego, CA, 1979

Semiconductor physics, RF/microwave design, product management, finance.

**Flora Chu**

D.B.E.: Doctor of Business Administration, Northwestern Polytechnic University, CA, 2015

M.B.A.: Master of Business Administration, Chadwick University, AL, 1996

B.S.: Bachelor of Science, Accounting, Biola University, CA, 1990

Accounting, payroll services, human resources management.

**James Connor**

M.B.A.: Master of Business Administration, California State University - East Bay, CA, 1983

B.S.: Bachelor of Science, Electrical Engineering, Worcester Polytechnic University, MA, 1981

Marketing management, product and project management, new business development, computer networks, communication engineering, Unix/Linux systems, cloud computing.

**Steven Fichera**

J.D.: Juris Doctor, Law, Rutgers School of Law, NJ, 1998

M.S.: Master of Science, Business Administration, Rutgers School of Business, NJ, 1998
B.A.: Bachelor of Arts, History, Rutgers University, NJ, 1992
Business law, copyright law, business management.

Mariam Ghazvini
M.B.A.: Master of Business Administration, Northwestern Polytechnic University, CA, 2014
M.A.: Master of Arts, Counseling, Santa Clara University, CA, 2004
M.A.: Master of Arts, Higher Education, San Jose State University, CA, 1994
B.A.: Bachelor of Arts, Sociology, San Jose State University, CA, 1983
Organizational behavior, leadership development, career planning, counseling, communication.

Yann Huang
D.B.A.: Doctor of Business Administration, Golden Gate University, San Francisco, CA, 2004
M.S.: Master of Science, Telecommunication Management, Golden Gate University, San Francisco, CA, 1993
M.B.A.: Master of Business Administration, Computer Information Systems, Golden Gate University, San Francisco, CA, 1993
B.A.: Bachelor of Arts, Economics, Chinese Culture University, Taiwan, 1991
Business development and organization management, information management system design and applications, e-business technology.

Stephen Hyatt
Ph.D.: Doctor of Philosophy, Engineering Materials, University of Windsor, Canada, 1990
M.B.A.: Master of Business Administration, Northwestern Polytechnic University, CA, 2014
M.S.: Master of Science, Ceramic Engineering, Georgia Institute of Technology, GA, 1981
B.S.: Bachelor of Science, Materials Engineering, American University in Cairo, Egypt, 1979
Stochastic methods to business processes, multivariate analysis, prediction modeling.

Hashem Kardevani
Ph.D.: Doctor of Philosophy, Economics, University of California at Riverside, CA, 1996
M.A.: Master of Arts, Economics, University of California at Riverside, CA, 1981
Marketing management, product and project management, new business development.

James Nysather
D.B.A.: Doctor of Business Administration, Northwestern Polytechnic University, CA, 2015
M.B.A.: Master of Business Administration, International Management, Thunderbird School of Global Management, AZ, 1999
B.S.: Bachelor of Science, Marketing, St. Cloud State University, MN, 1988
Business development, marketing, business management.

Timothy A. Reilly
J.D.: Juris Doctor, Catholic University of America, Columbus School of Law, Washington D.C., 1994
B.A.: Bachelor of Arts, Political Science, University of Massachusetts, MA, 1990
Business law, municipal law, real estate law, foreclosure, personal injury

Swapna Sinha
D.B.A.: Doctor of Business Administration, Golden Gate University, CA, 2006
B.A.: Bachelor of Arts, History, University of Lucknow, India, 1986
Business development, marketing, finance, strategic management.

James Wu
D.B.A.: Doctor of Business Administration, Golden Gate University, CA, 1992
M.B.A.: Master of Business Administration, University of California-Berkeley, CA, 1985
B.B.A.: Bachelor of Business Administration, National Taiwan University, Taiwan, 1982
Finance, investment, international business management, economics, organizational management.

General Studies

Michael Bailey
Degree of Engineer: Electrical Engineering, Stanford University, Stanford, CA, 1992
M.B.A.: Master of Business Administration, Finance, Santa Clara University, CA, 2001
M.A.: Master of Arts, Physics, University of California, Santa Barbara, CA, 1981
B.A.: Bachelor of Arts, Physics, University of California, San Diego, CA, 1979
Semiconductor physics, RF/microwave design, product management, finance.

Wayne Chow
D.M.A.: Doctor of Musical Arts, Music Composition, Louisiana State University, Louisiana, 1987
M.M.: Master of Music, Music Theory, Pittsburg State University, Kansas, 1984
B.M.: Bachelor of Music, Piano, Pittsburg State University, Kansas, 1983
Music composition, music theory and history.

John Jeonghee Kim
Ph.D.: Doctor of Philosophy, Engineering, New Mexico State University, New Mexico, 2000
B.S: Bachelor of Science, Electrical Engineering, University of Kansas, Kansas, 1984
Optimization and performance analysis, matlab, VHDL, analog devices, visual DSP++.

Michael Leinhos
M.E.: Master of Education, Temple University, PA, 1994
M.B.A.: Master of Arts, Political Science, Temple University, PA, 1993
Social sciences, communication, humanities.

Mariam Ghazvini
M.B.A.: Master of Business Administration, Northwestern Polytechnic University, CA, 2014
M.A.: Master of Arts, Counseling, Santa Clara University, CA, 2004
M.A.: Master of Arts, Higher Education, San Jose State University, CA, 1994
B.A.: Bachelor of Arts, Sociology, San Jose State University, CA, 1983
Organizational behavior, leadership development, career planning, counseling, communication.

Intensive English Program

Jennie O’Connor
M.Ed.: Master of Education, Curriculum and Instruction, Teaching English to Speakers of Other Languages (TESOL), Cleveland State University, OH, 2008
M.A.: Master of Arts, English, Cleveland State University, OH, 2006
English as a second language (ESL)
DIRECTIONS TO NPU

► From I-880: Exit I-880 at Mission Blvd.-Warren Ave. and take Mission Blvd. East (towards the hills). Turn right onto Warm Springs Blvd. Drive past Warren Ave. to Fourier Ave. Turn right onto Fourier Ave. to go to the learning facilities. Fourier Avenue turns into Westinghouse Dr. where the NPU Administration Office is located.

► From I-680: Exit I-680 at Mission Blvd.-Warm Springs District and drive west on Mission Blvd. (towards the Bay) to Warm Springs Blvd. Turn left onto Warm Springs Blvd. Drive past Warren Ave. to Fourier Ave. Turn right onto Fourier Ave. to go to the learning facilities. Fourier Avenue turns into Westinghouse Dr. where the NPU Administration Office is located.

Administrative Building
47671 Westinghouse Dr., Fremont, CA 94539
Tel: 510-592-9688; Fax: 510-657-8975

School of Engineering
105-119 Fourier Ave., Fremont, CA 94539

School of Business & Information Technology
47655 Warm Springs Blvd., Bldg. A, Fremont, CA 94539

North Building
47102 Mission Falls Ct., Fremont, CA 94539

Recreation Center
47655 Warm Springs Blvd., Bldg. B, Fremont, CA 94539

Online Education Center
47613 Warm Springs Blvd., Fremont, CA 94539

NPU Campus Map

1. Administration Building
47671 Westinghouse Dr., Fremont, CA 94539

2. Library and Student Service Center (WEST Bldg.)
117 Fourier Ave., Fremont, CA 94539

3. School of Engineering (EAST Bldg.)
105 Fourier Ave., Fremont, CA 94539

4. Online Education Center
47613 Warm Springs Blvd., Fremont, CA 94539

5. School of Business & Info. Tech. & Recreation Center (South Bldg.)
47655 Warm Springs Blvd., Fremont, CA 94539

6. North Building
47102 Mission Falls Court, Fremont, CA 94539
# Returning Students

When a former NPU student returns to continue his/her study in an unfinished program after skipping more than one term, the returning student must submit a new online application and pay the application fee. The student will receive a new evaluation and study plan based on the graduation requirements specified in the current catalog. The admission evaluators follow the policy in effect to transfer the prior credit earned by the returning student in the unfinished program. The policy limits the absence period for transfer of previously earned credit. Applicable courses and credits earned in the unfinished program may be applied towards the new study plan.

<table>
<thead>
<tr>
<th>Location</th>
<th>Change</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Page 4</td>
<td>Returning Students</td>
<td>1/24/2018</td>
</tr>
</tbody>
</table>

# Fees

| | Duplicate Diploma Processing Fee | $150 | Applies if the student requests a duplicate diploma |
| | | | 1/24/2018 |

# Academic Information

| | Academic Information |
| | Returning Student: When a student returns to NPU to continue his/her study in an unfinished program after skipping more than one term, the returning student must submit a new application form. The student will receive a new study plan based on the graduation requirements specified in the current catalog. The credit transfer policy in effect at the time of return is used to transfer the credits earned by the student from his/her previous study in the unfinished program at NPU. Applicable courses and credits earned in the unfinished program may be applied towards the new study plan. |
| | Page 7 | 1/24/2018 |

# Academic Program Change

- Current NPU students may request to change their program of study. This academic program change policy applies to both change of academic program and change of school (Business to Engineering, or vice versa).
- Students are permitted to change the program only once during their course of study at NPU.
- Students requesting to change schools must meet the admissions criteria specified by that school.
- Credits and grades earned from applicable courses taken at NPU in the original program may be applied towards the new program requirements. The grades are included in the cumulative grade point average (CGPA) calculation for the new program at the same degree level. The credits are excluded from the maximum program length (MPL).
- Students who are placed on academic probation must meet with their respective school dean to determine their eligibility to change programs.

| | Academic Program Change | 1/24/2018 |
| | • Current NPU students may request to change their program of study. This academic program change policy applies to both change of academic program and change of school (Business to Engineering, or vice versa). | |
| | • Students are permitted to change the program only once during their course of study at NPU. | |
| | • Students requesting to change schools must meet the admissions criteria specified by that school. | |
| | • Credits and grades earned from applicable courses taken at NPU in the original program may be applied towards the new program requirements. The grades are included in the cumulative grade point average (CGPA) calculation for the new program at the same degree level. The credits are excluded from the maximum program length (MPL). | |
| | • Students who are placed on academic probation must meet with their respective school dean to determine their eligibility to change programs. | |

# Effect of Grades on Satisfactory Academic Progress:

Credits transferred, performed at the time of admission evaluation, will reduce the maximum program length. The credit transfer policy is observed for both new students and current students changing program of study or seeking to earn an additional degree at NPU. Credit transferred from any outside institution is excluded from the maximum program length and has no effect on the calculation of the student’s GPA or CGPA. Credit transferred into a program from previous credit earned at NPU is excluded from the program length, but the grades are transferred along with the credit; they are included in the calculations of the student’s CGPA if the student changes program within the same degree level. Credits and grades earned from applicable courses taken at NPU in the original program may be applied towards the new program requirements. The grades are included in the CGPA calculation for the new program at the same degree level. The credits are excluded from the maximum program length (MPL).

| | Effect of Grades on Satisfactory Academic Progress: | 1/24/2018 |
| | • Current NPU students may request to change their program of study. This academic program change policy applies to both change of academic program and change of school (Business to Engineering, or vice versa). | |
| | • Students are permitted to change the program only once during their course of study at NPU. | |
| | • Students requesting to change schools must meet the admissions criteria specified by that school. | |
| | • Credits and grades earned from applicable courses taken at NPU in the original program may be applied towards the new program requirements. The grades are included in the cumulative grade point average (CGPA) calculation for the new program at the same degree level. The credits are excluded from the maximum program length (MPL). | |
| | • Students who are placed on academic probation must meet with their respective school dean to determine their eligibility to change programs. | |

# Undergraduate Programs

- English Proficiency Requirement
  - Successfully completed NPU’s IEP Level 5, or upon completion of all level 4 courses with a minimum grade of A.

| | Undergraduate Programs | 1/24/2018 |
| | • English Proficiency Requirement | |
| | - Successfully completed NPU’s IEP Level 5, or upon completion of all level 4 courses with a minimum grade of A. | |

# Undergraduate Program

- Transfer of Credit from Other Institutions
  - Course credit earned at other institutions of higher education may be transferable. Credit transfer is made by the admission evaluators while conducting the admission evaluation. The transfer of credit is done at the program-of-study level, on a case-by-case basis dependent on relevancy match of related course content. The following statements apply to all transfer credits:
    - The NPU Admissions Office must receive all official transcripts prior to the student’s joining a degree program. Without preapproval, transcripts received after the student joins NPU cannot be used in transferring credits, except for records from the term immediately preceding the student’s starting trimester at NPU.
    - The student was officially enrolled in the course.

| | Undergraduate Program | 1/24/2018 |
| | Transfer of Credit from Other Institutions | |
| | - Course credit earned at other institutions of higher education may be transferable. Credit transfer is made by the admission evaluators while conducting the admission evaluation. The transfer of credit is done at the program-of-study level, on a case-by-case basis dependent on relevancy match of related course content. The following statements apply to all transfer credits: | |
| |    - The NPU Admissions Office must receive all official transcripts prior to the student’s joining a degree program. Without preapproval, transcripts received after the student joins NPU cannot be used in transferring credits, except for records from the term immediately preceding the student’s starting trimester at NPU. | |
| |    - The student was officially enrolled in the course. | |
Courses eligible for transfer will be evaluated based on the comparability in content, quality and rigor of NPU’s courses. The transfer evaluation will include, but is not limited to, course descriptions, course syllabi, and/or general public information. Students may be asked to provide course catalogs or syllabi if needed.

When evaluating any foreign transcript, the admission evaluators may accept or transfer credit based on their knowledge of the course contents in comparison with similar courses offered in the U.S.

Courses for transfer to NPU may not be completed concurrently at another institution while attending NPU.

College English courses taken at an institution where English is not an official language cannot be transferred for general education credit.

The credits contemplated for transfer must be earned at (1) institutions approved by the Bureau for Private Postsecondary Education, (2) public or private institutions of higher learning accredited by an accrediting association recognized by the U.S. Department of Education, or (3) any institution of higher learning, including foreign institutions, offering degree programs equivalent to degree programs approved by the Bureau or accredited by an accrediting association recognized by the U.S. Department of Education. With regard to foreign institutions, if NPU cannot determine that the institution is offering degree programs equivalent to degree programs approved by the Bureau or accredited by an accrediting association recognized by the U.S. Department of Education, the student may obtain a credential evaluation from a National Association of Credential Evaluation Services (NACES) member.

Professional Development Units (PDUs) offered by professional/industry organizations cannot be transferred to NPU for academic credit.

Continuing Education Units (CEUs) offered on a non-academic basis by other academic institutions cannot be transferred to NPU for academic credit.

The total credits transferred from other institutions to meet the student’s undergraduate program requirements are limited to 75 trimester units.

Credits transferred, performed at the time of admission evaluation, will reduce the maximum program length. The credit transfer policy is observed for both new students and current students changing program of study or seeking to earn an additional degree at NPU. Credit transferred from any outside institution is excluded from the maximum program length and has no effect on the calculation of the student’s GPA or CGPA.

Credits are transferred by the following conversion:

a. Definition of a Trimester Unit:
   One trimester credit hour equals, at a minimum, 15 contact classroom hours of lecture, 30 contact hours of laboratory, or 45 contact hours of practicum.

b. Conversion Factor:
   1 quarter unit = 0.66 trimester unit

Grades Required for Transfer Credit
In the bachelor’s degree programs, applicable courses completed with an equivalency of a letter grade of “C” or better are transferable. Courses completed with Pass/No Pass are not transferable unless the transcript states that the general grading policy is not based on letter grades. This policy must be in writing from the institution (transcript key or a letter of verification).

Other Types of Undergraduate Transfer Credit
The following other types of credit may be transferable:

a. AP course credit earned which is considered to be equivalent to college credit.

b. Credit by Examination - CLEP
   NPU grants credit to those students who pass examinations in English, natural sciences, humanities, and social science subjects offered by the College Level Examination Program (CLEP). Only General Education credits will be granted. Students should consult with the Admissions Office for information on acceptable CLEP scores and units. The CLEP Institution Code for NPU is 7569.

c. Transfer of Credit from Defense Activity for Nontraditional Education Support (DANTES) and Military Services
   Credits will be allowed for DANTES Subject Standardized Tests and professional military education evaluated by the American Council on Education (ACE). The maximum transferable credits follow the same policies as specified above. NPU’s evaluation of an application is made prior to the student’s admission to a program unless otherwise approved by the authorizing VA office. The DANTES Institution Code for NPU is 9670.
Course Description
CPT 402 Curricular Practicum (2 units)
This is a full-time practicum course taken by the undergraduate student to work more than twenty hours but not to exceed forty hours each week during the approved practicum period.

Master’s Degree Programs
- English Proficiency Requirement
  - Successfully completed NPU’s IEP Level 6, or upon completion of all level 5 courses with a minimum grade of A.

Transfer of Credit from Other Institutions
Graduate course credit earned at other accredited higher education institutions may be transferable to meet the student’s graduation requirements if the courses are closely related to the engineering course requirements in the student’s intended program of study and the grade earned meets the requirement stated below. Such course credits are considered qualified transfer credits. Credit transfer is made by the admission evaluators while conducting the admission evaluation.

The following statements apply to qualified transfer credits:
- The NPU Admissions Office must receive all official transcripts prior to the student’s joining a degree program. Without preapproval, transcripts received after the student joins NPU cannot be used in transferring credits, except for records from the term immediately preceding the student’s starting trimester at NPU.
- The student was officially enrolled in the course.
- Courses eligible for transfer will be evaluated based on the comparability in content, quality and rigor of NPU’s courses. The transfer evaluation will include, but is not limited to, course descriptions, course syllabi, and/or general public information. Students may be asked to provide course catalogs or syllabi if needed.
- No more than 7 units of qualified graduate-level course credits may be transferred.
- Courses for transfer to NPU may not be completed concurrently at another institution while attending NPU.
- The credits contemplated for transfer must be earned at (1) institutions approved by the Bureau for Private Postsecondary Education, (2) public or private institutions of higher learning accredited by an accrediting association recognized by the U.S. Department of Education, or (3) any institution of higher learning, including foreign institutions, offering degree programs equivalent to degree programs approved by the Bureau or accredited by an accrediting association recognized by the U.S. Department of Education. With regard to foreign institutions, if NPU cannot determine that the institution is offering degree programs equivalent to degree programs approved by the Bureau or accredited by an accrediting association recognized by the U.S. Department of Education, the student may obtain a credential evaluation from a National Association of Credential Evaluation Services (NACES) member.
- Professional Development Units (PDUs) offered by professional / industry organizations cannot be transferred to NPU for academic credit.
- Continuing Education Units (CEUs) offered on a non-academic basis by other academic institutions cannot be transferred to NPU for academic credit.
- Credits transferred, performed at the time of admission evaluation, will reduce the maximum program length. The credit transfer policy is observed for both new students and current students changing program of study or seeking to earn an additional degree at NPU. Credit transferred from any outside institution is excluded from the maximum program length and has no effect on the calculation of the student’s GPA or CGPA. Credit transferred into a program from previous credit earned at NPU is excluded from the program length, but the grades are transferred along with the credit; they are included in the calculations of the student’s CGPA if the student changes program within the same degree level.
- Credits are transferred by the following conversion:
  - a. Definition of a Trimester Unit:
    One trimester credit hour equals, at a minimum, 15 contact classroom hours of lecture, 30 contact hours of laboratory, or 45 contact hours of practicum.
  - b. Conversion Factor:
    1 quarter unit = 0.66 trimester unit
- Grades Required for Transfer Credit
In the master’s degree programs, qualified courses completed with an equivalency of a letter grade of “B” or better are transferable. Courses completed with a “CREDIT” grade are transferable only if the institution’s grading policy states that “CREDIT” is granted with a letter grade which meets the above...
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Master’s Degree Programs

Graduation Requirements
- Maintain a grade of C or better for all courses taken towards the degree requirements

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Course Description

CPT 502 Curricular Practicum (2 units)

This is a full-time practicum course taken by the undergraduate student to work more than twenty hours **but not to exceed forty hours** each week during the approved practicum period.

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BUS460 Introduction to Business Analytics (3 units)

**Page 111**

MGT538 International Business Management (3 units)

This class reviews the classic five functions of management: planning, organizing, staffing, leading, and controlling. Students will compare managerial practices of Europe, Asia, and Latin America. The class also covers the importance of quality and continuous improvement for gaining a competitive edge. Students will learn practical aspects of management from actual case studies, the strategic considerations for management in the international environment, and the roles of the latest information technologies, including computer networks, telecommuting, decision support systems, and CAD, CAM, CAL.

Prerequisite/Corequisite: MGT450 or PBUS05

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Structure of the Intensive English Program

Levels 5-7

IEP students are considered to have met the English proficiency requirement for entry into NPU’s bachelor’s degree programs upon successful completion of level 5, or upon completion of all level 4 courses with a minimum grade of A-. IEP students are considered to have met the English proficiency requirement for entry into NPU’s master’s degree programs upon successful completion of level 6, or upon completion of all level 5 courses with a minimum grade of A-

A letter grade (A, B, C, D, F, or W) will be assigned for each course at the end of every session. A student must obtain a C (73% - 76%) grade or better in all courses of the current IEP level in order to advance to the next level.

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>97%-100%</td>
</tr>
<tr>
<td>A</td>
<td>93%-96%</td>
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<tr>
<td>A-</td>
<td>90%-92%</td>
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<tr>
<td>B+</td>
<td>87%-90%</td>
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<tr>
<td>F</td>
<td>0%-59%</td>
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<tr>
<td>W</td>
<td>Withdrawal</td>
</tr>
</tbody>
</table>

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Standards of Satisfactory Progress (SSP)

Effect of Grades on Satisfactory Academic Progress:

- Units attempted but not completed include the following grades: Failing grades including F (fail), NC (not passing a challenge exam), U (unauthorized incomplete), W (withdraw), NP (no pass), and * (course being repeated).

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Standards of Satisfactory Progress (SSP)

Effect of Grades on Satisfactory Academic Progress:

- Units attempted but not completed include the following grades: Failing grades including F (fail), NC (not passing a challenge exam), U (unauthorized incomplete), W (withdraw), NP (no pass), and * (course being repeated).
2. The grade CR (credit through challenge exam by undergraduates) counts as units attempted and completed. The grades A, B, C, D, and S count as units attempted and completed.
3. The grades of P (pass without credit), AU (audit), and non-credit courses do not count for credit attempted or completed; they have no effect on the calculations of GPA, CGPA, or percentage of successful course completion. Examples of non-credit courses are: Intensive English Program (IEP) courses and business preparatory module courses (courses numbered as PBUS05 through PBUS06).
4. Credits transferred, performed at the time of admission evaluation, will reduce the program length. Credit transferred from any outside institution is excluded from the maximum program length and has no effect on the calculation of the student’s GPA or CGPA. Credits and grades earned from applicable courses taken at NPU in the original program may be applied towards the new program requirements. The grades are included in the CGPA calculation for the new program at the same degree level. The credits are excluded from the maximum program length (MPL).
5. Taking Deficiency Courses: A graduate student may be required to take undergraduate course subjects to clear background deficiencies. These course units are not included in the student’s program length and do not affect the MPL; the credits and grades of these courses do not affect the student’s CGPA.

- **Withdrawal (W):**
  A student dropping a course after the add/drop deadline will receive a withdrawal (W) in that course. Withdrawals do not affect the trimester GPA or CGPA. Withdrawal from a course is counted as credits attempted but not completed.

- **Incomplete (I):**
  An incomplete (I) grade is a temporary grade issued to a student who has completed all homework and tests/quizzes to date, passed the mid-term exam, and have serious and compelling circumstances beyond the student’s control that occur within the last two weeks of the trimester preventing the student from taking the final exam or submitting the final project. Issuance of an “I” grade requires approval from the course instructor and the responsible Records Officer. The incomplete work must be made up by the end of the 4th week of the following trimester. An “F” grade will be issued to the student if an “I” grade is not cleared within the 4-week deadline. An “I” grade does not affect the trimester GPA or CGPA as this grade will change to a failing or a passing grade after the end of 4th of the following trimester.

- **Repeated Courses:**
  A “*” is assigned to the course that has been repeated. A student may repeat a course due to several reasons: (a) To meet the graduation requirements on CGPA, (b) To earn a better grade for a subject, or (c) To gain a better understanding of the subject. In such cases, both grades will appear on the student’s permanent record, but only the latest grade earned for the same course will be calculated towards the student’s CGPA.

- **Non-punitive Grades:**
  Non-punitive grades are assigned if
  c. the student withdraws from a course. A “W” grade is assigned to the course.
  d. the student is withdrawn from a course due to failure to meet attendance and course requirements. An “U” grade is assigned to the course.
  These grades do not affect the trimester GPA or CGPA. These courses are counted as credits attempted but not completed.

- **Non-Credit Courses:**
  The grades of P (pass without credit), AU (audit), and non-credit courses do not count for credit attempted nor completed. These grades have no effect on the calculations of trimester GPA or CGPA, or percentage of successful course completion. Examples of non-credit courses are: Intensive English Program (IEP) courses and business preparatory module courses (courses numbered as PBUS05 through PBUS06).

- **Changing Academic Programs:**
  Credits and grades earned from applicable courses taken at NPU in the original program may be applied towards the new program requirements. The grades are included in the CGPA calculation for the new program at the same degree level. The credits are excluded from the maximum program length (MPL).

- **Earning an Additional Credential/Degree:**
  c. Students Starting a New Program in the Same Degree Level - Credits and grades earned from applicable courses taken at NPU may be applied towards the new program requirements. The grades are included in the CGPA calculation for the new program at the same degree level.
**d. Students Starting a Master’s Degree After Earning a Bachelor’s Degree at NPU/Other Institutions:** Grades and credits earned at a bachelor’s degree level are not applied towards the master’s degree.

- **Transfer of Credits from Other Institutions:**
  Credits transferred, performed at the time of admission evaluation, will reduce the program length. Credit transferred from any outside institution is excluded from the maximum program length and has no effect on the calculation of the student’s GPA or CGPA.

- **Deficiency Courses:**
  A graduate student may be required to take undergraduate course subjects to clear background deficiencies. These course units are not included in the student’s program length and do not affect the MPL; the credits and grades of these courses do not affect the student’s CGPA.

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### Page 25

**Leaves of Absence**

Students who are ineligible for a trimester break, may request for a leave of absence, which must be formally requested through the student portal. The request must be approved by the administration before the leave is taken; otherwise, the student may be withdrawn from the university. The request must be made and will be granted on a trimester basis. The maximum Leave of Absence granted is one trimester. If the student fails to register for classes or requests an additional trimester break after the initial leave of absence period is over, the student will be withdrawn from the university.

**Notice to International Students:**

International students (F-1 immigration status) must follow immigration rules and thus should seek the advice of an international student advisor before taking a Short-Term Absence or a Leave of Absence. In general, students must maintain a full course of study to maintain their immigration status. A Short-Term Absence is considered a brief leave amounting to no more than three consecutive classes per course. A Short-Term Absence or a Leave of Absence must be formally requested through the student portal. The student must have valid reason for the leave. The student is, and are required to inform his/her instructors and obtain their permission. The request must be approved by the administration. The administration must give final approval before the absence or leave is taken.

A student wishing to take a Leave of Absence, if ineligible for a trimester break, may only make such requests due to a personal illness or medical condition as per immigration rules. No other reasons are allowed. Per immigration rules, the maximum leave allowed is a total of 12 months during the course of study at that program level.

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### Page 5, 118

**Tuition**

**IEP:**
- Tuition for full-time students (four courses, 20 hours/week): $2000 per session.
- Tuition for part-time students (one course, 5 hours/week): $1000 $500 per session.
- Tuition for part-time students (two courses, 10 hours/week): $1400 $1000 per session.
- Tuition for part-time students (three courses, 15 hours/week): $1700 $1500 per session.

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### Page 126

**Recognition. Accreditation**

Northwestern Polytechnic University is an academic institution recognized accredited by the Accrediting Council for Independent Colleges and Schools (ACICS) to award bachelor’s degrees and master’s degrees. ACICS is recognized by the Council for Higher Education Accreditation (CHEA), ACICS is listed as a nationally recognized accrediting agency by the United States Department of Education (U.S. DOE) and is recognized by the Council for Higher Education Accreditation (CHEA). For recent updates on ACICS, please review, http://www.acics.org/news/content.aspx?id=7154. ACICS may be contacted at 750 First Street, NE, Suite 980, Washington, DC 20002-4241, Tel: (202) 336-6780.

While NPU is recognized by ACICS, NPU is not accredited by an accrediting agency recognized by the United States Department of Education. Please be advised that a degree from an unaccredited institution is not recognized for some employment positions, including, but not limited to, positions with the State of California. A student enrolled in an unaccredited institution is not eligible for federal financial aid programs. Please note NPU’s degree programs are not intended to prepare a student for a licensure exam.

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### Page 6

**Fees**

- Health Insurance Premium: **$200-$350**

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*ver. 2018.10.05*
Scholarship terms updated
The scholarship is valid for tuition payments only. The scholarship has no cash value. Any unused tuition scholarship will be forfeited.

English proficiency requirement removed from Alumni Scholarships

Estimated Total Charges for On-time Completion of Entire Educational Program

- BSCS: $50,570

Please note that these estimate is based upon the current tuition and fee schedule, which is subject to change. All students are required to pay current rates for tuition and fees each trimester.

- Tuition: $42,570
- Fees: $4,400
- Graduation Petition Fee: $300
- Textbooks Costs: $6,450
- Health Insurance Premium: $3,850

- BSCS: $57,570

Please note that this estimate includes tuition, fees, textbooks costs, and health insurance premium, which is subject to change. All students are required to pay current rates for tuition and fees each trimester. Additional fees may apply, depending on the services requested (see Tuition and Fee section). The cost of textbooks is estimated to be approximately $150 per course. The actual cost of textbooks can vary significantly from course to course.

Estimated Total Charges for On-time Completion of Entire Educational Program

- MSCS: $19,300
- MSEE: $19,300

Please note that these estimates are based upon the current tuition and fee schedule, which is subject to change. All students are required to pay current rates for tuition and fees each trimester.

- Tuition: $16,200
- Fees: $1,600
- Graduation Petition Fee: $300
- Textbooks Costs: $1,800
- Health Insurance Premium: $1,400

- MSCS: $21,300
- MSEE: $21,300

Please note that this estimate includes tuition, fees, textbooks costs, and health insurance premium, which is subject to change. All students are required to pay current rates for tuition and fees each trimester. Additional fees may apply, depending on the services requested (see Tuition and Fee section). The cost of textbooks is estimated to be approximately $150 per course. The actual cost of textbooks can vary significantly from course to course.

Standard Occupational Classification (SOC) – 2010 & 2018
SOC Code list updated for Bachelor of Science in Computer Science, Master of Science in Electrical Engineering, and Master of Science in Computer Science programs.

*2010 SOC codes are used for ACICS’ employment reports.
textbooks is estimated to be approximately $150 per course. The actual cost of textbooks can vary significantly from course to course.

### Estimated Total Charges for On-time Completion of Entire Educational Program

- **MBA:** $19,300

Please note that this estimate is based upon the current tuition and fee schedule, which is subject to change. All students are required to pay current rates for tuition and fees each trimester.

- Tuition: $16,200
- Fees: $1,600
- Graduation Petition Fee: $300
- Textbooks Costs: $1,800
- Health Insurance Premium: $1,400

- **MBA:** $21,300

Please note that this estimate includes tuition, fees, textbooks costs, and health insurance premium, which is subject to change. All students are required to pay current rates for tuition and fees each trimester. Additional fees may apply, depending on the services requested (see Tuition and Fee section). The cost of textbooks is estimated to be approximately $150 per course. The actual cost of textbooks can vary significantly from course to course.

### Standard Occupational Classification (SOC) – 2010 & 2018

SOC Codes list updated for Bachelor of Business Administration and Information Science and Master of Business Administration programs.

*2010 SOC codes are used for ACICS’ employment reports.*

### Notice to students and prospective students

The Bachelor of Business Administration and Information Sciences at Northwestern Polytechnic University has been placed on student achievement show-cause by their accreditor, the Accrediting Council for Independent Colleges and Schools (“ACICS”), due to material noncompliance with its placement rate standard of 60%.

However, no claim can be paid to any student without a social security number or a taxpayer identification number.

You must pay the state-imposed fee for the Student Tuition Recovery Fund (STRF) if all of the following applies to you.

1. You are a student in an educational program, who is a California resident, or are enrolled in a residency program, and pay or reimburse loan proceeds under a federally guaranteed student loan program as required by law or to pay or reimburse proceeds received by the school prior to closure in excess of tuition and other costs.

You may be eligible for STRF if you are a California resident or are enrolled in a residency program, prepaid tuition, paid STRF assessment, and suffered an economic loss as a result of any of the following.

1. The school closed before the course of instruction was completed.
2. The school’s failure to pay refunds or charges on behalf of a student to a third party for license fees or any other purpose, or to provide equipment or materials for which a charge was collected within 180 days before the closure of the school.
3. The school’s failure to pay or reimburse loan proceeds under a federally guaranteed student loan program as required by law or to pay or reimburse proceeds received by the school prior to closure in excess of tuition and other costs.
4. There was a material failure to comply with the Act or the Division within 30 days before the school closed or, if the material failure began earlier than 30 days prior to closure, the period determined by the Bureau.
5. An inability after diligent efforts to prosecute, prove, and collect on a judgment against the institution for a violation of the Act.

The State of California created the Student Tuition Recovery Fund (STRF) to relieve or mitigate economic losses suffered by students in educational programs who are California residents, or are enrolled in a residency program attending certain schools regulated by the Bureau for Private Postsecondary Education.

You may be eligible for STRF if you are a California resident or are enrolled in a residency program, prepaid tuition, paid STRF assessment, and suffered an economic loss as a result of any of the following.

1. The school closed before the course of instruction was completed.
2. The school’s failure to pay refunds or charges on behalf of a student to a third party for license fees or any other purpose, or to provide equipment or materials for which a charge was collected within 180 days before the closure of the school.
3. The school’s failure to pay or reimburse loan proceeds under a federally guaranteed student loan program as required by law or to pay or reimburse proceeds received by the school prior to closure in excess of tuition and other costs.
4. There was a material failure to comply with the Act or the Division within 30 days before the school closed or, if the material failure began earlier than 30 days prior to closure, the period determined by the Bureau.
5. An inability after diligent efforts to prosecute, prove, and collect on a judgment against the institution for a violation of the Act.

However, no claim can be paid to any student without a social security number or a taxpayer identification number.

You must pay the state-imposed fee for the Student Tuition Recovery Fund (STRF) if all of the following applies to you.

1. You are a student in an educational program, who is a California resident, or are enrolled in a residency program, and pay or reimburse loan proceeds under a federally guaranteed student loan program as required by law or to pay or reimburse proceeds received by the school prior to closure in excess of tuition and other costs.
2. Your total charges are not paid by any third party payer such as an employer, government program, or other payer unless you have a separate agreement to repay the third party.

You are not eligible for protection from the STRF and you are not required to pay the STRF assessment, if either of the following applies:

1. You are not a California resident, or are not enrolled in a residency program, or
2. Your total charges are paid by a third party, such as an employer, government program or other payer, and you have no separate agreement to repay the third party.

Student Tuition Recovery Fund

The State of California established the Student Tuition Recovery Fund (STRF) to relieve or mitigate economic loss suffered by a student in an educational program at a qualifying institution, who is or was a California resident while enrolled, or was enrolled in a residency program, if the student enrolled in the institution, prepaid tuition, and suffered an economic loss. Unless relieved of the obligation to do so, you must pay the state-imposed assessment for the STRF, or it must be paid on your behalf, if you are a student in an educational program, who is a California resident, or are enrolled in a residency program, and prepaid all or part of your tuition.

You are not eligible for protection from the STRF and you are not required to pay the STRF assessment, if you are not a California resident, or are not enrolled in a residency program.

It is important that you keep copies of your enrollment agreement, financial aid documents, receipts, or any other information that documents the amount paid to the school. Questions regarding the STRF may be directed to the Bureau for Private Postsecondary Education, 2535 Capital Oaks Drive, Suite 400, Sacramento, CA 95833, (916) 431-6959 or (888) 370-7589.

To be eligible for STRF, you must be a California resident or are enrolled in a residency program, prepaid tuition, paid or deemed to have paid the STRF assessment, and suffered an economic loss as a result of any of the following:

1. The institution, a location of the institution, or an educational program offered by the institution was closed or discontinued, and you did not choose to participate in a teach-out plan approved by the Bureau.
2. You were enrolled at an institution or a location of the institution within the 120 day period before the closure of the institution or location of the institution, or were enrolled in an educational program within the 120 day period before the program was discontinued.
3. You were enrolled at an institution or a location of the institution more than 120 days before the closure of the institution or location of the institution, in an educational program offered by the institution as to which the Bureau determined there was a significant decline in the quality or value of the program more than 120 days before closure.
4. The institution has been ordered to pay a refund by the Bureau but has failed to do so.
5. The institution has failed to pay or reimburse loan proceeds under a federal student loan program as required by law, or has failed to pay or reimburse proceeds received by the institution in excess of tuition and other costs.
6. You have been awarded restitution, a refund, or other monetary award by an arbitrator or court, based on a violation of this chapter by an institution or representative of an institution, but have been unable to collect the award from the institution.
7. You sought legal counsel that resulted in the cancellation of one or more of your student loans and have an invoice for services rendered and evidence of the cancellation of the student loan or loans.

To qualify for STRF reimbursement, the application must be received within four (4) years from the date of the action or event that made the student eligible for recovery from STRF.

A student whose loan is revived by a loan holder or debt collector after a period of noncollection may, at any time, file a written application for recovery from STRF for the debt that would have otherwise been eligible for recovery. If it has been more than four (4) years since the action or event that made the student eligible, the student must have filed a written application for recovery within the original four (4) year period, unless the period has been extended by another act of law. However, no claim can be paid to any student without a social security number or a taxpayer identification number.

Addresses of Instruction

The addresses where the class sessions will be held are as follows:

East Building: 105-107 Fourier Ave., Fremont, CA 94539
West Building: 117-119 Fourier Ave., Fremont, CA 94539
South Building: 47655 Warm Springs Blvd., Fremont, CA 94539
The University Library and Digital Campus

To access the library catalog, library patrons have two options:
1) Using the computer in the library lobby whose home page is the catalog
2) Access the catalog from the library’s website:
   a. Go to: http://www.npu.edu/academics/library
   b. Click “Search for Books and Materials” at the top left

To access the library’s electronic collection, library users have three options:
1) Using the computer in the library lobby
2) Access the e-library via the link on the student/faculty portal:
   a. Go to: https://my.npu.edu/
   b. Click e-Services tab, top right
   c. Select eLibrary > ProQuest
3) 24/7 access from anywhere is provided via EZProxy:
   a. Go to: https://elib.npu.edu/login
   b. Enter your on-campus computer login information
   c. Click on “ProQuest Digital Library”

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Library Services

Page 6

Fees

Health Insurance Premium $350 $416.12

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VA EDUCATIONAL ASSISTANCE

The University is authorized by the U.S. Veterans Administration (VA) to accept qualified veterans who receive veteran’s education benefits. In administering student financial and academic affairs for veteran and military students, the University follows VA and related military regulations. A newly admitted student is required to submit a Certificate of Release or Discharge from Active Duty Form (Form DD-214). Please refer to the NPU website or contact the Administration Office for additional information.

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Adding and Dropping Courses

From the second through the last fourteenth week of the trimester, a student may drop courses for serious and compelling reasons after discussing this with an academic counselor. The student will be issued a grade of “W”.

Page 25

Leave of Absence

Students who are ineligible for a trimester break may request for a leave of absence, which must be formally requested through the student portal. The request must be approved by the administration before the leave is taken; otherwise, the student may be withdrawn from the university. The maximum Leave of Absence granted is one trimester. If the student fails to register for classes or requests an additional leave prior to the initial leave’s end, the student will be withdrawn from the university.

The maximum Leaves of Absence may not exceed a cumulative total of three trimesters during the course of study at that program level. Such Leave of Absence must be requested on a trimester basis. If the student fails to register for classes or fails to request an additional leave of absence prior to the initial leave’s end, the student will be withdrawn from the university.

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GRIEVANCE POLICY AND PROCEDURE

1) INFORMAL RESOLUTION

With regard to academic grievances (e.g., grade changes, academic integrity, faculty grievance), students must attempt to informally resolve the matter with his or her instructor.

COMPLAINT PROCEDURE AND RESOLUTION

All complaints and supporting documentation shall be submitted in writing to the NPU Compliance Department. The complaint should be made using the NPU Grievance Form, which is available on the NPU website. (http://www.npu.edu/PDF/NPUGrievanceForm.pdf).

If a complainant has exhausted all grievance procedures provided under NPU’s policies, the complainant may contact
a. The Accrediting Council for Independent Colleges and Schools at 750 First Street NE, Suite 980, Washington, DC 20002
b. The Bureau for Private Postsecondary Education by calling (888) 370-7589 or by completing the complaint form, which can be obtained on the bureau’s Internet Web site address www.bppe.ca.gov.

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Library Services
Besides learning in class, students are encouraged to pursue independent research using resources provided by the Northwestern Polytechnic University Library. NPU’s physical collections comprise books, periodicals, and audio/visual materials, and its online resources include IEEE Computer Society Digital Library, Directory of Open Access Journals (DOAJ) and ProQuest databases.

## Estimated Total Charges for On-time Completion of Entire Educational Program

**Page 52**

- Tuition: $42,570
- Fees: $4,400
- Graduation Petition Fee: $300
- Textbooks Costs: $6,450
- Health Insurance Premium: $3,850

**Total: $57,570**

**Page 67**

- Tuition: $16,200
- Fees: $1,600
- Graduation Petition Fee: $300
- Textbooks Costs: $1,800
- Health Insurance Premium: $3,850

**Total: $21,568**

**Page 93**

- Tuition: $41,250
- Fees: $4,400
- Graduation Petition Fee: $300
- Textbooks Costs: $6,300
- Health Insurance Premium: $3,850

**Total: $56,100**

**Page 110**

- Tuition: $16,200
- Fees: $1,600
- Graduation Petition Fee: $300
- Textbooks Costs: $1,800
- Health Insurance Premium: $1,400

**Total: $21,300**

## Reasonable Accommodation for Students with Disabilities

NPU adheres to the Americans with Disabilities Act (ADA) requirements and provides reasonable accommodations for students who are otherwise qualified but have disabilities. Such disabilities may include learning disabilities, health impairments, and other documented disabling conditions.

## STUDENT GRIEVANCE POLICY AND PROCEDURE

NPU takes complaints regarding the institution seriously. Students have the right to file a grievance that concerns NPU, whether it is with personnel, the course of study, general university policies, or other related matter. This policy describes the grievance procedure available to members of the NPU community, whether students, employees, or other interested parties.

### 6) INFORMAL RESOLUTION

NPU highly encourages members of the NPU community to attempt to informally resolve any situations directly with the aggrieving party or department.

With regard to academic grievances (e.g., academic integrity, faculty grievance), students must attempt to informally resolve the matter with his or her instructor.

With regard to appeals of disciplinary action and other complaints, no member of the NPU community is obligated to attempt informal resolution and may bring a formal complaint to the administration as outlined in this policy.

## ADMINISTRATION

Judy Weng, Registrar and Senior Academic Advisor
D.C.E.: Doctor of Computer Engineering, Northwestern Polytechnic University, CA
M.S.C.S.: Master of Science in Computer Science, Northwestern Polytechnic University, CA
M.B.A.: Master of Business Administration, Northwestern Polytechnic University, CA
M.S.: Master of Applied Mathematics, Beijing University of Technology, China
B.S.: Bachelor of Science, Computer Application, Beijing University of Technology, China
Elton Li, *Director of IT & Computing Services*

D.C.E.: Doctor of Computer Engineering, Northwestern Polytechnic University, CA  
M.S.C.S.: Master of Science in Computer Science, Northwestern Polytechnic University, USA  
B.C.E.: Bachelor of Computer Engineering, Beihua Hangtian Industry College, China

**FACULTY**

Timothy A. Reilly  
J.D.: Juris Doctor, Catholic University of America, Columbus School of Law, Washington D.C., 1994  
B.A.: Bachelor of Arts, Political Science, University of Massachusetts, MA, 1990  
Business law, municipal law, real estate law, foreclosure, personal injury  
8/09/2018

**BOARD OF TRUSTEES**

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Mr. Hanno Sander  
Founder  
OneRobot  
Christchurch, NZ  
9/28/2018

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Institutional Learning Outcomes

NPU graduates are expected to demonstrate the following institutional student learning outcomes:

1. **Written Communication** - Write sustained, coherent arguments or explanations.
2. **Oral Communication** - Utilize effective oral communication strategies.
3. **Quantitative Reasoning** - Utilize mathematical concepts and methods to analyze, and explain issues in quantitative terms.
4. **Information Literacy** - Identify, locate, evaluate, and effectively and responsibly use and share information in support of academic, personal, and professional needs.
5. **Critical Thinking** - Explore and analyze issues, ideas, artifacts, and/or events to formalize an opinion or conclusion.
6. **Specialized Knowledge** - Achieve knowledge and skill required in a specialized field of study appropriate to the degree level.

General Education Student Learning Outcomes

All undergraduate students are expected to demonstrate the following general education student learning outcomes:

A. **Written Communication** - Write sustained, coherent arguments or explanations.
B. **Oral Communication** - Utilize effective oral communication strategies.
C. **Quantitative Reasoning** - Utilize mathematical concepts and methods to analyze, and explain issues in quantitative terms.
D. **Information Literacy** - Identify, locate, evaluate, and effectively and responsibly use and share information in support of academic, personal, and professional needs.
E. **Critical Thinking** - Utilizing various disciplinary perspectives, explore and analyze issues, ideas, artifacts, and/or events to formalize an opinion or conclusion.

Bachelor of Science in Computer Science (BSCS) Program Learning Outcomes: Students graduating with a BSCS degree will be able to demonstrate the following program learning outcomes -

4. **Written & Oral Communication** - Communicate proficiently on topics that are related to computer science and computer systems with a range of audiences.
<table>
<thead>
<tr>
<th>Program</th>
<th>Program Learning Outcomes: Students graduating with a degree are expected to demonstrate the following program learning outcomes –</th>
</tr>
</thead>
</table>
| **Master of Science in Electrical Engineering (MSEE)** | - Written Communication & Critical Thinking - Create reports for engineering projects that demonstrate an advanced level of proficiency and evidence-based decision making ability.  
- Specialized Knowledge & Written/Oral Communication - Apply the specialized skills relevant to graduate level work to examine problems, synthesize the data/information, and communicate the requirements and the solutions effectively.  
- Quantitative Reasoning - Prepare engineering prototype models, conduct experiments, collect measurements, analyze the data, and effectively interpret the results.  
- Information Literacy - Demonstrate the expertise and resourcefulness in utilizing multiple sources of information to research and strategize solutions necessary to complete engineering projects.  
- Integrative Learning, Problem Solving & Creative Thinking - Produce robust hardware/software solutions to meet industry needs in the modern technology areas by utilizing existing technology in a novel manner. |
| **Master of Science in Computer Science (MSCS)** | - Written & Oral Communication - Effectively present the concepts, designs, and outcomes for software development projects in written and oral forms.  
- Quantitative Reasoning & Problem Solving - Employ current computer science technologies, methodologies, and quantitative analysis to examine modern industry challenges and formulate suitable solutions.  
- Information Literacy - Demonstrate the proficiency and resourcefulness in utilizing multiple sources of information to research, design, or implement complex programming projects.  
- Critical Thinking, Analysis & Creative Thinking - Apply critical thinking and problem solving skills to analyze computing problems and derive solutions based on evidences and practicality.  
- Specialized Knowledge, Integrative Learning & Creative Thinking - Practice specialized knowledge relevant to the area of expertise and the skills attained in the program study to complete required tasks in professional manners. |
| **Bachelor of Business Administration and Information Sciences (BBAIS)** | - Written Communication - Use written language that communicates complex business concepts and enabling technology approaches.  
- Oral Communication - Orally explain to one's peers complex business and supporting technology concepts.  
- Quantitative Reasoning - Apply (computer and non-computer assisted) quantitative methods in a comprehensive manner in a business setting.  
- Information Literacy - Access, review and then meaningfully apply information in business and management decision making.  
- Critical Thinking - Analyze business issues and recommend solutions which apply business concepts and technology practices.  
- Specialized Knowledge - Apply business concepts in the areas of management, finance, accounting, marketing, and information technology to various business scenarios. **Evaluate and propose information technology solutions to improve an organization's operational efficiency.**  
- Write and propose information technology solutions to improve an organization's operational efficiency. |
| **Master of Business Administration (MBA)** | - Written Communication - In a contextually appropriate manner, write strategic business plans and tactical implementation plans.  
- Oral Communication - In a business setting, craft and deliver compelling messages, based on logic and variety of supporting materials. |
| **• Quantitative Reasoning** - Convert relevant information into insightful mathematical portrayals and apply across a wide range of business situations. |
|**• Information Literacy** - Determine, acquire, and analyze data needed from multiple sources in order to create recommendations for complex business situations. |
|**• Critical Thinking** - Methodically solve multi-criteria business and managerial problems. |
|**• Specialized Knowledge** - Synthesize concepts in management, finance, accounting, and marketing to resolve complex business challenges. |