# ENGR 3030 SPECIALISATION WORKSHOP 2

#### Credit Points 10

Legacy Code 301439

**Coordinator** Fidelis Mashiri (https://directory.westernsydney.edu.au/ search/name/Fidelis Mashiri/)

**Description** This unit is designed to further enhance technical skills development in a team environment and in an engineering discipline through additional workshops that compliment and strengthen those completed in previous unit Specialisation Workshop 1. The unit enables students to perform and manage 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 HECS Band contribution amount via the Fees (https:// www.westernsydney.edu.au/currentstudents/current\_students/fees/) page.

Level Undergraduate Level 3 subject

#### Pre-requisite(s) ENGR 3029

### **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 problemsApply project management and engineering procedures and processes for engineering solution development and delivery
- 3. Implement safe work procedures in workshops, laboratory settings and work sites and in discussion with peers and the facilities team
- Demonstrate 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. Civil and Construction Plant Operations
- 2.Infrastructure Construction and Maintenance (Roads, Bridges, Pipes,
- etc.)
- 3. Supply Industry Operations
- Electrical and Robotics & Mechatronics:
- 1.Electrical Systems Engineering
- 2.Switchgear and Control gear
- 3.Outdoor Power Equipment Technology
- Mechanical and Robotics and Mechatronics:
- 1. Electrical machinery, mechanical principles and mechanical

equipment

- 2.Refrigeration and Air-conditioning
- 3.Automotive Technology

## 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.

ltem	Length	Percent	Threshold	Individual/ Group Task
Short Answer	Approx. 1000 words or equivalent	20	Ν	Individual
Practical	Approx. 1000 words or equivalent (per submission)	40	Ν	Individual
Presentation	15 minutes, Group Presentation	15% (5 (l), 10 (G))	Ν	Both (Individual & Group)
Report	Approx. 3000 words or equivalent	25% (5 (l), 20 (G))	Ν	Both (Individual & Group)

**Teaching Periods**