

PRE-ENGINEERING (BA)

General Undergraduate Admission Requirements

All applicants must meet the general admission requirements for Concordia University Chicago undergraduate programs as published in the Concordia University Chicago academic catalog.

New students are accepted into undergraduate degree-seeking programs for online (ADP) and on-campus (Traditional) study in the fall and spring semesters. If you have any questions please work with your

The Pre-Engineering program will follow the same General Education requirements as other programs in The Health Science & Technology College.

BA-Pre-Engineering (62 Hours)

Code	Title	Hours
Required Courses		
MAT-2500	Calculus I	4
MAT-2600	Calculus II	4
MAT-3100	Calculus III	4
MAT-3010	Probability and Statistics	3
MAT-3500	Mathematical Proof	3
MAT-3600	Linear Algebra	3
MAT-3200	Differential Equations	3
BIO-2011	General Biology I (With Lab)	4
PHY-2311	Physics for Engineering I	4
PHY-2312	Physics for Engineering II	4
PHY-2313	Fundamentals in Engineering Physics III	4
CSC-2410	Computer Science I	3
CSC-2411	Applied Programming Techniques in Computer Science I	1
CHE-2211	General Chemistry I (With Lab)	4
CHE-2212	General Chemistry II (With Lab)	4
CHE-4901	Seminar in Chemistry *	3
Required Electives *		6
MAT/CHE/PHY 4000 level and above		
MAT/CHE/PHY 3000 level and above		
Required if Transfer to Valparaiso University		
PES-1010	Fitness and Wellness	1
Total Hours		62

The total hours for the program is 120 credits. This includes general education, electives and major requirements above.

Graduation Requirements

Students in the College of Health, Science and Technology or The College of Theology, Arts and Humanities must meet all University requirements found in the Academic Information section of this catalog. Specific requirements for these Colleges include the following:

- A minimum cumulative GPA of 2.00 for all coursework completed at CUC
- A minimum GPA of 2.00 for all courses taken in the major at CUC

- A minimum grade of C for all courses taken in a major at CUC
- All administrative obligations to CUC must be cleared in order to prompt the release of CUC transcripts and diploma(s).
- The Division of Natural Sciences requires a minimum grade of D- for courses within the major that are not pre-requisites for other courses. For courses that are pre-requisites, the C minimum remains unless superseded by admission grade requirements for specific programs, e.g., medicine/dentistry/pharmacy at LECOM, etc.).

3+2 Mechanical Engineering Program

Students enrolled in the B.A. Pre-engineering major at CUC can participate in the 3+2 Mechanical Engineering program. This pathway allows students to earn a B.A. in Pre-Engineering from CUC, followed by two additional years, and one summer online, of Mechanical Engineering coursework at Valparaiso University to obtain a B.S. in Mechanical Engineering. This program offers students small class sizes, close faculty advisement, and a tailored academic experience that combines liberal arts and pre-engineering coursework. In the first three years, students build a solid foundation, then transition to Valparaiso University for the final two years, to specialize in Mechanical Engineering. Upon completion, students can receive both a Bachelor of Arts in Pre-Engineering from CUC and a Bachelor of Science in Mechanical Engineering from Valparaiso. This seamless pathway, supported by a partnership between the institutions, offers flexibility for students to explore other majors like mathematics or computer science, without losing momentum toward their engineering degree. The program blends critical thinking skills from liberal arts with technical expertise, preparing students for successful careers in mechanical engineering while fostering creativity and innovation.

*Students who transition to Valparaiso University after completing six semesters at CUC can fulfill the course requirements of CHE 4901 Seminar in Chemistry, three hours of MAT/CHE/PHY 4000 level, and three hours of MAT/CHE/PHY 3000 by transferring courses from Valparaiso University's Mechanical Engineering program. These transferred courses need not align with CUC's specific curriculum.

Incoming students can declare a B.A. in Pre-Engineering upon entry to CUC. To be considered for acceptance into the 3+2 Program with Valparaiso University, B.A./B.S. Mechanical Engineering, students must present the following by the end of the Spring semester of their third year.

- A completed application for admission to Valparaiso University
- All courses
- A cumulative GPA of 3.0
- A course grade of "C" or better must be earned to be accepted for transfer.
- The student has a 3.0 or higher-grade point average.
- They must meet the general education graduation requirements as approved by Valparaiso University at the time of the student's admission to the Mechanical Engineering program.
- Payments of all tuition and fees due to Concordia University Chicago. All holds must be removed to receive transcripts and diploma.