



# All about Engineering



All About Engineering for the prison sector Newsletter 1



A newsletter from City & Guilds on professional and technical education available for prison delivery.

### This newsletter focuses on:

- Our Engineering Qualifications
- Our Engineering Short Courses

## **Performing Engineering Operations**

Available at Levels 1 and 2 the 'PEO' as most call it is a qualification that follows National Vocational Qualification (NVQ) principles of competence demonstration yet can be delivered in a simulated or sheltered environment rather than the workplace. This is particularly helpful as it ensures learners have appropriate levels of health & safety knowledge alongside technical skills to allow them to contribute from day one when entering the workforce. The courses start out quite straightforward with basic marking out and assembly activities but soon progress on to more advanced and engaging content including:

- Producing mechanical engineering drawings using a CAD system
- Forming and assembling pipework systems
- Carrying out aircraft detail fitting activities
- Preparing and proving CNC machine tool programs
- Preparing and using industrial robots
- Preparing and using manual metal arc welding equipment
- Producing composite assemblies
- Stripping and rebuilding motorsport vehicles (pre-competition)
- General electrical and electronic engineering applications

These are a small selection of options in the programme rather than mandatory elements allowing a curriculum to be built around the needs of the learners, local employment opportunities and resources available to the delivery centre.

The qualification numbers to search on our website are 7682-10 for Level 1 and 7682-20 for Level 2.

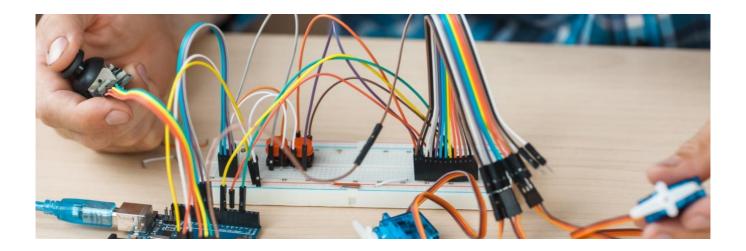
### **Certificates and Diplomas in Engineering**

These qualifications use a different assessment strategy to the 'PEO' but are highly regarded in the sector and used to contribute to apprenticeship frameworks as a result of this. Available as an introductory offer at Level 1 learners can progress all the way up to Level 3 in several disciplines. The main progression routes are available in:

- Fabrication and Welding
- Mechanical Manufacture
- Electrical and Electronic
- Maintenance Technology

They can be used as an alternative to or run alongside the 'PEO'. Search 2850 for more information.





### **CAD Short Courses**

Available from Levels 1 to 3 we offer courses to suit most entry points into the area of Computer Aided Design.

Our **Level 1 Award in Parametric Modelling** is ideal for anyone looking to start working with CAD software, or who already has some limited experience.

Our **Level 2 CAD courses** are for those who already have some experience in computing and want to increase their knowledge and skills.

Our **Level 3 CAD courses** are for those who want to develop specialist 2D/3D design skills, who already have a background in computing and design, and may have worked in manufacturing or engineering design for some time.

The number to search for on the website is 7689 where you will find information and the qualification documentation such as scheme handbooks.

### **Welding Short Courses**

Also available from Levels 1 to 3 our welding short courses support those just starting out in welding to others requiring more advanced training.

Our **Level 1 welding courses** are ideal for anyone who wants to become a welder and is new to welding.

Our **Level 2 welding courses** are aimed at anyone already working in the industry who wants to develop their welding skills further and advance their career.

Our **Level 3 welding courses** are for experienced welders who need a qualification to progress to complex welding work and quality control.

To find out more search 3268 on the search function on our website where you can find all the course documentation needed to plan your delivery.



If there is something specific in the Engineering sector you don't see here the first port of call is the website, https://www.cityandguilds.com/ where you will be able to access our comprehensive offer. To find out more about these courses and the wider offer why not contact our Technical Advisor, Simon Yorke? Simon is experienced in qualification delivery and on hand to support your teams with any queries they may have.



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# Thank you for your continued support.

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