



FACULTY OF ENGINEERING

CHIANG MAI UNIVERSITY

Bachelor of Engineering Program
in Electrical Engineering and Smart Grid Technology
(International Program)

ABOUT THE PROGRAM:

Electrical Engineering and Smart Grid Technology is a program that focuses on theory and practice that complies with digital information and control technology to improve the reliability and efficiency of the electric grid.

INTERNATIONAL PARTNERSHIPS:



Muroran Institute of Technology
Mie University



Montpellier University
Sigma Clermont



Chung Aug University
Hanbat National University



Institute Pertanian Bogor University



University of Michigan
University of South Carolina



National Taipei University of Technology



BACHELOR OF ENGINEERING PROGRAM IN ELECTRICAL ENGINEERING AND SMART GRID TECHNOLOGY

(International Program)

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STUDY PLAN

Year 1

First Semester	Total 21 credits	Second Semester	Total 20 credits
001101 Fundamental English 1	3	001102 Fundamental English 2	3
203162 General Chemistry for Engineering Students	3	140104 Citizenship	3
203167 General Chemistry Laboratory for Engineering Students	1	206162 Calculus for Engineering 2	3
206161 Calculus for Engineering 1	3	207106 Physics for Engineering and Agro-Industry Students 2	3
207105 Physics for Engineering and Agro-Industry Students 1	3	207116 Physics Laboratory for Engineering and Agro-Industry Students 2	1
207115 Physics Laboratory for Engineering and Agro-Industry Students 1	1	259107 Engineering Mechanics 1	3
259104 Engineering Drawing	3	259106 Workshop Technology	3
259103 Engineering Materials	3	259201 Computer Programming for Engineers	3
259191 Principle of Being Professional	1		

Year 2

First Semester	Total 21 credits	Second Semester	Total 19 credits
001201 Critical Reading and Effective Writing	3	001225 English in Science and Technology Context	3
206261 Calculus for Engineering 3	3	206362 Applied Differential Equation for Engineers	3
208150 Probability and Statistics	3	252210 Basic Electrical Engineering Laboratory 1	1
252202 Mathematics and Computing for Electrical Engineering	3	252201 Electrical Measurements and Instruments	3
252213 Electric Circuits Analysis	3	252222 Electrical Machines	3
252236 Electronic Engineering Innovative Co-creator	3	252311 Electromagnetic Fields and Waves	3
		252317 Signal Analysis	3

Year 3

First Semester	Total 19 credits	Second Semester	Total 17 credits
252301 Engineering Stochastic Processes	3	252429 Electrical System Design	3
252325 Power Generation, Transmission and Distribution	3	252435 Power Electronics	1
252330 Electronic Engineering Laboratory	1	252340 Basic Communication Engineering Laboratory 1	1
252342 Principles of Communication Systems	3	252350 Basic Electrical Power Engineering Laboratory 1	3
252336 Digital Electronics and Microcontroller	3	Major Elective	3
252353 Control Systems	3	General Education Elective Courses	4
261111 Internet and Online Community	3	Free Elective	3

Year 4 (Capstone Design Project Plan)

First Semester	Total 15 credits	Second Semester	Total 10 credits
252475 Distributed Generation Technologies	3	252494 Capstone Design Project in Electrical Engineering	3
252423 Electrical Power System Analysis	3	259192 Skills for Professionalism and Entrepreneurship 1	1
252491 Preliminary Study for Project Planning	1	Major Elective Courses	3
252340 Basic Communication Engineering Laboratory 1	1	Free Elective	3
252350 Basic Electrical Power Engineering Laboratory 1	1		
General Education Elective Courses	3		
Major Elective	4		

Year 4 (Cooperative Plan)

First Semester	Total 19 credits	Second Semester	Total 6 credits
252423 Electrical Power System Analysis	3	252488 Cooperative Education in Electrical Engineering	6
252475 Distributed Generation Technologies	3		
252491 Preliminary Study for Project Planning	1		
259192 Skills for Professionalism and Entrepreneurship	1		
252340 Basic Communication Engineering Laboratory 1	1		
252350 Basic Electrical Power Engineering Laboratory 1	1		
Major Elective	4		
General Education Elective Courses	3		
Free Elective	3		

ABOUT THE PROGRAM

The program enhances courses on smart grid technology, electric vehicles, applications of the Internet of Things (IoT) and artificial intelligence (AI) through teaching, operations and extracurricular activities relating to academics, profession, social and service, and others. In accordance with the objectives of the curriculum, to provide students with knowledge and understanding that will benefit the application of electrical engineering for solving engineering problems.

The Faculty of Engineering has a group of personnel with expertise in various fields and has close cooperation with the electrical authorities of the country, including the Electricity Generating Authority of Thailand (EGAT), the Metropolitan Electricity Authority (MEA), and the Provincial Electricity Authority (PEA).

CAREER OPPORTUNITIES

Electrical Engineer in Power System Operator, Power Generation and Energy Management, Electrical Project Engineer, Electrical Asset Engineer, Electrical System Design Engineer, Electrical Field Engineer, Electrical Maintenance Engineer

INTERNATIONAL PARTNERSHIPS



TUITION FEES

Thai nationality:
50,000 baht per semester
Other nationalities:
70,000 baht per semester

CONTACT US

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