

# Digital Design Engineering



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Start Date	Course Length	Level	Funding Band
September	24- 36 Months	3	£21000

**i** This Apprenticeship is one of the new suite of Apprenticeship Standards which have been developed and designed by employers to improve the overall quality and ensure the correct skills are obtained by Apprentices. The Government has set an overall target to have a further 3 million Apprentices in learning by 2020.

## Overview

West Suffolk College are delivering this Apprenticeship in partnership with Cadcoe, the '**Construction and Design Centre of Excellence**', which offers innovative, advanced technical training and design in 2D CAD, 3D Modelling and BIM for the construction industry.

The role is to produce detailed solutions to achieve the optimum performance of built environment projects via digital models and presentations using software, sketches and electronic visualisations.

The Apprentice will typically support Digital Engineers or other functional specialists in completing complex tasks using digital engineering techniques, specifically:

- Virtualisation and simulation of design, construction and management of assets
- Digital measurement of design, production and management of assets
- Communication of complex engineering principles to stakeholders digitally
- Integration of construction data and information throughout the whole life cycle of the asset

## Entry Requirements

The typical entry requirements for this Apprenticeship will be five GCSEs or equivalent, including Maths and English at Grade A-C or 5 and above.

## Knowledge Required

Understand sustainability issues, engineering principles in the built environment, commercial procedures and risk, understanding costings within a digital environment, design management, application of technology, project planning and resourcing, awareness of the structure of the construction industry and its respective sectors.

## Skills Required

Demonstrate environmental impact of a project, applying engineering principles, prepare design briefs and commercial reports, assist in the implementation of innovation, create simple construction simulations, assess and report on quality standards, carry out a stakeholder presentation.

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### **Behaviours Required**

Work within rules and regulations of professional competence and conduct, identifying own development needs, contribute to effective meetings and present information, understand the existence of team dynamics and the application of personal strengths and weaknesses in group situations.

### **Progression**

Progression from the Level 3 Apprenticeship could lead to Construction Design Manager, Construction Quantity Surveyor, Construction Site Manager, and Civil Engineering Site Manager. This standard has been designed to deliver sufficient competence, underpinning knowledge and understanding in the identified job role to allow Apprentices to meet the requirements of the Construction Skills Certification Scheme (CSCS) or other industry affiliated schemes.

### **Training**

Learners will be required to attend college four days per week during the first term of the Apprenticeship to study CAD programmes such as Revit, Solidworks & Tekla which will be delivered by Cadcoe. Following this, attendance to college is required one day per week to study a **BTEC Level 3 in Construction and the Built Environment**. The Apprentice will be supported in the workplace by a Programme Tutor and will work towards achieving a **NVQ Level 3 in Built Environment Design**.

### **Funding Info for Employers**

If you are a Levy paying employer you will be required to pay for the Apprenticeship training from your Digital Apprenticeship Account.

If you do not pay the Levy or have insufficient funds within your Levy account you will be able to access Government funding. You will be required to contribute 5% of the funding band (listed above) with the Government adding the further 95%.

If you employ less than 50 staff and recruit a 16-18 year old or someone aged 19-24 who has an Education Health and Care Plan no employer contribution to training is required.

If you recruit a 16-18 year old or someone aged 19-24 who has an Education Health and Care Plan, you will also be entitled to a £1,000 grant.

### **What Next**

If you are wanting to find and start an Apprenticeship please visit our website to review the current vacancies we have available

[www.westsuffolkcollege.ac.uk/apprenticeships/apprenticeship-courses](http://www.westsuffolkcollege.ac.uk/apprenticeships/apprenticeship-courses)

Or alternatively contact **01284 716246** / [apprenticeships@wsc.ac.uk](mailto:apprenticeships@wsc.ac.uk) to organise an interview with one of our Apprenticeship Advisors.

If you are an employer wishing to recruit a new Apprentice or want to train an existing member of your workforce please contact us on **01284 716246** / [training@wsc.ac.uk](mailto:training@wsc.ac.uk) to have a discussion with one of our Business Development Executives.

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