## BACHELOR OF ENGINEERING IN ELECTRONIC ENGINEERING

## CODE: TA_EELEC_D

*2 years part time*

### Who is this course for?

The Bachelor of Engineering Programme is designed to provide students with a proficiency in Electronic Engineering and equip them with professional engineering skills and knowledge that prepares them for employment or further study. Graduates of the Programme will demonstrate a strong knowledge of electronic hardware and embedded computing technology and display excellent trouble shooting and problem solving skills.

### Entry Requirements

This Programme is a part time Add-On programme to the Higher Certificate in Electronic Engineering. Applicants need to hold a Higher Certificate in Electronic Engineering or an equivalent qualification.

### Course Timetable

The course runs three evening per week over two semesters. Alternatively, students may attend for one full day (including evening) each week.

### Who can apply?

This course is open to all eligible students

### Course Summary

This Programme provides you with the skills necessary to work in all aspects of the ICT industry including electronics, information technology, telecommunications, and computer network engineering, while also offering the graduate an option of progressing to an Honours Degree programme. The Programme focuses on hardware and data communications design. Students spend approximately 60% of their time working with advanced equipment and software in our laboratories.

### Career Opportunities

With our industry-relevant curriculum, graduates will be well placed to meet the needs of industry. Graduates can work in areas such as product design, maintenance, wireless system maintenance and computer networking design and support.

### Course and Exam Information

The Bachelor of Engineering Programme is delivered over two years with examinations in January and May of each year. The Programme introduces specialist design-based modules in communications, computing networks, digital circuit design, control systems and the fabrication of microelectronic devices. In addition you will take an Integrated Project module normally over two semesters.

### KEY DATES

| | |
|---|---|
| **INDUCTION** | **4th/5th September 2018** |
| **CLASSES BEGIN** | **Mid-September 2018** |
| **CLASSES FINISH** | **End April 2019** |
| **EXAMS** | **January and May 2019** |
| **RESULTS** | **June 2019** |

# BACHELOR OF ENGINEERING IN ELECTRONIC ENGINEERING

# (NFQ LEVEL 7)



*August 2018*

## How to Apply

### Students apply directly to IT Tallaght

Please apply through www.it-tallaght.ie

Total cost of course (180 credits) is

Year 1 €1,290 / Year 2 €1,290

### Please Note

You will be required to pay a €100 application fee with your application. If you are offered a place on the course your fee will be put towards your full course fees. The application fee is only refundable if the course does not run.

**The balance of fees due are as follows:**
**On acceptance of place - €550**

**Payment of half your course fees due by 31 October 2018.**

**Payment of full fees due by 31 January 2019.**

**For further information – course specific**

Please Contact: john.byrne@it-tallaght.ie

**For queries on the application process**

Please contact LLL@it-tallaght.ie or phone the Lifelong Learning Team @ 01-4042101

B. Eng (Hons) in Electronic Engineering (Semester 1–8)
With Embedded B.Eng. in Electronic Engineering (Semester 1–6)
With Embedded Higher Certificate in Electronic Engineering (Semester 1–4)

| Streams | Semester 1 | Semester 2 | Semester 3 | Semester 4 | Semester 5 | Semester 6 | Semester 7 | Semester 8 |
|---|---|---|---|---|---|---|---|---|
| **Mathematics Stream** | Mathematics 1 | Mathematics 2 | Mathematics 3 | Mathematics 4 | Mathematics 5 | Mathematics 6 | Mathematics 7 | Mathematics 8 |
| **Communications, Team Work & Project Work** | Learning to Learn<br>Electronic Workshop | Computer Aided Design | Project | Project | Integrated Lab work* | Integrated Lab work* | Project | Project<br>Management Practice |
| **Analogue Design** | Electric Circuits 1 | Electric Circuits 2<br>Analogue Electronics | | Control Systems<br>Solid State Circuits | | Control System Design<br>Analogue System Design<br>Power Engineering | | Analogue IC Design (E) |
| **Communications Eng** | | | Computer Network Fundamentals<br>Radio Propagation Systems | Routers & Switches | Network Design<br>Digital Communications | Analysis of Analogue Communications | Analysis of Digital Communications<br>Comms Systems (E<br>Internet Systems (E) | Wireless Comms (E)<br>Network Eng (E) |
| **Software Development** | Interactive Computer Programming | Interactive Embedded Systems | Java Programming | Microprocessor Fundamentals | C Programming | Embedded Systems | Software Devl. 1 (E) | Operating Systems (E)<br>Software Devl. 2 (E) |
| **Engineering Science** | Engineering Science | | | | Semiconductor Fabrication | | Semiconductor Device Physics (E) | Submicron MOSFET Fabrication (E) |
| **Digital Design** | | Digital Systems 1 | Digital Systems 2 | | Digital Design with Verilog | | Digital FSM Design | Digital Processor Design (E)<br>Digital Signal Processing |