Module Descriptor

Title	Object Oriented Analysis		
Session	2025/26	**Status**	Published
Code	COMP08033	**SCQF Level**	8
Credit Points	20	**ECTS (European Credit Transfer Scheme)**	10
School	**Computing, Engineering and Physical Sciences**		
Module Co-ordinator	Joanna Olszewska		

Summary of Module

The module aims to increase a student's awareness of the process associated with the analysis, evaluation, justification, provision, and design of technology-based organisational information systems. This module is focused on the requirements analysis and design of an IT-based business system in context of the overall business organisation and strategy.

The Unified Modelling Language (UML) is the object-oriented development method used for the analysis phase of the system development. During the analysis, the system is described from three viewpoints each of which is supported by specific techniques: the functional view (supported by the Use Case Diagram and Use Case Descriptions), the data view (supported by the Data Dictionary and the Class Diagram), and the event view (supported by the Sequence Diagrams). Emphasis is placed on the practical application of these techniques via a number of case studies used throughout the module. An appropriate Computer Aided Software Engineering (CASE) tool is used to produce the UML diagrams.

Undertaking this module will develop a range of graduate attributes such as problem solving and collaborative work. Furthermore, students will be knowledgeable in IT system analysis techniques using UML and will get practice in enterprising IT system design with UML.

Module Delivery Method	**On-Campus[1]** ☒	**Hybrid[2]** ☐	**Online[3]** ☒	**Work -Based Learning[4]** ☐
Campuses for Module Delivery	☒ Ayr	☒ Lanarkshire	☒ Online / Distance Learning	

[1] Where contact hours are synchronous/ live and take place fully on campus. Campus-based learning is focused on providing an interactive learning experience supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus contact hours will be clearly articulated to students.

[2] The module includes a combination of synchronous/ live on-campus and online learning events. These will be supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus and online contact hours will be clearly articulated to students.

[3] Where all learning is solely delivered by web-based or internet-based technologies and the participants can engage in all learning activities through these means. All required contact hours will be clearly articulated to students.

[4] Learning activities where the main location for the learning experience is in the workplace. All required contact hours, whether online or on campus, will be clearly articulated to students

	☒ Dumfries		☐ London ☒ Paisley		☐ Other (specify)	
Terms for Module Delivery	Term 1	☒	Term 2	☐	Term 3	☐
Long-thin Delivery over more than one Term	Term 1 – Term 2	☐	Term 2 – Term 3	☐	Term 3 – Term 1	☐

Learning Outcomes	
L1	apply modern analysis approaches, specifically UML
L2	produce an analysis report using standard business software and CASE tools
L3	work as a member of a development team
L4	N/A
L5	N/A

Employability Skills and Personal Development Planning (PDP) Skills	
SCQF Headings	**During completion of this module, there will be an opportunity to achieve core skills in:**
Knowledge and Understanding (K and U)	**SCQF 8** Understanding the role of analysis within software development. Understanding object oriented concepts.
Practice: Applied Knowledge and Understanding	**SCQF 8** Using a number of object oriented techniques to provide a specification of the system.
Generic Cognitive skills	**SCQF 8** Assessing the strengths and weaknesses of the techniques used.
Communication, ICT and Numeracy Skills	**SCQF 8** Using an appropriate CASE tool to maintain deliverables
Autonomy, Accountability and Working with Others	**SCQF 8** Working within a group to a set deadline.

Prerequisites	**Module Code**	**Module Title**
	Other	
Co-requisites	**Module Code**	**Module Title**

Learning and Teaching
In line with current learning and teaching principles, a 20-credit module includes 200 learning hours, normally including a minimum of 36 contact hours and maximum of 48 contact hours.

Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	**Student Learning Hours** (Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture / Core Content Delivery	12
Tutorial / Synchronous Support Activity	24
Laboratory / Practical Demonstration / Workshop	12
Independent Study	152
Please select	
Please select	
TOTAL	200

Indicative Resources
The following materials form essential underpinning for the module content and ultimately for the learning outcomes: Material on the module's Aula site Bennett, McRobb, and Farmer, Object Oriented Systems Analysis & Design Using UML Britton and Doake, Object-Oriented Systems Development
(N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)

Attendance and Engagement Requirements
In line with the Student Attendance and Engagement Procedure, Students are academically engaged if they are regularly attending and participating in timetabled on-campus and online teaching sessions, asynchronous online learning activities, course-related learning resources, and complete assessments and submit these on time. **For the purposes of this module, academic engagement equates to the following:** The School of Computing, Engineering and Physical Sciences considers attendance and engagement to mean a commitment to attending, and engaging in, timetabled sessions. You will scan your attendance via the scanners each time you are on-campus and you will login to the VLE several times per week. Where you are unable to attend a timetabled learning session due to illness or other circumstance, you should notify the Programme Leader that you cannot attend. Across the School an 80% attendance threshold is set. If you fall below this, you will be referred to the Student Success Team to see how we can best support your studies.

Equality and Diversity

The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: UWS Equality, Diversity and Human Rights Code. The School of Computing, Engineering and Physical Sciences considers attendance and engagement to mean a commitment to attending, and engaging in, timetabled sessions. You will scan your attendance via the scanners each time you are on-campus and you will login to the VLE several times per week. Where you are unable to attend a timetabled learning session due to illness or other circumstance, you should notify the Programme Leader that you cannot attend. Across the School an 80% attendance threshold is set. If you fall below this, you will be referred to the Student Success Team to see how we can best support your studies.
(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)

Supplemental Information

Divisional Programme Board	**Computing**
Overall Assessment Results	☐ **Pass / Fail** ☒ **Graded**
Module Eligible for Compensation	☐ **Yes** ☒ **No** **If this module is eligible for compensation, there may be cases where compensation is not permitted due to programme accreditation requirements. Please check the associated programme specification for details.**
School Assessment Board	Business and Applied Computing
Moderator	Ying Liang
External Examiner	V Sharma
Accreditation Details	British Computer Society
Module Appears in CPD catalogue	☐ **Yes** ☒ **No**
Changes / Version Number	2.12

Assessment (also refer to Assessment Outcomes Grids below)
Assessment 1
Assignment 40% - Group based case study
Assessment 2
Assignment 60% - Group based case study
Assessment 3
(N.B. (i) Assessment Outcomes Grids for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed. (ii) An indicative schedule listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Module Handbook.)

Component 1

Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
Case study	☒	☒	☒	☐	☐	40	0

Component 2							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Case study	☒	☒	☒	☐	☐	60	0

Component 3							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
	☐	☐	☐	☐	☐		
Combined total for all components						100%	0 hours

Change Control

What	When	Who
Attendance and Engagement and Equality and Diversity statements updated	20/1/25	L Smith