

CIVL 2002 ENVIRONMENTAL ENGINEERING

Credit Points 10

Legacy Code 300737

Coordinator Mariam Darestani ([https://directory.westernsydney.edu.au/search/name/Mariam Darestani/](https://directory.westernsydney.edu.au/search/name/Mariam%20Darestani/))

Description This unit teaches the fundamental theory and methods required for a civil engineer to solve environmental issues they would face in their professional life.

School Eng, Design & Built Env

Discipline Civil Engineering

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 2 subject

Equivalent Subjects CIVL 4006 - Environmental Engineering

Learning Outcomes

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

1. Apply basic principles of ecology and environmental processes to achieve sustainable water quantity and quality management;
2. Apply appropriate drinking water and wastewater treatment techniques;
3. Examine basic air and noise pollution control techniques;
4. Apply solid and hazardous waste management techniques in urban and rural environments;
5. Explain climate change issues and its implication to civil and environmental engineering projects;
6. Apply environmental impact assessment and life cycle assessment methods for simple civil and environmental engineering problems.
7. Explain legislative requirements and ethical issues related to civil and environmental engineering projects.

Subject Content

1. General principal of ecologically sustainable development , Climate change and Environmental issues
2. Drinking water treatment
3. Wastewater treatment
4. Water quality management
5. Solid and hazardous waste collection and disposal
6. Environmental impact assessment and life cycle assessment
7. Air and noise pollution
8. Climate change issues related to civil and environmental engineering
9. Water chemistry
10. Emerging water and water treatment and desalination technologies

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
Quiz 1	30 minutes	15	N	Individual
Quiz 2	30 minutes	15	N	Individual
Quiz 3	30 minutes	15	N	Individual
Project	2 hours	30	N	Group
Report	500 words	15	N	Individual
Field trip - quiz and essay	1,000 words	10	N	Individual

Teaching Periods

Sydney City Campus - Term 1

Sydney City

Day

Subject Contact Ankit Agarwal ([https://directory.westernsydney.edu.au/search/name/Ankit Agarwal/](https://directory.westernsydney.edu.au/search/name/Ankit%20Agarwal/))

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=CIVL2002_22-SC1_SC_D#subjects)

Spring

Penrith (Kingswood)

Day

Subject Contact Mariam Darestani ([https://directory.westernsydney.edu.au/search/name/Mariam Darestani/](https://directory.westernsydney.edu.au/search/name/Mariam%20Darestani/))

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=CIVL2002_22-SPR_KW_D#subjects)

Parramatta - Victoria Rd

Day

Subject Contact Mariam Darestani ([https://directory.westernsydney.edu.au/search/name/Mariam Darestani/](https://directory.westernsydney.edu.au/search/name/Mariam%20Darestani/))

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=CIVL2002_22-SPR_PS_D#subjects)

Sydney City Campus - Term 3

Sydney City

Day

Subject Contact Peter Lendrum ([https://directory.westernsydney.edu.au/search/name/Peter Lendrum/](https://directory.westernsydney.edu.au/search/name/Peter%20Lendrum/))

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=CIVL2002_22-SC3_SC_D#subjects)