

ARCH 1005 DRAWING AND CAD (WSTC)

Credit Points 10

Legacy Code 700306

Coordinator Ramin Ebadi (<https://directory.westernsydney.edu.au/search/name/Ramin Ebadi/>)

Description This subject is designed to provide students with the knowledge and skills necessary to develop elementary design skills and basic CAD (Computer Aided Design) proficiency suitable for application within the building industry. Students will learn to describe building designs in plan, section, elevation, isometric and perspective views. Basic drafting concepts and skills will be acquired in the context of individual detached housing designs. Students will also be required to develop appropriate analytical and problem solving skills in dealing with a realistic house building project.

School Eng, Design & Built Env

Discipline Interior and Environmental Design

Student Contribution Band HECS Band 2 10cp

Check your fees via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 1 subject

Equivalent Subjects ARCH 1003 - Graphic Communication and Design (WSTC) ARCH 1001 - Graphic Communication and Design ARCH 1004 - Drawing and CAD

Restrictions

Students must be enrolled at The College. Students in Extended Diploma programs must pass 30 CPs of preparatory subjects in order to enrol in this subject. Students in Integrated Diploma programs must pass or be enrolled in the preparatory subjects in order to enrol in this subject.

Learning Outcomes

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

1. Apply architectural and technical drafting standards and symbols.
2. Generate ideas, designs and 3D models for sustainable housing.
3. Differentiate and correctly interpret site plans, survey plans, floor plans, cross sections, elevations and roof plans.
4. Produce the required documentation for a standard three-bedroom house using a CAD program.

Subject Content

Sketching basic house designs

Drawing types - Plans, elevations and sections

Passive solar design principles

Efficient floor plan layouts

Finishes selection

CAD skills

Construction drawing essentials

Bathroom layouts

Sketching basic house designs

Drawing types - Plans, elevations and sections

Passive solar design principles

Efficient floor plan layouts

Finishes selection
CAD skills
Construction drawing essentials
Bathroom layouts

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.

| Type | Length | Percent | Threshold | Individual/ Group Task | Mandatory |
|-----------------|--|---------|-----------|------------------------|-----------|
| Applied Project | Two A3-sized sheets, hand-drawn, 1:100 scale sketches of the floor plan and two main elevations. Fully annotated to describe the design concept. | 30 | N | Individual | N |
| Applied Project | Minimum 5 x A3 sheets of CAD construction drawings: Rendered 3D view; Site plan; Floor plan; and 4 Elevations and 2 sections | 40 | N | Individual | N |
| Final Exam | 2 hours | 30 | N | Individual | N |

Teaching Periods

Term 2 (2025)

Penrith (Kingswood)

On-site

Subject Contact Ramin Ebadi (<https://directory.westernsydney.edu.au/search/name/Ramin Ebadi/>)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=ARCH1005_25-T2_KW_1#subjects)