

Welcome

Welcome to Colchester Institute and to the range of highly successful Engineering courses that we have on offer:

- Mechanical Engineering and Manufacturing Technologies
- Mechanical & Electrical Maintenance
- Fabrication & Welding
- Electronic Engineering

All of the courses are accredited by the well known name of either EAL or City and Guilds.

There is a progression path from L1 up to L3 studies

The higher levels of study support entry into Industry or Higher Education



Mechanical Engineering and Manufacturing Technologies

Considering a career in this section?

Mechanical Engineering and Manufacturing Technologies requires students to create solutions and solve problems, playing a central role in the design and implementation of moving parts in a range of industries. They are also vital in the physical production of materials into goods needed for everyday life.

If you are a student who likes working with their hands and an interest in specialist machinery then this is the career for you.





Mechanical Engineering and Manufacturing Technologies

This Study Programme is made up of 3 main parts:

- Vocational qualification: 4 hours of theory and 7 hours practical
- English & maths: 1-2 hour of study each (if you have a Grade 3 or below)
- Work Experience: 30 hours over the duration of the programme 36 weeks.

L3 in Engineering

L2 in Mechanical Engineering and Manufacturing Technologies

L1 in Engineering and Manufacturing



Study Programme Mechanical & Electrical Maintenance

Considering a career in this section?

Maintenance engineers work in a variety of changing environments from onsite to within a factory. Their individual tasks change on a daily basis to keep production operational. They are also usually multiskilled individuals work with electrical, hydraulic and mechanical systems to fault find and fix the problem.





Mechanical & Electrical Maintenance

This Study Programme is made up of 3 main parts:

- Vocational qualification: 4 hours of theory and 7 hours practical
- English & maths: 1-2 hour of study each (if you have a Grade 3 or below)
- Work Experience: 30 hours over the duration of the programme 36 weeks.



Fabrication and Welding

Considering a career in this section?

Fabrication and welding requires students to manufacture items from various forms of sheet, plate, tubes and sections. This is a diverse trade to enter as work can be onsite, in a factory or at height. This is a highly skilled area requiring a high degree of dexterity to physical join the metal materials using a welding process.









Fabrication and Welding

This Study Programme is made up of 3 main parts:

- Vocational qualification: 4 hours of theory and 7 hours practical
- English & maths: 1-2 hour of study each (if you have a Grade 3 or below)
- Work Experience: 30 hours over the duration of the programme 36 weeks.

L3 in Engineering

L2 in Fabrication & Welding (starting point subject to grades)

L1 in Engineering and Manufacturing (starting point subject to grades)



Electronic Engineering

Considering a career in this section?

Electronic engineers need to use a range of tools to solve electrical and electronic problems. This requires students to calculate electrical/electronic loads and physically create circuits. This work usually involves working on a bench using various pieces of equipment to design, simulate and create the circuit.





Electronic Engineering

This Study Programme is made up of 3 main parts:

- Vocational qualification: 4 hours of theory and 7 hours practical
- English & maths: 1-2 hour of study each (if you have a Grade 3 or below)
- Work Experience: 30 hours over the duration of the programme 36 weeks.



Study Options

Full-Time or Apprenticeship Studies

People can attend courses at Colchester Institute in one of two ways:

Full Time: 2-3 days per week on a Study Programme if you are 16-19 years old (*Currently under Covid conditions only 1 day on-campus and 2 days digital learning*)

Part Time: Various model of attendance subject to the Apprenticeship Standard

Both routes require a student to study English and maths if they have not gained a Grade 4 or above, in these subjects previously



Studies

Apprenticeship – L2 Welding Standard

An apprenticeship enables you to 'earn while you learn' and students follow a programme laid out below:

- The final exams/assessments in an Apprenticeship are known as: End Point Assessment (EPA)
- The Welding EPA consists of a 2 day test of written tests, practical observations and a professional discussion.

Note: It is very important that the company employing the apprentice can cover all aspects of work that is involved in the specialist choice to ensure the apprentice can pass the EPA.



Studies

Apprenticeship – L3 Metal Fabricator Standard

An apprenticeship enables you to 'earn while you learn' and students follow a programme laid out below:

- L3 Knowledge Qualification in Welding, Fabrication & Manufacturing
- Work competency portfolio
- L2 English & maths
- The final exams/assessments in an Apprenticeship are known as an End Point Assessment (EPA) and the above requirements must be met before triggered.
- The Metal Fabricator EPA consists of a 2 day test of written tests, practical observations and a professional discussion.

Note: It is very important that the company employing the apprentice can cover all aspects of work that is involved in the specialist choice to ensure the apprentice can pass the EPA.



Apprenticeship

L3 Engineering Technician Standard (Multiple Roles)

An apprenticeship enables you to 'earn while you learn' and students follow a programme laid out below:

- L2 Competency Qualification
- L3 Knowledge & Competency Qualification
- L2 English & maths
- The final exams/assessments in an Apprenticeship are known as an End Point Assessment (EPA) and the above requirements must be met before triggered.
- The Machinist EPA consists of a 2 day test of written tests, practical observations and a professional discussion.

Note: It is very important that the company employing the apprentice can cover all aspects of work that is involved in the specialist choice to ensure the apprentice can pass the EPA.



Apprenticeship

L3 Machinist Standard

An apprenticeship enables you to 'earn while you learn' and students follow a programme laid out below:

- L2 Knowledge & Competency Qualification in Machining
- L3 Knowledge & Competency Qualification in Machining
- L2 English & maths
- The final exams/assessments in an Apprenticeship are known as an End Point Assessment (EPA) and the above requirements must be met before triggered.
- The Machinist EPA consists of a 2 day test of written tests, practical observations and a professional discussion.

Note: It is very important that the company employing the apprentice can cover all aspects of work that is involved in the specialist choice to ensure the apprentice can pass the EPA.



Where you will be learning

Braintree campus

















Where you will be learning

Colchester campus













