



## ENGINEERING TECHNOLOGY LOWESTOFT COLLEGE

### **AUTOCAD C&G7579/301 - 2D TOP UP TO LEVEL 3 COURSE 18 WEEK COURSE AT 2.5 HOURS PER WEEK (45Hrs) FOR AUTO CAD 2007 WINDOWS XP [COMPATIBLE TO LT2007] IN CITY AND GUILDS 7579/301**

As a new course there will be periodic updates & additions as the New course progresses. The emphasis is to be Architectural and mechanical engineering but allowances will be made for Electrical Engineers.

#### ***Is this the right course for me?***

Auto Cad is one of the most popular computer aided drawing packages on the market today. Using Auto Cad requires the development of new skills, but the benefits that accrue will soon be evident.

#### ***What will I need to join the course?***

A good knowledge of engineering drawing, mechanical or built environment. A PREVIOUS C&G LEVEL2 OR EQUIVALENT + Windows XP & file management is ESSENTIAL to complete within the 18 weeks.

#### ***What will I be doing?***

##### **Learning outcomes**

There are **thirteen** learning outcomes to this unit. The learner will be able to:

1. use a layering system and different line type styles
2. define and use a system for grouping objects to form blocks or libraries
3. produce isometric drawings within the 2D environment
4. define and use an adjustable co-ordinate system based on user requirements
5. use complex dimensioning routines
6. use different drawing spaces and complex multi viewing areas
7. produce hard copies of drawings
8. make inquiries of an existing drawing and place reference points
9. use a means of pre-command object selection in order to carry out editing processes
10. change the properties of a number of drawn entities
11. edit blocks/symbols and hatched areas
12. modify continuous lines formed by a connected sequence of lines or arcs
13. use a method to remove unused items and rename other items logically

##### First 13 weeks

This course requires good knowledge of Microsoft Windows XP, & involves the use of basic commands to enable the production of 2-dimensional drawings.

The course is a 'hands on' course where learning is achieved by a series of structured lessons with the main emphasis on practical exercises. The student learns more advanced 2D commands to enable 2D drawings to be more effectively made especially for Architectural drawings.

Plotting - hard copies and plotting in different colours. Layers on/off

Drawing commands - sketch, hatch, solid

Advanced editing - stretch, offset, array, fillet, chamfer, break, divide, measure, extend, rotate, change, properties, scale, mirror

Running object snap	-	permanent object selection
Text	-	fonts, new styles
Blocks	-	blocks, insert, wblock, attributed blocks & uses.
Isometric drawings	-	Complex 3D solid shapes without dimensioning.
Online help	-	Use the Internet connection for City & Guilds or Autodesk Help.
Paper space	-	Complex use of multiple views, scaling, layer visibility & locking.
DXF	-	insert drawing files from other systems
Polylines	-	polylines, pedit
Dimension	-	hometext, update, newtext, dimvars, dimension styles
Grips	-	used inside/outside blocks

Last 5 weeks

This is a continuation of the course which covers topics as assessments leading to the award of City & Guilds Certificate in the use of Auto Cad. Exam standard 2D exercises including on line GOLA written part complex layouts. TWO practical exams 1) Engineering 2) Architectural drawings.

***How long will the course last and what patterns of attendance are available?***

Each part is one evening per week at 2.5 hours per session, total 45 hours, including exam.

Lessons 6.30 – 9.00 pm for 18weeks from Thursday 11<sup>th</sup> September 2010 to 27<sup>th</sup> January 2011

Alternative start if numbers are NOT enough in September:-

Lessons 6.30 – 9.00 pm for 18weeks from Thursday 12<sup>th</sup> February 2011 to 09<sup>th</sup> July 2011

***How will my progress on the course be assessed?***

The course is a 'hands on' course where learning is achieved by a series of structured lessons with the main emphasis on practical exercises. The assessment is at the end of the course and involves the production of drawings under examination conditions.

***What will I achieve?***

You will register for certification with the City & Guilds of London Institute and achieve the certificate in the use of Auto Cad to City & Guilds 7579/301– 2D – New Level 3.

***What will it cost?***

Tuition fees are to be confirmed

***And the future?***

There are opportunities for courses in 3 dimensional drawings at level 3. We will be pleased to develop courses to suit particular requirements.

***What should I do now?***

Ring the Client Co-ordinator Debby Jopson on 01502 525040.

*It is the policy of this College that all people are entitled to equality of opportunity in education and training.*

*All programmes run subject to satisfactory enrolment. This information is issued without prejudice to the right of the College to make such modifications to the matters dealt with as the College considers necessary without prior notice.*

*March 2010*