

## Liverpool John Moores University

Title: COMPUTER AIDED DESIGN  
Status: Definitive  
Code: **4006BEUG** (102728)  
Version Start Date: 01-08-2011

Owning School/Faculty: Built Environment  
Teaching School/Faculty: Built Environment

Team	Leader
Aseel Hussien	Y

**Academic Level:** FHEQ4  
**Credit Value:** 12.00  
**Total Delivered Hours:** 36.00  
**Total Learning Hours:** 120  
**Private Study:** 84

### Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Seminar	6.000
Workshop	30.000

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Artefacts	AS1	Computer Based Assignment	50.0	
Test	AS2	ICA- Computer Based	50.0	

### Aims

*To introduce and develop skills in construction design using computer aided design (CAD).*

*To produce industry standard two dimensional construction drawings using CAD packages.*

### Learning Outcomes

After completing the module the student should be able to:

- 1 Manage drawing files using industry standard CAD software.
- 2 Analyse appropriate design and construction technology options in the production of drawings using CAD software.
- 3 Produce construction drawings of low rise buildings, using CAD software.

### Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

ARTEFACT	1	2	3
TEST	1	2	3

### Outline Syllabus

*Access CAD Software, creating & loading drawings, saving drawings to an appropriate folder/directory. Setting up system preferences, drawing scales, drawing sheet size, borders, title block. Use of view, zoom and pan commands, plotting and help system.*

*Use of design and construction technology issues related to suitable structures through the evaluation of example production drawings and relevant regulation.*

*Production of site plans, floor plans, elevations and detail drawings. Use of format, draw, tools and modify commands. Use of layers, linetype and weight, lock, freeze and thaw. Creating and editing text and dimensions.*

*Introduction to 3D design including views, UCS, extrude and draw solids commands.*

### Learning Activities

For the first part of the module, tutor-led seminars will introduce the basic commands and processes through worked examples, followed by student centred IT workshops, during which students will develop their skills by the completion of practical construction drawing exercises, based on real production drawings.

During the second part of the module, the students will produce an individual portfolio of construction drawings based on their own designs.

### References

<b>Course Material</b>	Book
<b>Author</b>	Yarwood, A.

<b>Publishing Year</b>	2006
<b>Title</b>	Introduction to AutoCAD 2007
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Elsevier
<b>ISBN</b>	

<b>Course Material</b>	Book
<b>Author</b>	Stine, D
<b>Publishing Year</b>	2006
<b>Title</b>	Residential Design Using AutoCAD 2007
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Schroff Development Corporation
<b>ISBN</b>	

<b>Course Material</b>	Book
<b>Author</b>	LJMU
<b>Publishing Year</b>	2007
<b>Title</b>	Built Environment IT Studies Resource Handouts
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	
<b>ISBN</b>	

<b>Course Material</b>	Book
<b>Author</b>	CIS
<b>Publishing Year</b>	2007
<b>Title</b>	Liverpool Computer Information Services: Guides and Fact Sheets
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	
<b>ISBN</b>	

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## Notes

Students require access to personal computers with computer aided drawing software.