

Course Aim

Many companies use Computer Aided Design, Drafting, Engineering and Manufacturing across their industrial application in sectors such as Automotive, Power Generation, Petrochemical, Product Design, Manufacturing, Marine, Defence, Architecture and City Planning etc.

This course aims to deepen the learners' understanding of the mechanical CAD Parametric Modelling environment and its application. It will enable the learner to develop the knowledge and skills to create sketches, work features, table driven parts and assemblies, understand constraints and be able to create a drafted drawing work with an appreciation of BS 8888.

Advanced learners can go on to gain an enhanced appreciation of the engineering applications, such as: Finite Element Analysis, Geometric Dimensioning and Tolerancing and Computer Aided Manufacture. The course will also provide learners with an opportunity to develop hands on skills in their respective areas.

Course Learning Outcomes

1. Set up and explain parameters used in CAD applications
2. Create 3D mechanical models
3. Assemble 3D mechanical models for real word application
4. Interpret drafted engineering drawings
5. Create drafted engineering drawings

Schedule

A blend of face to face classes and practical sessions supported by online knowledge session and resources. Commencing on Wednesday 28 September 2022 from 1pm to 5pm and weekly thereafter for 16 weeks. Professional development classes will also take place during evenings throughout the 16 weeks which will include face to face classes and self-study.

Course Content

- Set up of Autodesk Inventor modelling parameter.
 - Creation of single part mechanical models.
 - Assembly of single parts in to small mechanical assemblies.
 - Use of standard parts and weld types.
 - Set up of Autodesk Inventor Drafting parameter.
 - Creation of single part mechanical drawings.
 - Creation of assemblies and sub-assemblies drawings.
- Extension tasks:
- Use of basic FEA (Finite Element Analysis)
 - Use of basic GD&T (Geometric Dimensioning and Tolerancing)
 - Analyse CAM (Computer Aided Manufacture) applications

Employer Costs

- Large employer at 30% contribution. This is fantastic value for money with a 70% reduction.
- Micro, Small and Medium employer at 10%. This is fantastic value for money with a 90% reduction.
- Free licence for Autodesk package.

Learner Costs

The training is free if you meet the following criteria:

- Aged over 19 years of age
- Working, recently unemployed within the last 12 months or looking for work e.g. coming back into the workforce after a career break
- Resident in the UK and legally entitled to work in the UK
- Free licence for Autodesk package.

Scan the QR code, visit our website (www.lcwc.ac.uk) or email admissions@lcwc.ac.uk for more information!



David Allen



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