ELECTRICAL ENGINEERING

COLLEGE OF ARTS & SCIENCES

ABOUT THE MAJOR

Electrical Engineering applies physics and math to areas like photonics, semiconductors, sensors, circuit design, power systems, telecommunications, signal processing, computer interfacing, and robotics. Scranton's project-based curriculum emphasizes hands-on design and analysis.

CONTACT US

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admissions.scranton.edu/electrical-engineering

The Electrical Engineering Program is accredited by the Engineering Accreditation Commission of ABET.

ABET | Engineering Accreditation Commission

OUTCOMES & OPPORTUNITIES

- Nearly all upper-level engineering students secure paid summer internships at leading organizations, such as Lockheed Martin, PepsiCo, Pride Mobility, U.S. Department of Defense, Hershey Corporation, and Tobyhanna Army Depot.
- Engineering majors at Scranton are well prepared to excel in private, public, and government sectors, with recent graduates employed by BAE Systems, Lockheed Martin, Microsoft, GE Aerospace Systems, and PPL Corporation in roles such as electrical, facility, nuclear, product marketing, and systems engineers.
- Many electrical engineering majors pursue graduate study at institutions like Drexel, Lehigh, Penn State, SUNY Binghamton, Miami, Rochester, and Yale, while others launch careers in industry immediately after graduation.



ELECTRICAL ENGINEERING

128 Credits

LEARN MORE!

1st Year: FALL

COURSE#	COURSE TITLE	CREDITS
CHEM 112	General and Analytical Chemistry	3
MATH 114	Calculus I	4
WRTG 107	Composition	3
ENGR 150	Foundations of Physics and Engineering	3
PHIL 120	Introduction to Philosophy	3
First Year Seminar		0
	Total Credits: **16**	

1st Year: SPRING

COURSE#	COURSE TITLE	CREDITS
PHYS 140/PHYS 140L	Elements of Physics I	4
MATH 221	Calculus II	4
CMPS 134/134L	Computer Science I + Lab	4
T/RS 121	Theology I: Introduction to the Bible	3
First Year Seminar		0
	Total Credits: **15**	

2nd Year: FALL

COURSE#	COURSE TITLE	CREDITS
E/CE 240/240L	- Introduction to Computer Engineering + Lab	4
EE 250/250L	Computational Tools for Physics and Engineering + Lab	4
PHYS 141/141L	Elements of Physics II + Lab	4
MATH 222	Calculus III	4
	Total Credits: **16**	

2nd Year: SPRING

COURSE#	COURSE TITLE	CREDITS
EE 241/EE 241L	Circuit Analysis + Lab	4
ENGR 252	- Solid State Devices & Power Electronics	3
MATH 341	Differential Equations	4
PHIL 210	Ethics	3
HUMN ELECT:	Humanities Elective	3
	Total Credits: **17**	

3rd Year: FALL

COURSE#	COURSE TITLE	CREDITS
EE 343/343L	Electronic Circuits I + Lab	4
EE 346	Digital Signal Processing	3
PHYS 270/270L	Elements of Modern Physics + Lab	4
ENGR 350	Applied and Engineering Mathematics	3
HUMN ELECT:	Humanities Elective	3
	Total Credits: **17**	

3rd Year: SPRING

COURSE#	COURSE TITLE	CREDITS
EE 344/344L	Circuits II	4
E/CE 340	Digital Systems	3
COGNATE ELECT	Cognate Elective	3
T/RS 122	Theology II: Introduction to Christian Theology	3
HUMN ELECT	Humanities Electives	3
	Total Credits: **18**	

4th Year: FALL

COURSE#	COURSE TITLE	CREDITS
EE 449/449L	Embedded Systems + Lab	3
EE 450	Control Systems	3
EE 447	Electromagnetics I	3
HUMN ELECT	Humanities Electives	3
S/BH ELECT	Social/Behavioral Electives	3
	Total Credits: **15**	

4th Year: SPRING

COURSE#	COURSE TITLE	CREDITS
EE 451	Communication Systems	3
EE 454	Robotics Design Project and Professional Practice	3
EE 448/448L	Electromagnetics II + Lab	4
S/BH ELECT	Social/Behavioral Electives	3
PHIL ELECT or **T/RS ELECT**	Philosophy Elective or Theology Elective	3
	Total Credits: **15**	

This is a sample curriculum. Please refer to the Undergraduate Catalog at **scranton.edu/catalog**.

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