

# ENGR 7027 SPATIAL TOOLS AND MAPPING

**Credit Points** 10

**Legacy Code** 301264

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

**Description** This unit offers practical applications in spatial information software. Students will be taught using Geographical Information Systems (GIS) software to prepare maps (such as bushfire prone land) as well as management plans required of planning and design practitioners. Workshops are provided to assist students in the practical use of the GIS system. Students are provided with online module notes and readings as well as assignments being submitted online. Emphasis is placed on teaching students practical software applications skills relevant to industry needs.

**School** Eng, Design & Built Env

**Discipline** Other Engineering And Related Technologies

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

**Level** Postgraduate Coursework Level 7 subject

## Learning Outcomes

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

1. Recognise and apply the capabilities of spatial software tools in a professional context.
2. Input, model and analyse data and systems using industry standard spatial software.
3. Apply spatial modelling and analysis tools to professionally represent environmental measures of a specific development proposal.
4. Apply software-generated imagery to support planning and construction reports, findings and recommendations.

## Subject Content

1. Introduction to GIS
2. GIS Applications
3. Key Concepts
4. Introduction to emergency and environmental risk management planning
5. GIS and other software applications
6. GIS analysis tools
7. GIS mapping layouts
8. Bushfire Prone Land Mapping Guidelines
9. Bushfire Protection/Management Plans and other environmental management plans

## 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
Short Answer	1,000 words	25	N	Individual
Applied Project	1,000 words	25	N	Individual
Applied Project	2,000 words plus mapping	50	N	Individual

Teaching Periods

## Autumn

### Parramatta City - Macquarie St

#### Day

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

View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=ENGR7027\\_22-AUT\\_PC\\_D#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=ENGR7027_22-AUT_PC_D#subjects))