COLLEGE OF ARTS & SCIENCES

PRE-ENGINEERING PROGRAM

About the Program

The one or two-year pre-engineering program prepares students to pursue majors in any area of engineering. Students may wish to continue at The University of Scranton for electrical, computer or mechanical engineering, or they may apply to transfer to another university's undergraduate engineering program.

Outcomes & Opportunities

- Should you stay on at Scranton for your engineering degree, you can expect to pursue an internship in engineering. Nearly all upper-class students obtain paid engineering internships during the summer.

- Engineering plays a significant role in solving societal problems. Engineers develop new processes and products, always focusing on safety and responsible use of resources.

- From basic infrastructure of roads and bridges to evolving areas of technology, engineering is at the forefront of innovation.

- Building on knowledge and skills developed throughout the pre-engineering program, students who have completed this program are expected, within a few years, to have pursued a bachelor's degree program in engineering (if desired) or established themselves as professionals.

- Majors pursued by graduates of the pre-engineering program include aerospace engineering, biomedical engineering, chemical engineering, civil engineering, computer engineering, electrical engineering or mechanical engineering.

Scranton engineering students achieve top finishes in prestigious regional and national engineering competitions.

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SUCCESS AHEAD

admissions.scranton.edu/preeng

PRE-ENGINEERING PROGRAM CURRICULUM

	Department & Number - Descriptive Title of Course	Fall Cr.	Spr. Cr.
FIRST YEAR			
COGNATE (GE NSCI)	PHYS 140/PHYS 140L - (E) Elements of Physics I –		
	PHYS 141/PHYS 141L - (E) Elements of Physics II	4	4
COGNATE (GE QUAN)	MATH 114 - (Q) Calculus I – MATH 221 Calculus II	4	4
COGNATE	CHEM 112-113 - (E) General & Analytical Chemistry/CHEM 112L-113L	4.5	4.5
GE FSEM	First Year Seminar [1]		
GE PHIL	PHIL 120 - Introduction to Philosophy		3
GE T/RS	T/RS 121 - Theology I: Introduction to the Bible		3
GE WRTG	WRTG 107 - (FYW) Composition	3	
		15.5	**18.5**
SECOND YEAR			
COGNATE	COGNATE ELECTIVES [2]	3-4	6-7
COGNATE	MATH 222 - Calculus III – MATH 341 - Differential Equations	4	4
COGNATE	CMPS 134 - Computer Science I/ CMPS 134L - Computer Science I Lab	4	
MAJOR	ENGR 253L - An Introduction to Computer-Aided Design –	1	1
	ENGR 254L - 3D Computer-aided Design		
GE ELECTIVE	HUMANITIES/S/BH Electives	6	6
		18-19	**17-18**

Total: 70-71 Credits

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[1] *The selection of a First Year Seminar is likely to fulfill requirements both for the First Year Seminar and a General Education Requirement. Thus, the First Year Seminar will not add to the total credits for the semester. Talk with your advisor if you have any questions.*

[2] *Selected in consultation with pre-engineering advisor. Suggested courses include PHYS 270/PHYS 270L - (W,EPW: Lab only) Elements of Modern Physics, ENGR 250 - Engineering Mechanics-Statics, ENGR 252 - Solid State Devices & Power Electronics, EE 241/EE 241L - (EPW) Circuit Analysis, E/CE 240 - Introduction to Computer Engineering, ENGR 352 - Statistical and Engineering Thermodynamics, CHEM 232 - (E) Organic Chemistry/CHEM 232L - Organic Chemistry Laboratory, CHEM 233 - (E) Organic Chemistry/CHEM 233L - Organic Chemistry Laboratory, CMPS 144 - Computer Science II, MATH 351 - Linear Algebra.*

For more information about the Physics and Electrical Engineering departments, visit its website at scranton.edu/academics.

Curriculum grid effective for the 2022-23 academic year in accordance with the undergraduate course catalog.

CONTACT INFORMATION
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1.888.SCRANTON *or visit* **admissions.scranton.edu**

The computer and electrical engineering programs at The University of Scranton are accredited by the Engineering Accreditation Commission of ABET.