Introduction to Programming

Module Information

2022.01, Approved

Summary Information

Module Code	4500COMECA
Formal Module Title	Introduction to Programming
Owning School	Computer Science and Mathematics
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 4
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

Partner Teaching Institution

Institution Name
Education Centre of Australia Pty Ltd

Learning Methods

Learning Method Type	Hours
Online	44

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
SEP-PAR	PAR	September	12 Weeks

Aims and Outcomes

Aims	To gain an understanding of how software is developed.To become familiar with a range of computer programming paradigms. To develop basic problem solving skills in computing.To prepare students for software development at higher levels.

After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Apply knowledge of programming constructs and basic algorithms.
MLO2	2	Demonstrate problem solving skills by producing simple programming solutions.
MLO3	3	Evaluate alternatives and make sound judgements regarding programming solutions.
MLO4	4	Investigate integrated development environments & application programming interfaces.
MLO5	5	Demonstrate basic knowledge of the object oriented programming paradigm.

Module Content

Outline Syllabus	Programming Overview & HistoryThe Language & IDEBasic ElementsVariables & ConstantsOperators, Expressions & StatementsBasic I/O & File I/OSelectionBoolean Operators & ExpressionsIf, If-Else & Switch-CaseIterationWhile, For & Do-WhileBreakCollectionsArray and ArrayListString and char TypesUser-Defined MethodsReturn TypesParametersScopeUser-Defined ClassesMembersConstructorsExceptions & Event HandlingTry, Catch & Finally
Module Overview	
Additional Information	This module delivers programming and problem solving skills, with no prior assumptions of programming experience. Given the importance of programming to computer science this module will encourage students to study more specialized software development topics.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Essay	Simple Application	40	0	MLO1, MLO2
Technology	Complex Application	60	0	MLO3, MLO4, MLO5

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Bo Zhou	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings