engineering

B.Eng. in Electrical Engineering

program structure

The Electrical Engineering Program fosters graduates with desired characteristics for the future of jobs in the digital revolution era. We focus on professionalism, cross-cultural competency, Communication skills, technological literacy, and design mindset.

The research and instructional expertise of our faculty are in the areas emphasised in Thailand 4.0 policies: Cyber-physical systems, alternative energy and power efficiency, autonomous robots for manufacturing, smart electronics, advanced telecommunications, data analytics and information management.

The curriculum is a balanced mix between lecture based, seminar, project-based, and laboratory Courses.

Practical work experience is acquired through a required junior Summer Internship and optional cooperative study or oversea training.

The program is divided into four sub-disciplines:

- Electrical Power
- Mechatronics
- Communications and Data
- Electronics.

*Eligible for professional registration with CoE and ACPE.

Credits to complete the degree

Electrical Power
145 credits
GE 30 / EE 109 / Free Elective 6

Mechatronics
135 credits
GE 30 / EE 99 / Free Elective 6

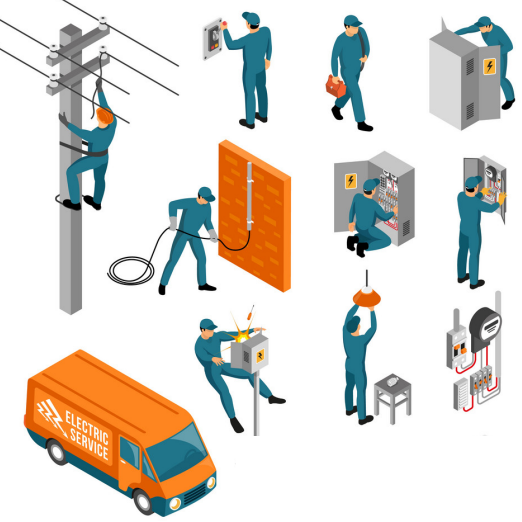
Communications and Data
133 credits
GE 30 / EE 97 / Free Elective 6

Electronics
133 credits
GE 30 / EE 97 / Free Elective 6

tuition fee

2,750 USD/semester
(21,820 USD for the entire program)

** 90,000 baht/semester (720,000 baht for the entire program)



Electrical engineering study plan

	Semester 1	Semester 2
Year 1	Introduction to Calculus Electrical Engineering Roadmap Physics 1 Chemistry Introduction to Engineering Programming (GENED Electives) (GENED Electives)	Advanced Calculus Complex Analysis and Linear Algebra Physics 2 Digital System Design Creative Stem Design 1 (GENED) (GENED Electives)
Year 2	Differential Equations for Engineers Electric Circuits Probability and Statistics for Engineers Engineering Electromagnetics Electrical Engineering Materials Engineering Materials Renewable Energy (GENED Electives) (GENED Electives)	Engineering Electronics Microprocessors and Microcontrollers Signals and Systems Electrical Instruments and Measurements Principles of Communications Fundamental of Electrical Machines Creative Stem Design 2 (GENED)
Year 3	Probability and Statistics For Engineering Engineering Mechanics Power Electronics Object-Oriented Programming Electrical Power Systems Electrical Machines and Drives Industrial Electronics Robotics Digital Communications Electromagnetics Wave and Transmission Lines Integrated Circuit Design Electrical Power Engineering Laboratory 1 Mechatronic Laboratory 1 Telecommunications Engineering Laboratory 1 Electronics Engineering Laboratory 1 Electrical Engineering Elective (GENED Electives)	Junior Engineering Design Engineering Drawing Control Systems Electrical System Design Energy Conservation and Management Mechatronics and Embedded Microcomputer Data Communications and Networking Electrical Power Engineering Laboratory 2 Telecommunications Engineering Laboratory 2 Electronics Engineering Laboratory 2 Electrical Engineering Elective Electrical Engineering Elective Electrical Engineering Elective (GENED Electives)
Year 3	*Summer (All Tracks) - Industrial Training*	
Year 4	Senior Capstone Design *or* Cooperative Education *or* Oversea Training	Electrical Engineering Elective Electrical Engineering Elective Free Elective 1 Free Elective 2 (GENED Electives) (GENED Electives)