# Leicester College

# **Engineering Fitter Apprenticeship**

#### Course Overview

Our Advanced Engineering Fitter Apprenticeship is conducted over 42 months and covers a multi-skilled engineering programme. As part of your apprenticeship, you will complete the diploma whilst on a day release programme based at our Abbey Park Campus technology centre. Much of the competency that you will be required to demonstrate will be a result of your day to day activities in your place of work. The apprenticeship will require you to complete an endpoint assessment. This will consist of a work-based project, knowledge assessment, and a professional discussion with an independent awarding body. The course has been designed for apprenticeship is a job with training. You will be employed at least 30 hours a week, with 80% of your working hours in your day-to-day role, and the remaining 20% of your time engaged in training or study. By enquiring about this apprenticeship you are not applying for a specific role. For current vacancies please take a look at the apprenticeship vacancies page.

## What you will learn

During the first year, you will cover the acts and regulations important to this industry including Health Safety at Work Act, Personal Protective Equipment (PPE), manual handling, Control of Substances Hazardous to Health (COSHH), Provision and Use of Work Equipment Regulations (PUWER), Noise at Work Regulations, Electricity at Work Regulations. Additionally, you will also learn how to produce risk assessments; how they must be applied in the workplace. Manufacturing and assembly processes for example; filing, sawing, scraping, drilling, soldering, bolting, wire cutting, and threading. Safe use of tools and equipment (hand and power tools); right tool for the job, requirements for machinery checks, adjustments, operation and shut down. You will also learn about different materials and how they are used and applied.

Following on in year 2 you will learn the principles of design and operation, for example; design for cost, minimising waste, productivity (speed), health and safety, and reverse engineering. You will also learn the importance of component and assembly documentation. For example, bill of materials, standard operating procedures, inspection records, assembly instructions, and electrical/pneumatic/hydraulic circuit diagrams. What they are and how to interpret and use them. Component/assembly quality checks for example; checking tolerances, threads, and voltages. Types of faults that occur and problem-solving techniques, for example; cause and effect, 5 Whys, and flow process analysis. Carry out relevant planning and preparation activities before commencing work activity and know-how to source required resources and interpret detailed drawings, specifications, and job instructions. Measuring and testing, checking/inspecting component/assembly for example; use of micrometres, verniers, multimeters, voltmeter.

#### **Entry Requirements**

Ideally, you should have achieved grade 5 or above in GCSE maths and English. However, if you have achieved a grade 4 in either then during your program there will be an opportunity to enrol on a level 2 functional skills course which is the requirement of the overall qualification.

#### How you will be assessed

During the course which lasts a minimum of 36 months, you will have many various assessments. You will carry out a technical certificate diploma at college and will be set on various assignments and assessed on some competency-based activity. During your time at work you will develop and learn many engineering skills and over the length of the course will be assessed by a college trainer and assessor. At the end of the course, you will have to carry out an endpoint assessment which is carried out by an independent awarding body. This will be a short multiple-choice question paper, practical assessments, and a professional discussion.

## **Course Progession**

Depending on the engineering pathway you have been working towards you will qualify as a mechanical fitter, electrical fitter, electronic fitter, instrumentation fitter, pipe fitter, or controls and systems fitter. You are now in a position to progress onto a level 4 engineering qualification or move into full-time education to carry out a degree course.

## What Happens Next

You can express your interest in this apprenticeship by completing an application form or alternatively you can apply for one of our live apprenticeship vacancies via the College website. Our apprenticeships can also be found on the government's apprenticeship site, gov.uk/apply-apprenticeship. As with any other job application, if you are shortlisted, you will be invited for an interview at the employer's premises. You can apply for as many apprenticeship vacancies as you want.

# **Course Details**

Course Code	P00583
Start Date	Various
Study Hours	Full Time
Duration	42 months
Campus	Freemen's Park Campus
Level 3	

