



Enrolment Period 1	Enrolment Period 2
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School: Science

This unit information may be updated and amended immediately prior to semester. To ensure you have the correct outline, please check it again at the beginning of semester.

Unit Title	Programming Languages and Paradigms
Unit Code	CSP3341
Year	2019
Enrolment Period	1
Version	1
Credit Points	15
Full Year Unit	N
Mode of Delivery	On Campus Online
Unit Co-ordinator	Dr Leisa ARMSTRONG

Description

This unit engages the students in the exploration of the theoretical, practical and evolutionary characteristics of programming languages using various operational paradigms.

Prerequisite Rule

Students must pass 1 unit from CSP2104, CSP2343, CSP3241, CSP3242

Learning Outcomes

On completion of this unit students should be able to:

1. Describe the implementation of programming language constructs including data types, sequence control and data control.
2. Describe the implementation of programming languages including the processes included in translation/compilation, binding and scoping, the virtual computer, software simulation of hardware and memory management.
3. Learn and follow, new developments in programming language design resulting from computer science research.
4. Use any programming language with greater understanding of its semantics and implementation, effectiveness and efficiency.
5. Work in terms of abstract programming constructs with an awareness of their semantics and the limitations imposed by implementation.

Unit Content

1. Abstract data types, encapsulation and object-oriented programming.
2. Concurrency.
3. Describing syntax and semantics.
4. Exception and event handling.
5. Expressions, assignment statements and control structures.
6. History, evolution and design of programming languages.
7. Lexical and Syntax Analysis.
8. Names, Bindings, Type Checking and Scope.
9. Primitive, structured and programmer-defined data types.
10. Subprograms.

Learning Experience

ON-CAMPUS

Students will attend on campus classes as well as engage in learning activities through ECU Blackboard.

	Joondalup	Mount Lawley	South West (Bunbury)
Semester 1	13 x 1 hour lab	Not Offered	Not Offered
Semester 1	13 x 2 hour lecture	Not Offered	Not Offered
Semester 1	13 x 1 hour waitlist	Not Offered	Not Offered

For more information see the [Semester Timetable](#)

ONLINE

Students will engage in learning experiences through ECU Blackboard as well as additional ECU learning technologies.

Additional Learning Experience Information

Lectures and workshop sessions.

Assessment

GS1 GRADING SCHEMA 1 Used for standard coursework units

Students please note: The marks and grades received by students on assessments may be subject to further moderation. All marks and grades are to be considered provisional until endorsed by the relevant Board of Examiners.

ON CAMPUS

Type	Description	Value
Assignment	Programming language report and presentation	30%
Workshop	Assessable workshop exercises	20%
Examination ^	End of semester examination	50%

ONLINE

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Assignment	Programming language report and presentation	30%
Workshop	Assessable workshop exercises	20%
Examination ^	End of semester examination	50%

^ Mandatory to Pass

Disability Standards for Education (Commonwealth 2005)

For the purposes of considering a request for Reasonable Adjustments under the Disability Standards for Education (Commonwealth 2005), inherent requirements for this subject are articulated in the Unit Description, Learning Outcomes and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. Further details on the support for students with disabilities or medical conditions can be found at the [Student Equity, Diversity and Disability Service website](#).

Academic Misconduct

Edith Cowan University has firm rules governing academic misconduct and there are substantial penalties that can be applied to students who are found in breach of these rules. Academic misconduct includes, but is not limited to:

- plagiarism;
- unauthorised collaboration;
- cheating in examinations;
- theft of other students' work;

Additionally, any material submitted for assessment purposes must be work that has not been submitted previously, by any person, for any other unit at ECU or elsewhere.

The ECU rules and policies governing all academic activities, including misconduct, can be accessed through the ECU website.

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