

1806ICT

Programming Fundamentals

Course Overview

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Course Information

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|---------------------|------------------------------|
| Course code: | 1806ICT |
| Course title: | Programming Fundamentals |
| Program: | Bachelor of Computer Science |
| Credit point value: | 10 CP |

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Staff Details

- Lecturer
 - Dr. Wayne Pullan(G09 1.70)
w.pullan@griffith.edu.au
- Sessional Staff
 - Dylan Janssen

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Consultation Time

Wednesday

3pm - 4pm

Microsoft Teams

Please send me an email in advance, if you wish to talk to me at another time.

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Course Description

This is a foundational course that thoroughly covers all of the fundamental programming concepts, basic data structures, algorithmic processes, and includes those skills and concepts that are essential to programming practice independent of underlying paradigms.

The widely deployed C language is used in the context of programming in PCs and embedded devices.

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Objectives

On completion of the course, the student will have a sound understanding of fundamental programming principles, and the ability to write effective and efficient computer programs.

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Programme

| | Hours |
|-------------------------------|-------|
| Lectures | 24 |
| Computer Labs | 24 |
| Private Study and Preparation | 72 |
| Total (average 10 hrs/week) | 120 |

Attendance and participation at lectures and computer labs are strongly recommended and expected.

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Texts and Supporting Materials

- **Recommended Text**
 - Programming in C, 4th ed., Stephen G. Kochan, Addison Wesley, 2014.
- **Additional References**
 - The C Programming Language, 2nd ed., Brian Kernighan, Dennis Ritchie, Prentice Hall, 1988
 - C in a Nutshell, Peter Prinz, Tony Crawford, O' Reilly Media, 2005.

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Why C?

- A language that has proven to be reliable, flexible and powerful
 - Has survived more than 4 decades
- Used for a variety of applications, ranging from business program to engineering
 - Windows, UNIX, Linux
 - Embedded systems, e.g. modems, routers, ...
- Capable of accessing system's low level functions and hardware

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