



Course Syllabus

Course Code	Course Title	ECTS Credits
INT-361	CAD II	4
Prerequisites	Department	Semester
INT-262	Architecture	Fall
Type of Course	Field	Language of Instruction
Required	Architecture	English
Level of Course	Lecturer	Year of Study
1 st Cycle	Michalis Georgiou	3 rd
Mode of Delivery	Work Placement	Co-requisites
Face- to- face	N/A	INT-301/INT-311

Course Objectives:

The main objectives of the course are to:

- To introduce and encourage practice in different kind of 3D modelling software
- To teach students various modelling techniques including transformation
- To teach digital fabrication techniques encouraging students to use 3d printing and milling machine
- The course is designed to teach students the advanced knowledge of computerized 3D design and to allow practice in different kinds of design on the computer
- To teach the student advanced capabilities of computerized design for drafting, design, visualization, analysis and modelling
- To teach the students how to follow all the procedures necessary to prepare a drawing from initial design creation through final plot output
- The course attempts to teach at various levels between 'how to' considerations of learning hardware and software, while exploring a deeper understanding of the technological implications on design and digital fabrication

Learning Outcomes:

After completion of the course students are expected to be able to:

1. Understand the basic principles of digital design
2. Participate in network projects and individual work
3. Experiment and understand the different principles of modelling such as
4. Architectural modelling and free modellers
5. Use and combine various CAD software according to individual projects and design outcomes
6. Develop an ability to draw and express architectural conditions in that they satisfy both aesthetic and technical requirements

Course Content:

- Introduction to digital design
- Introduction to CAD Modelling
- 3D Modelling and Architecture elements
- NURBS and Curves in 3D
- Import, Export. Create DWG/ DXF/ DGN/ IFC Bitmap.3ds/ STL/ IGS
- Scripting
- Introduction to Digital Fabrication

Learning Activities and Teaching Methods:

Lectures, Computer Demonstrations, Workshops, Tutorials, Discussions, Presentations, Practical Exercises and Assignments

Assessment Methods:

Homework, Project, Mid-Term, Final Project, Presentation

Required Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Lecturer manual	Demetris Economides, Odysseas Kontovourkis	Student Intranet	2008	

Recommended Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Designing for a digital world	Leach Neil	Wiley-Academy, Chichester	2002	0470844191
Animate form	Lynn, G.	Princeton Architectural Press	1999	1568980833