

# ARCH 2002 ARCHITECTURE STUDIO - FUNDAMENTALS OF DIGITAL DESIGN

**Credit Points** 20

**Legacy Code** 301198

**Coordinator** Ursa Komac ([https://directory.westernsydney.edu.au/search/name/Ursa Komac/](https://directory.westernsydney.edu.au/search/name/Ursa%20Komac/))

**Description** This unit introduces students to fundamentals of spatial organisation and human experience in the built environment. Principles of making will be practiced and analysed for their relationship to architectural outcomes, the study of Modern organisational strategies, materiality, experiential phenomena, and abstraction. Students work on project-based assessments that involve an iterative process of reflection and refinement, the use of digital techniques of 3D design including NURBS modelling and rapid prototyping to explore architectural concepts. This work is contextualised as students learn about the history, theory, and discourse of architecture from the Industrial Revolution to the Present.

**School** Eng, Design & Built Env

**Discipline** Architecture

**Student Contribution Band** HECS Band 2 20cp

Check your HECS Band contribution amount via the Fees ([https://www.westernsydney.edu.au/currentstudents/current\\_students/fees/](https://www.westernsydney.edu.au/currentstudents/current_students/fees/)) page.

**Level** Undergraduate Level 2 subject

**Restrictions** Students must be enrolled in 3753 Bachelor of Architectural Design or 3768 Postgraduate Bridging Program (Architecture). Students not enrolled in 3753 or 3768 who wish to enrol into this subject should have a 5.0 minimum GPA and are required to discuss with the Academic program Advisor.

## Learning Outcomes

On successful completion of this subject, students should be able to:

1. Create design solutions using a foundation of visual, spatial, and material literacy through iterative studio-based explorations in 2D and 3D composition, aesthetics, and abstraction that relate to scale, experience, and context.
2. Demonstrate underpinning design skills in inquiry, organization, comparison of information, editing, diagramming, critical observation and reflection in support of design investigations.
3. Communicate architectural design concepts and solutions using a range of technology and techniques demonstrating skills in persuasion and construction of a rationale.
4. Proficiently design with NURBS modelling software to represent architectural forms and to generate physical rapid prototyping models.
5. Critique important themes from the history and theory of the architecture discipline including from an Australian, European and Global context of architectural development, from industrial to contemporary eras.
6. Apply a critical understanding of historical architectural precedents toward contemporary issues, design possibilities, construction

systems, and representational techniques, through research and communication skills.s.

## Subject Content

1. Fundamentals of Spatial and Architectural design
2. Architectural history and theory ? Industrial Era to Present
3. Architectural communication skills using digital modelling and visualisation
4. Ergonomics, scale, and proportioning systems
5. 2D and 3D composition of form
6. Design through making using rapid prototyping

## Special Requirements

Legislative pre-requisites

Construction Site Induction Safety "White Card" – this will be facilitated during orientation sessions or the first week of semester.

## Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Item	Length	Percent	Threshold	Individual/ Group Task
Case Study	Drawings and 20 Models and 300 words		N	Individual
Quizzes	1 hour (per quiz)	10	N	Individual
Applied Project and Presentation	Drawings and 25 Models and 3 minutes presentation		N	Individual
Applied Project and Presentation	Drawings and 35 Models and 3 minutes presentation		N	Individual
Portfolio	300 words plus visual compendium	10	N	Individual

Teaching Periods

## Spring

### Parramatta City - Macquarie St

#### Day

**Subject Contact** Ursa Komac ([https://directory.westernsydney.edu.au/search/name/Ursa Komac/](https://directory.westernsydney.edu.au/search/name/Ursa%20Komac/))

View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=ARCH2002\\_22-SPR\\_PC\\_D#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=ARCH2002_22-SPR_PC_D#subjects))