

# ENGR 3029 SPECIALISATION WORKSHOP 1

**Credit Points** 10

**Legacy Code** 301438

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

**Description** This subject is designed to enhance technical skills development in an engineering discipline. The subject enables students to perform the practical aspects that relate to product development, manufacturing, infrastructure development and service delivery. It also enables students to gain skills to plan, communicate, operate and manage workshops, laboratory settings and work sites while working in a team environment.

**School** Eng, Design & Built Env

**Discipline** Engineering and Related Technologies, Not Elsewhere Classified.

**Student Contribution Band** HECS Band 2 10cp

Check your fees 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 3 subject

## Restrictions

Successful completion of 60 credit points

## Learning Outcomes

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

1. Design engineering solutions by applying engineering fundamental principles, methods and tools to real world problems
2. Apply project management and engineering procedures and processes for engineering solution development and delivery
3. Develop safe work procedures in workshops, laboratory settings and work sites and in discussion with peers and the facilities team
4. Develop collaboration skills in managing teamwork and team projects with respect for diversity and inclusiveness to achieve project outcomes
5. Communicate concepts, solutions and project outcomes clearly and ethically in a range of formats

## Subject Content

Civil and Construction Engineering:

1. Engineering drawing and Computer Aided Drafting (CAD)
2. Civil and Construction Design
3. Civil and Construction Management

Electrical:

1. Industrial Electronics and Control
2. Power Electronics and Communications
3. Renewable Energy

Mechanical and Robotics and Mechatronics:

2. Fitting, Machining, and Fabrication
3. Hydraulics and pneumatics

## 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
Short Answer	Approx. 1000 words or equivalent	20	N	Individual	N
Practical	Approx. 1000 words or equivalent (per submission)	40	N	Individual	N
Presentation	5 Minutes Group Presentation	15	N	Group/ Individual	N
Report	Approx. 3000 words or equivalent	25	N	Group/ Individual	N

Teaching Periods

## Autumn (2025) Penrith (Kingswood)

### On-site

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

View timetable ([https://classregistration.westernsydney.edu.au/odd/timetable/?subject\\_code=ENGR3029\\_25-AUT\\_KW\\_1#subjects](https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=ENGR3029_25-AUT_KW_1#subjects))

## Parramatta City - Macquarie St

### On-site

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

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