

# ENGR 1045 ENGINEERING PROGRAMMING FUNDAMENTALS

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**Credit Points** 10

**Legacy Code** 301335

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

**Description** An introduction to problem-solving via programming, which aims to have students develop proficiency in using a high level programming language. Topics covered in this subject include: algorithms, program structures (statements, sequence, selection, iteration, functions), data types (numeric, character), data structures (arrays, tuples, pointers, lists), storage structures (memory, addresses), introduction to analysis of algorithms, testing, code quality, teamwork, and reflective practice. The subject includes extensive practical work in labs and programming projects.

**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 1 subject

## Assumed Knowledge

HSC Physics and HSC Mathematics Extension 1 or HSC Mathematics Extension 2.HSC Two units of Science and HSC two units of English.

## 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
Practical	2 hours	20	N	Individual	N
Report	2 hours (each) (2 submission at 20% each)	40	N	Individual	N
Final Exam	6 hours	40	N	Individual	Y