

Academic Planning Guide -Engineering

North Park University

effective with 2016-2017 Catalog

Engineering Program Requirements

Required Semester Hours : **BA: 56 semester hours**

Supporting Courses: 20 semester hours

- MATH 1510: Calculus I (4) - *meets Analytical & Quantitative Reasoning Requirement*
 - PHEN 1210: Introductory Physics I (4) - *meets Physical Science Requirement*
 - PHEN 1220: Introductory Physics II (4)
 - Additional 8 sh from identified courses in BIOL, CHEM, EXS MATH & STAT. See the catalog for courses that meet this requirement.
- Note: Some of the above courses may require prerequisites not included in this list.

Required Core Courses : 28 semester hours

- PHEN 1330: Mechanical Comprehension (2)
 - PHEN 1510: Mathematical Methods of Physics (2)
 - PHEN 2510: Electronics for Scientists (3)
 - PHEN 2520: Electronics Lab (1)
 - PHEN 3310: Dynamics (4)
 - PHEN 3610: Materials (4)
- Select PHEN courses numbered 2000 or above for a total of 12 credits. These course cannot double count for Elective Courses below.
- PHEN course 2000+ (2-4)
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Note: MATH 2030, 3050 or 3100 can be substituted for one of the PHEN courses 2000+

Elective Courses: 8 semester hours; These courses cannot double count for PHEN courses numbered 2000 or above

- PHEN 1410: Pursuit of Knowledge (2), *meets Writing Intensive designation*
- PHEN 2950: Topics in History and Philosophy of Physics (2), may be repeated, *meets Writing Intensive designation*
- PHEN 4030: Knowledge Reloaded (2)
- PHIL 2530: Business and Professional Ethics (2) - *meets Ethical Reasoning requirement*
- PHIL 2930: Introductory Issues in Philosophy - Philosophy of Technology (4)

Notes:

The BA Engineering is not an ABET accredited degree; students interested in becoming professional engineers should instead consider the 3-2 program or the NPU/UIC dual degree program.

All students will carry out a senior design project.

Students are recommended to participate in some sort of internship in Engineering.

Students might also undertake some type of original research project that will result in written paper to be submitted to the department for review. Students should also present their research at either a departmental symposium or at an organized off campus meeting.

There is no honors option for the B.A.

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Core Curriculum

Starting with the framework of North Park's identity as a Christian, liberal arts institution, our Core Curriculum is intentionally multi-disciplinary and multi-year. It is set up as a progress through three areas: Foundation Courses, Explorations Courses, and Capstone Courses.

<http://www.northpark.edu/Academics/Undergraduate-Studies/Core-Curriculum>

Foundations

Preparing for more in-depth work in both the Core Curriculum and your major

Cornerstone Seminar (4sh)

Biblical Studies (4sh)

Health and Well-Being (2sh)

Analytical & Quantitative Reasoning (4sh) <i>met by MATH 1510</i>

Global Histories (4sh)

Modern Languages (8sh)

Explorations

Knowledge in specific disciplines, with strong emphasis on how you can use them in the context of your own life

Art and Aesthetics (2sh)

Christian Life & Thought (4sh)

Life Science (2sh/lab)

Physical Science (2sh/lab) <i>met by PHYS 1210</i>

Culture and Society (4sh)

Ethical Reasoning (2sh)

Intermediate Level Writing

Two courses in the context of your major that specifically address writing clearly and doing effective research

Writing Intensive Course (4sh) <i>met by PHEN 1410 and PHEN 2950</i>

Research Writing Course (4sh)

Keystone

Interdisciplinary integration of skills and knowledge applied to contemporary social issues

Keystone Seminar (4sh)

The Academic Planning Guide is designed as a guide for students planning their course selections. The information on this page provides only a suggested schedule. Actual course selections should be made with the advice and consent of a faculty advisor. While accurately portraying the information contained in the college catalog, this form is not considered a legal substitute for that document. Students should become familiar with the catalog in effect at the time in which they entered the institution.