

# **Programme Specification Document**

Approved, 2022.02

# Overview

Programme Code	36741	
Programme Title	Computing	
Awarding Institution	Liverpool John Moores University	
Programme Type	Degree	
Language of Programme	All LJMU programmes are delivered and assessed in English	
Programme Leader		
Link Tutor(s)	Abdennour El Rhalibi	

Partner Name	Partnership Type
Education Centre of Australia Pty Ltd	Franchised

## **Awards**

Award Type	Award Description	Award Learning Outcomes
Target Award	Bachelor of Science with Honours - BSH	See Learning Outcomes Below
Alternative Exit	Diploma of Higher Education - DHE	Critically analyse the requirements of a business system using structured techniques. Critically evaluate and apply ethical theories to IT activities. Understand and explain the fundamentals of data analytics. Understand computer networking techniques and apply them to the design of computer networks. Develop a logical schema and create and manipulate data using a database management system. Understand and apply basic research skills in order to critique and review existing research and plan new research. Understand and apply advanced web development techniques and tools. Identify and demonstrate their employability skills.
Alternative Exit	Certificate of Higher Education - CHE	Develop computer programs using elementary programming constructs. Discuss computer systems at the hardware, software and network levels. Understand the different approaches required to solve computer-based problems. Discuss a range of practical aspects of computing and apply the associated tools and techniques. Identify a personal development plan to support their career path and recognise ethical, legal and professional aspects that relate to the computing profession. Design and develop a website using appropriate tools and techniques. Understand of the basics of data modelling and abstraction. Communicate their ideas and take personal responsibility for their learning.

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## **External Benchmarks**

Subject Benchmark Statement	UG-Computing (2022)
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# **Programme Offering(s)**

Mode of Study, Mode of Delivery	Intake Month	Teaching Institution	Programme Length
Part-Time, Distance Learning	April	Education Centre of Australia Pty Ltd	4 Year
Part-Time, Distance Learning	September	Education Centre of Australia Pty Ltd	4 Year

#### **Aims and Outcomes**

#### **Educational Aims of the Programme**

The programme aims to produce graduates who are able to play a significant role in the provision of information in a business environment by the development of effective and reliable computer-based systems. The specific aims of the course are as follows: -To understand the underlying concepts, formal foundations and theory of computer-based information systems. -To develop the knowledge, skills and abilities necessary for the investigation, analysis, design and development of large scale software systems. -To provide an educational underpinning that both addresses leading edge developments in the industry and provides for future professional development, equipping students with the appropriate knowledge and skills for a wide variety of employment and/or further study. -To encourage students to engage with the development of employability skills by completing a self-awareness statement. -To encourage students to become advanced autonomous learners. -To further develop students' originality in applying analytical, creative, problem solving and research skills. -To provide advanced, conceptual understanding, underpinning career development, innovation and further study. -For students undertaking a placement year the aim is to provide students with an extended period of work experience at an approved partner that will complement their programme of study at LJMU. This will give the students the opportunity to develop professional skills relevant to their programme of study, as well as attitude and behaviours necessary for employment in a diverse and changing environment.

#### **Learning Outcomes**

Code	Description
PLO1	Critically evaluate current and developing principles and practices in selected areas of computer systems technologies.
PLO2	Creatively plan and manage the development of a complex computer system.
PLO3	Implement and evaluate computer software in a wide range of domains.
PLO4	Manage computer systems projects.
PLO5	Work professionally as a member of a team.
PLO6	Apply numerical methods to computing problems involving a quantitative dimension.
PLO7	Communicate complex information effectively by written or verbal means.
PLO8	Identify job roles and opportunities that reflect personal interest and expertise.
PLO9	Plan and manage personal learning and development.
PLO10	Apply a wide and deep range of conceptual and practical knowledge and skills in selected areas of computer systems, in a wide range of domains.
PLO11	Utilise a range of tools and techniques used in the development of complex computer systems.
PLO12	Critically analyse a range of computer systems and application domains.
PLO13	Effectively and creatively manage a complex computer system.
PLO14	Use knowledge with originality and be innovative in solving computer systems problems.
PLO15	Deploy systematic and comprehensive knowledge and understanding of computer systems concepts, principles and theories to computing problems.

Code	Description
PLO16	Use knowledge with originality in system modelling, requirements analysis and design.
PLO17	Critically evaluate and test a computer-based system.

# **Programme Structure**

# **Programme Structure Description**

Programme Structure - 360 credit points	
Level 4 - 120 credit points	
Level 4 Core - 120 credit points	CORE
[MODULE] 4500COMECA Introduction to Programming Approved 2022.01 - 20 credit points	
[MODULE] 4501COMECA Computer Systems Approved 2022.01 - 20 credit points	
[MODULE] 4502COMECA Networks and Web Development Approved 2022.01 - 20 credit points	
[MODULE] 4503COMECA Professional Practice Approved 2022.01 - 10 credit points	
[MODULE] 4504COMECA Data Modelling Approved 2022.01 - 10 credit points	
[MODULE] 4510COMECA Fundamentals of Information Systems Approved 2022.01 - 20 credit points	
[MODULE] 4511COMECA Problem Solving for Computing Approved 2022.01 - 20 credit points	
Level 5 - 120 credit points	
Level 5 Core - 120 credit points	CORE
[MODULE] 5500COMECA Group Project Approved 2022.01 - 20 credit points	
[MODULE] 5501COMECA Computer Networks Approved 2022.01 - 20 credit points	
[MODULE] 5502COMECA Database Systems Approved 2022.01 - 20 credit points	
[MODULE] 5513COMECA Information Systems Development Approved 2022.01 - 20 credit points	
[MODULE] 5514COMECA Advanced Web Development Approved 2022.01 - 20 credit points	
[MODULE] 5524COMECA Data Analytics Approved 2022.01 - 20 credit points	
Level 6 - 120 credit points	
Level 6 Core - 60 credit points	CORE
[MODULE] 6500COMECA Project Approved 2022.01 - 40 credit points	
[MODULE] 6511COMECA Advanced Information Systems Approved 2022.01 - 20 credit points	
Level 6 Optional - 60 credit points	OPTIONAL
[MODULE] 6509COMECA Business Intelligence Approved 2022.01 - 20 credit points	
[MODULE] 6510COMECA User Experience Design Approved 2022.01 - 20 credit points	
[MODULE] 6512COMECA E-Commerce Systems Approved 2022.01 - 20 credit points	
[MODULE] 6513COMECA Network Defence Approved 2022.01 - 20 credit points	
[MODULE] 6514COMECA Advanced Networking Approved 2022.01 - 20 credit points	

Module specifications may be accessed at <a href="https://proformas.ljmu.ac.uk/Default.aspx">https://proformas.ljmu.ac.uk/Default.aspx</a>

### Teaching, Learning and Assessment

Core knowledge and understanding is acquired via online lectures, tutorials, coursework, projects and guided independent study. Students are given feedback on all work produced. Assessment methods for the knowledge and understanding are specified in module specifications. Each module is assessed by coursework or online exam. Specifically, the assessment takes the form of written assessments, coursework reports and/or project work, reports and presentations. Cognitive skills are developed throughout the programme via online tutorial, group discussion, teamwork, coursework, projects and presentations. Specifically, it is developed through tutorial group discussion, teamwork, coursework, projects, and presentations. Assessment of cognitive skills is through coursework reports, project work, reports and presentations. Practical skills are developed throughout the programme. Coursework and projects are designed to provide practical opportunities for students to work independently or in groups. Assessment of practical skills is normally by coursework and projects. Key skills are developed throughout the programme in a variety of forms. Specifically, through a combination of research related coursework, guided independent study and projects, group work and presentations.

## Opportunities for work related learning

Level 4: 4503COMECA Professional Practice - this module provides students with an opportunity to consider their future role as a computing professional and develop a plan to enable them to progress in their chosen career. Level 5: 5500COMECA Group Project – this module provides further insight into developing the role of the student becoming a computing professional. Students will be encouraged to become student members of appropriate professional bodies for the computing industry (e.g. ACM, IEEE or BCS) as part of their development.

### **Entry Requirements**

Туре	Description
Alternative qualifications considered	Qualifications deemed equivalent to the above upon completion of appropriate assessment will be considered acceptable. Applicants should have five GCSE (or equivalent) passes of at least grade C including Mathematics and English (or IELTS 6.0).
International Baccalaureate	Applicants should have or expect to obtain a total of 112 UCAS points overall.
BTECs	BTEC Extended Diploma To the value of 112 UCAS points. BTEC Diploma / 90 Credit Diploma / Subsidiary Diploma /Certificate To the value of 112 UCAS points when combined with other qualifications.
A levels	Applicants should have or expect to obtain a total of 112 UCAS points with a maximum of 20 points from AS level qualifications.
Other international requirements	Applicants offering other awards will be considered on an individual basis in line with the agreed entry criteria. Australia: Applicants require 85 points in ATAR or 8 points in OP India: Applicants require a Higher Secondary Certificate / Standard 12 / Indian School Certificate (Year 12) OR All India Senior School Certificate Examination with a minimum of 65% overall (60% in Maths and your chosen subject and 70% in English) All applicants should have achieved IELTS 6 or equivalent.

### **Extra Entry Requirements**