

# ELECTRICAL ENGINEERING International Program (Bachelor of Engineering)



### **General Description**

Bachelor of Electrical Engineering aims to produce graduates who are knowledgeable in academic and have practical skills and also can seek knowledge from research and self-practice.

The objectives of this curriculum for producing graduates are as following.

1. Have knowledge and ability in the field of electrical engineering profession, Have skills and readiness in transfer technology management related to electrical engineering and Maintain yourself in professional ethics

## **Career Opportunities**

<sup>.</sup> Electrical engineering offers diverse career options in areas such as energy, electrical power systems, operation and control, telecommunications, electronics, biotechnology, information technology and consulting services.

1 Staffs in in educational institutions of government and private sectors such as electric utilities etc.

2 Operation or owner in related field such as engineer, project engineer, consults engineering As an electrical engineer, you will have a range of specialist skills in the design, testing and maintenance of electrical and electronic systems. You could specialize in areas including electrical power systems, electronic system design, electronic instrumentation, control systems and automation, system engineering, embedded systems and communications systems and networks.



Faculty of Engineering, Naresuan University, Phitsanulok 65000, Thailand



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#### **Curriculum Structure**

Requirements	Credits
1. General Education Courses	30
2. Specialized Courses:	109
2.1 Core Courses	106
2.2 Major Elective Courses	12
2.3 Undergraduate Thesis	3
2.4 Non-Credit Courses	7
3. Free Elective Courses	6
Total	145

### **General Education Courses**

Students has to take General Education Courses of 30 credits.

Subjects	Electrical Engineering (Power Engineering)	Electrical Engineering (Communication Engineering)
<b>Core Courses</b> choose 105 credits from the following courses	Electrical Machine, Electrical Engineering Laboratory, Power Electronics, High Voltage Engineering, Electrical Power System, Power Plants and Substations, Electrical System Design, Power System Protection, etc.	Principles of Communications, Data Communication and Network, Antenna Engineering, Telecommunication Engineering Laboratory, Signal Processing, Digital Communications, Communication Network and Transmission Lines, Microwave Engineering, Optical Communications, etc.
Major elective courses choose 12 credits from the following courses	Applied Electrical Engineering Mathematics, Signal Processing, Network Synthesis, Renewable Energy, Illumination Engineering, Electrical Engineering Materials, Electrical Estimation and System Design, Power System Stability, Electric Drives, etc.	Applied Electrical Engineering Mathematics, Electromagnetic Fields, Communication Electronics, Digital Signal Processing, Pulse, Digital and Switching Circuits, Satellite Communications, Radio Wave Propagation, Broadband Communications, Statistical Communications, etc.
	Students have to take 7 credits or not less than 270 hours from Training in Electrical Engineering	
<b>Free Elective Courses</b> Students can take Electives of 6 credits from any faculty in Naresuan University.		

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**Degree Information** 

- Duration: 4 Years (8 Semesters)
- Tuition Fee: 16,000 Bath/Semester