

HNC Engineering (Electrical and Electronic)

Location	Stretford Campus
Course Type	University Level
Department	Engineering
Start Date	Monday 14th September 2026
Duration	Full-time, 1 Year
Time	09:00 - 16:00
Fee	£ 8000.00
Course Code	TFQ-HM4H-1800

Course Overview

The aim of this course is to provide students with a broader knowledge of engineering principles and methodology, combined with the development of research and analytical skills, to prepare you for employment opportunities in the Electrical and Electronic Engineering field. There will be a focus on reflection, critical thinking, environmental impact, analysis and personal development.

Our dedicated faculty, comprised of experienced professionals, will guide you through the latest industry trends, technological advancements, and sustainable practices. You will also develop essential skills in problem-solving, project management, and teamwork, all of which are highly valued by employers in the field.

Upon successful completion of the HNC program, you will have the option to progress to an HND or enter the workforce with the confidence and competence to contribute effectively to the electrical and electronic engineering industry.

Course Requirements

Whilst applications are considered on individual basis, offers are usually based on the requirement to have:

64 UCAS points from either:

- A level 3 vocational qualification in a related subject
- GCE A levels
- An Access to Higher Education Diploma in a related subject
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Applicants should have GCSEs grades C/4 or above in maths and English or the equivalent level 2 qualifications.

Mature students with relevant work experience and/or professional qualifications are welcome to apply and may be asked to attend interview

What You Will Learn

The units lay the foundation of learning by giving students a wide introduction to the engineering sector, with a focused introduction to electrical and electronic engineering. This strengthens and builds core skills while preparing students for more specialist subjects at Level 5 or to enter employment with the necessary skills for job which entail some personal responsibility.

Students will gain broader range of engineering and scientific knowledge linked to practical skills developed through research, directed study, independent study, and workplace scenarios. Students are involved in vocational activities that help them to develop behaviours and transferable skills which include communication, research, teamwork, and analysis, which are held in high regard in higher education and in the workplace.

By the end of Level 4 study, students will have sound knowledge of the basic concepts of electrical and electronic engineering. They will be confident in a range of subject specific skills as well as in general skills and qualities that are key to these important areas of engineering.

Assessment

Coursework and Assignments: Coursework and assignments are common assessment tools. Students are given specific projects or tasks related to their coursework, and they are evaluated on their ability to apply theoretical knowledge to practical problems.

Practical Work: Practical laboratory sessions are a crucial part of an electrical engineering program. Students may be assessed on their ability to conduct experiments, analyse data, and draw conclusions from their findings.

Reports and Technical Writing: Students may be required to write technical reports based on their laboratory work or projects. These reports assess their ability to communicate technical information effectively.

Presentations: Students may be asked to give presentations on engineering topics, projects, or case studies. This assesses their communication and presentation skills, as well as their understanding of the subject matter.

Extensive use is made of computer modelling and simulation techniques and an emphasis is put on practical applications throughout.

Progression

On successful completion you may progress to a HND at Level 5 and then to a top-up Level 6 on a related undergraduate programme such as:

BEng Tech (Hons)

BSc (Hons) Electrical and Electronic Engineering (Top-up)

Career Options

A HNC Engineering (Electrical and Electronic) opens a wide array of rewarding career options in various sectors. Graduates of this program are equipped with a strong foundation in mechanical engineering principles and practical skills, making them valuable assets to industries that rely on innovation, design, and problem-solving. Here are some promising career paths:

CAD technician

Design Engineer

Electrical Engineer

Electronics Engineer

Sound/Broadcast Engineer

Network Engineer

Mandatory Units

At Level 4 you will study the following units:

Engineering Design
Engineering Maths
Engineering Science 1
CAD Schematics for Maintenance Engineering
Electrical and Electronic Principles
Managing a Professional Engineering Project
Automation, Robotics and Programmable Logic Controllers (PLCs)
Digital Principles

Extra Costs Involved

No

Exam Validation Body

Pearson Education Ltd.

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Hours Per Week

6 hours (1 day) part-time or 12 hours (2 days) full-time.

How Long To Complete

Two years part-time with one full day attendance per week, or one year full-time with the equivalent of two full day attendance per week.

Programme Structure

Each unit is worth 15 credits and over the course of the programme you will gain 120 credits.

Contact Details

For further information please email HEenquiries@tcg.ac.uk

Disclaimer

Although every care has been taken to ensure that the information contained within this document is accurate, there may be changes to this programme and provision. We will endeavour to keep prospective and current students updated where appropriate and when the information becomes available.