UNSW SYDNEY | Australia's Global University

Built Environment

IDES2171

Communication 3: 3D CAD Modelling

Course Outline – Term 3, 2020

Disclaimer
Information within this document is subject to change. The full and most accurate course outline will be available in Moodle closer to the start of the term in which the course is offered.

1. COURSE STAFF

Course Contact	Nicholas Baroni
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2. COURSE DETAILS

Credit Points	6 units of credit (uoc)
Workload	Approx. 150 hours including class contact hours, weekly individual and group online learning activities, readings, class preparation, and assessment activities.
Teaching Times and Location	Find details in timetable http://www.timetable.unsw.edu.au

Description

This course provides an introduction to computer modeling, with a parametric modelling application widely used in the design industry. Students develop competency with modelling that supports exploration of design in subsequent studio courses. Learning is structured around lectures and demonstrations followed by practical computer lab classes with structured learning activities. Assignment tasks engage students in designing, modelling and communicating components with a degree of complexity typical of consumer product design solutions.

Aims

This course enables students to gain understanding and competence with a parametric CAD modelling application applied in a design process particularly for accurate modelling that can be directly output in rapid prototyping and production. Learning in this course will complement students' experience with other modelling and representation methods and support further learning of design and beyond into professional practice.

Course Learning Outcomes (CLOs)

At the successful completion of this course, you will be able to:

1. Develop CAD models of components with the degree of complexity and form commonly expected in consumer products.
2. Split and connect components in the virtual CAD environment to create an assembly of parts.
3. Communicate details with engineering drawings derived from 3D CAD models.
4. Produce digitally rendered visualisations of products created in a CAD application.

3. ASSESSMENT

Assessment task	Weight	CLOs Assessed
1. Project - Modelled part	30%	1
2. Project - Modelled assembly	40%	2
3. Project - Drawings and Render	20%	3, 4
4. Test - On-line weekly quiz results	10%	1, 2, 3, 4

4. COURSE IMPROVEMENT AND FEEDBACK

Feedback from students is an integral part of improving courses and teaching approaches. One of the primary mechanisms of feedback is myExperience, which we strongly urge all students to complete at the end of term. Course convenors use the feedback to make ongoing improvements to the course. This is communicated in Moodle in the myFeedback Matters page.