COIT11222 *Programming Fundamentals*
Term 2 - 2022

Profile information current as at 18/05/2022 05:55 am

All details in this unit profile for COIT11222 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

General Information

Overview
This unit will help you become a programmer even if you have had no programming experience. You will learn and practise topics such as pseudocode, variables, constants, data types, operators, expressions, statements, classes, objects, control constructs, methods, passing parameters and arrays. In addition, you will learn how to design, implement and test programs using a modern Integrated Development Environment (IDE).

Details
Career Level: *Undergraduate*
Unit Level: *Level 1*
Credit Points: *6*
Student Contribution Band: *8*
Fraction of Full-Time Student Load: *0.125*

Pre-requisites or Co-requisites
There are no requisites for this unit.
Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the Assessment Policy and Procedure (Higher Education Coursework).

Offerings For Term 2 - 2022

- Brisbane
- Cairns
- Melbourne
- Online
- Rockhampton
- Sydney
- Townsville

Attendance Requirements
All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

Website
This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.

Class and Assessment Overview

Recommended Student Time Commitment

Each 6-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

Class Timetable

Regional Campuses

Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

Metropolitan Campuses

Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

1. **Practical Assessment**
Weighting: 35%
2. **Practical Assessment**
Weighting: 15%
3. **Examination**
Weighting: 50%

Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the University's Grades and Results Policy for more details of interim results and final grades.

CQUniversity Policies

All University policies are available on the CQUniversity Policy site.
You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the CQUniversity Policy site.

Previous Student Feedback

Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

Feedback from Have your say.

Feedback

Most students are satisfied with the quality of lecturers and tutors and the content of the unit.

Recommendation

Continue delivering good content and student interactions.

Feedback from Have your say.

Feedback

The PASS sessions have been really helpful for students who have taken advantage of this service.

Recommendation

Encourage more students to take advantage of this service. Have online sessions for off-shore students.

Feedback from Staff reflections.

Feedback

Some students fall behind with their practical tasks and it is difficult for such students in programming units to catch up.

Recommendation

Consider introducing weekly assessments to help students from falling behind.

Feedback from Staff reflections.

Feedback

Learning outcomes and their mappings to assessment items need reviewing to achieve a synergy between the learning outcomes and the assessment tasks.

Recommendation

Review learning outcomes and mappings to assessment items to achieve the required synergy between these.

Unit Learning Outcomes

On successful completion of this unit, you will be able to:

1. Develop clearly documented and thoroughly tested applications using an industry-standard integrated development environment (IDE)
2. Apply procedural concepts (methods, iteration, selection) and design principles (encapsulation, coupling and cohesion) to the realisation of object behaviour in applications
3. Implement standard algorithms such as searching, sorting and sequential processing for arrays and lists of objects in applications
4. Employ stream abstraction to process records contained in sequential text files
5. Apply concepts presented in this unit, including language syntax, memory models, execution models, types, scope rules, methods, parameter passing, classes, objects and algorithms.

The Australian Computer Society (ACS) recognises the Skills Framework for the Information Age (SFIA). SFIA is adopted by organisations, governments and individuals in many countries and provides a widely used and consistent definition of ICT skills. SFIA is increasingly being used when developing job descriptions and role profiles. ACS members can use the tool MySFIA to build a skills profile.

This unit contributes to the following workplace skills as defined by SFIA 8:

- Programming/Software Development (PROG)
- Testing (TEST)

Alignment of Learning Outcomes, Assessment and Graduate Attributes

— N/A Level ∘ Introductory Level ∘ Intermediate Level • Graduate Level ∘ Professional Level ∘ Advanced Level

Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes				
	1	2	3	4	5
1 - Practical Assessment - 35%	•	•	•		•
2 - Practical Assessment - 15%	•	•	•	•	•
3 - Examination - 50%				•	•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes				
	1	2	3	4	5
1 - Communication	∘	∘	∘	∘	∘
2 - Problem Solving	∘	∘	∘	∘	∘
3 - Critical Thinking		∘	∘	∘	∘
4 - Information Literacy	∘	∘	∘	∘	∘
5 - Team Work					
6 - Information Technology Competence	∘	∘	∘	∘	∘
7 - Cross Cultural Competence					
8 - Ethical practice	∘				
9 - Social Innovation					
10 - Aboriginal and Torres Strait Islander Cultures					

Textbooks and Resources

Textbooks
COIT11222

Prescribed

JAVA Programming
Edition: 9th edn (2018)
Authors: Joyce Farrell
CENGAGE Learning
Boston , MA , USA
ISBN: 9781337397070
Binding: Paperback

Additional Textbook Information
Both paper and eBook copies can now be purchased at the CQUni Bookshop here:
http://bookshop.cqu.edu.au (search on the Unit code).

View textbooks at the CQUniversity Bookshop

IT Resources

You will need access to the following IT resources:

Academic Integrity Statement

Information for Academic Integrity Statement has not been released yet.
This unit profile has not yet been finalised.