## Electrical Engineering





# Electrical Engineering

### The pillar of industrial development!

Did you know that Electrical Engineering has been the driving force behind the industrial revolution that shaped the modern world? It is responsible for electricity production, using conventional methods and renewable energy sources. With the evolution of electronics, Electrical Engineering leads the development of all emerging technologies, such as computers, wireless and optical telecommunications, automation, robotics, artificial intelligence, electric cars, smart networks, and countless other applications.

### **BSc in Electrical Engineering**

A degree in Electrical Engineering will equip you with valuable knowledge in the principles of Electrical Engineering, Electronics, and Electromagnetism, and practical skills you can apply in design, data analysis, and problem-solving related to this field and all the relevant modern technologies. A degree in Electrical Engineering will grant you instant access to numerous employment opportunities in the public and private sector and the industry. You will also acquire the academic knowledge and skills to pursue a postgraduate degree.

### Long-standing Tradition and Recognition

The academic community of Frederick University has over thirty years of experience in higher education in the field of Electrical Engineering - from Frederick Institute of Technology until its upgrade to a University in 2007. Due to this long-standing tradition, our graduates are sought after and hold key positions in governmental and semi-governmental organizations, the private sector, and the industry. All the faculty members teaching Electrical Engineering are PhD holders, specialised in the areas of Electrical Engineering taught at Frederick University

#### **Guaranteed employment**

97% of our graduates are employed by governmental and semi-governmental organizations, companies in the private sector, and the industry right after obtaining their degree. They can seek out job opportunities in many sectors, including, but not limited to, the following:

- Telecommunications
- Electrical Contracting
- Renewable Energy
- Security systems
- Industrial automation and control systems
- Electrical equipment maintenance
- Electrical maintenance of buildings and facilities
- Construction companies







The Electrical Engineering degree\* is accredited by academic and professional bodies. It is recognized by the Cyprus Scientific and Technical Chamber (ETEK) - Electrical Engineering and Electronics specializations, the Department of Electrical and Mechanical Services of Cyprus, the Hellenic National Academic Recognition and Information Center (DOATAP), the Institute of Engineering and Technology (IET) and the Institute of Electrical and Electronics Engineers (IEEE). Upon obtaining a postgraduate degree, graduates of this program can register at the Technical Chamber of Greece (TEE).



You will gain hands-on experience through the program's Practical Training course. You will also have the opportunity to participate in faculty-led research programs, such as: "technorevmeta", a program looking into smart power networks; "ICARUS" a research program focusing on the wireless charging of green/recyclable,batteryfree sensors; and "CyIRG" which focuses on developing applications for predicting the effects of space weather on radio systems. The majority of the courses are directly related to the latest developments in science, research, and innovation.

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Pop of the courses offered by this program, is complemented by lab activities. You will be working in laboratories with specialized equipment and gain practical skills in dozens of courses, such as Circuit Analysis I & II, Analogue Electronics I & II, Digital Logic, Digital Systems Design, Programming Principles, Instrumentation and Measurements, Electrical Engineering Workshop, Control Engineering, Signals Systems and Transforms, Electrical Machines, Power Systems Analysis, Communications I & II. Transmission Lines and Waves, Real-Time Embedded Systems, Renewable Energy Systems, Modern Control Systems, forms, Electrical Machines, Power Systems Analysis, Communications I & II, Transmission Lines and Waves, Real Time embedded Systems, Renewable Energy Systems, Modern Control Systems.

<sup>\*</sup>The requirements to practice a profession vary from country to country, so if you wish to practice your profession outside Cyprus and Greece, you are advised to confirm that this qualification is accredited by the competent professional body in the country in which you intend to work.



I chose Frederick University for my studies in Electrical Engineering because when I asked around which was the best university in the field, everyone pointed at it. And having experienced it, I can now confirm it myself.

### David Hadjichristodoulou, graduate

66 My studies at Frederick University helped me believe in myself. With the support of my professors, I have built my character and gained valuable knowledge that prepared me for the job market. ? ?

### Eleni Charalambous, graduate

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Expertise, generosity, and dedication are the characteristics of the teaching staff of the Electrical Engineering program at Frederick University. The program offers a multidimensional education in engineering and the solid foundations to make it in the job market.

### Sotiris Anastasiou, graduate

I decided to study Electrical Engineering because I was always fascinated by the way devices work. During my studies, I acquired in-depth knowledge in the field. The electrical engineering profession opens up horizons. If you choose this field of study one thing is certain: you will grow and gain valuable knowledge.

### Theofilos Michael, graduate

6 During my Electrical Engineering studies at Frederick University, I built solid foundations and a unique skillset, which will play an important role in the course of my career and my professional progress. ? ?

lliana Tsaloufa, graduate

### FREDERICK UNIVERSITY

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