PROGRAMME QUALITY HANDBOOK
2024 – 26

FdSc Digital Technologies

Welcome and Introduction to FdSc Digital Technologies

This programme has been designed to equip you with the skills and knowledge base required to work in your chosen specialism or other graduate opportunities. It is also a platform from which you can undertake additional vocational and academic qualifications.

This Programme Quality handbook contains important information including:
- The approved programme specification
- Module records

Note: The information in this handbook should be read in conjunction with the current edition of:
- Your Institution & University Student Handbook which contains student support based information on issues such as finance and studying at HE
- University of Plymouth's Student Handbook available at: https://www.plymouth.ac.uk/your-university/governance/student
- https://www.plymouth.ac.uk/your-university/governance/student-handbook

University of Plymouth

Academic Partnership

University College Jersey – Highlands College Jersey

Programme Specification

FdSc Digital Technologies

Date of Approval
July 2024

1.   **FdSc Digital Technologies**

     Exit awards

     A Certificate of Higher Education can be awarded to a student who has achieved 120 credits at level 4

     UCAS code – Not applicable

     HECOS code – CAH11

2.   **Awarding Institution:** University of Plymouth

     Teaching institution(s):   University College Jersey – Highlands College Jersey

3.   **Accrediting body**(ies)

     University of Plymouth

     Summary of specific conditions/regulations – N/A

     Date of re-accreditation – N/A

4.   **Distinctive Features of the Programme and the Student Experience**

This Programme has been designed to provide students with the knowledge and industry skillset to become effective graduate members of the workforce in the computing and digital sectors.

Students will have the opportunity to develop their analytical and critical thinking skills through current research. These will be underpinned by practical episodes focused on current industry practices.

The computing and digital sector has been one of the leading growth industries on the Island for several years with a 25% increase in computer and digital relevant sectors over the last 5 years. This includes a wide range of services from cyber security through to games development. The FdSc Digital Technologies course aims to develop students to be effective in these potential future careers and also prepare them for further study including qualifications such as BSc (Hons) degrees and Masters degrees.

Graduates may go on to future roles (not limited to):
- Cyber Security Analyst
- Security Administrator
- Cloud Developer/Administrator
- Software Developer
- Web Designer/Developer

The Programme is delivered by a combination of learning modes in Jersey by Jersey-based staff, with facilities and learning and student support services provided by UCJ. Its content enables students to apply a range of perspectives from computing and digital to initiatives, industry and policy.

The UCJ Computing teaching team includes a range of lecturers, appropriately qualified and all with computing and digital industry experience.

The module content has been designed through consultation with key representatives from the computing and digital industry including C5 Alliance, Government of Jersey, Prosperity 24/7, Aztec, Ogier and Ports of Jersey. These key partners are also the primary employers of UCJ Computing graduates.

UCJ Computing staff and students have direct access to learning spaces such as classrooms and library space at UCJ as well as utilising the co-working spaces of Digital Jersey Hub and Digital Jersey Academy (Digital Jersey is the government-backed economic development agency with responsibility for the sector). These spaces are used by students as a place to develop as a team and foster communication with current industry employers.

UCJ resources include equipment for networking, games development and access to cloud providers to develop a wide range of cloud-based solutions.

5.   Relevant QAA Subject Benchmark Group(s)
https://www.qaa.ac.uk/docs/qaa/sbs/sbs-computing-22.pdf?sfvrsn=ebb3dc81_2

The following statements have been selected from 1.6, 1.9, 1.10, 1.11, 2.15 and 2.17 from the Subject Benchmark Groups with relation to what could be included within a successful Level 4 and 5 provision.

1.6 Computing promotes innovation and creativity. It requires a disciplined approach to problem solving. It approaches design and development through selection from alternative possibilities justified by carefully crafted arguments. It controls complexity first through abstraction and simplification, and then by the integration of components. Above all, it is a product of human ingenuity and provides major intellectual challenges, yet this limits neither the scope of computing nor the complexity of the application domains addressed.

1.9 Computing degrees will continue to evolve in response to developments in the subject area and to reflect changes in the school curriculum. This Statement therefore concentrates on general graduate outcomes and does not specify a core computing curriculum.

1.10 Computing degrees often integrate a period of time working within a company or similar organisation, as an intern or placement student. Placements offer the opportunity for students to apply and validate their learning and skills in the context of the world of

employment and to provide early exposure to the development of professional competence as enshrined within the skills expressed in the particular course of study.

1.11 The pervasiveness of the computing discipline can enable a curriculum which is relevant and authentic, relates to real and current challenges, and able to promote greater social justice and equity. The curriculum should also speak to and be valued by every student, while addressing issues that are important to them. Culturally responsive computing approaches that recognise and value students' cultures can bring about ways for students to reflect and engage with issues of representation, exclusion, disadvantage and structurally embedded advantage. The curriculum should engage students in meaningful, culturally-contexed practical tasks in a welcoming and collaborative environment, as well as ensuring that technological solutions do not emerge with unintentional bias and limited insight into the diversity of the people who will develop and use them.

2.15 Many degree courses provide opportunities for work-based learning such as apprenticeships, placements and live work-based projects. Other courses may offer opportunities for study abroad. These opportunities are usually achieved through the higher education provider working in partnership with other external organisations.

2.17 Computing courses can benefit from other collaborations with external organisations in activities such as curriculum design, talks, workshops, projects and visits. An effective external/industry advisory board can help ensure courses are relevant to the needs of the computing sector and advise on the development of employability skills.

3.12 The curriculum will define the knowledge students will gain and the course learning outcomes indicate the areas in which graduates will have knowledge competence or capability. However, individual students are expected to have the opportunity to develop a greater level of competence in some aspects of computing. These areas could also be linked to specific applied learning contexts, the particular focus of their major capstone activity, or a student's chosen pathway through optional modules on the course. Individual students could highlight their competencies, for example, in a learning portfolio, through the achievement of badges linked to micro-credentials, or in their curriculum vitae.

	Threshold	Typical	Excellent
Subject knowledge, understanding and skills	Demonstrate a requisite understanding of the main body of knowledge for their subject	Demonstrate a sound understanding of the main body of knowledge for their subject and be able to exercise critical judgement in the use of that knowledge	Demonstrate an exceptional understanding of the main body of knowledge for their subject and be able to exercise insightful and critical judgement in the use of that knowledge. Be creative and innovative in the application of the principles covered in the curriculum, and be able to go beyond what has been taught in classes
Intellectual skills	Understand and apply essential concepts, principles and practices of the subject in the context of well-defined scenarios,	Critically analyse and apply concepts, principles and practices of the subject in the context of loosely defined scenarios,	Critically analyse and apply a wide range of concepts, principles and practices of the subject in the context of open

	showing judgement in the selection and application of tools and techniques	showing effective judgement and adaptability in the selection and use of tools and techniques	scenarios, showing refined judgement and adaptability in the selection and use of tools and techniques
Computational problem-solving	Be able to demonstrate judgement, critical thinking and problem-solving skills to solve well-specified problems, to create computational artefacts with a degree of independence	Be able to demonstrate detailed judgement, critical thinking and problem-solving skills to solve both well-specified and loosely defined problems, to create appropriate computational artefacts	Be able to demonstrate sophisticated judgement, critical thinking, research design, and well-developed problem-solving skills with a high degree of autonomy, and to create highly effective computational artefacts across complex and unpredictable circumstances
Practical skills across the computing lifecycle	Demonstrate the ability to undertake problem identification and analysis to appropriately design, develop, test, integrate or deploy a computing system and any associated artefacts; understand the	Demonstrate the ability to undertake problem identification and analysis to appropriately design, develop, test, integrate or deploy a complex computing system and any associated artefacts; understand the	Demonstrate the ability to undertake problem identification and analysis to appropriately design, develop, test, integrate or deploy a highly complex computing system and any associated artefacts; deeply

	relationship between stages	relationship between stages and be able to demonstrate related problem-solving and evidence-informed evaluative skills	understand the relationship between stages and be able to demonstrate related sophisticated problem-solving and evidence-informed evaluative skills
Interpersonal and team working skills (see also Entrepreneurship and enterprise education)	Demonstrate the ability to work in an effective manner, including as a member of a team, making use of tools and techniques to appropriately communicate, manage tasks and plan projects under guidance	Demonstrate the ability to work in a proactive and effective manner, including as a member of a team, making good use of tools and techniques to successfully communicate, manage tasks and plan projects with minimum guidance	Demonstrate the ability to work in a highly proactive and accomplished manner, including as a leading member of a team, making excellent use of tools and techniques to proficiently communicate, manage tasks and plan projects with minimum guidance
Professional practice (see also Equality, diversity and inclusion, Sustainability and Entrepreneurship and enterprise education)	Identify appropriate practices and perform work within a professional, legal and ethical framework – including data management and use, security, equality, diversity and inclusion (EDI)	Identify appropriate practices and effect principled solutions within a professional, legal and ethical framework to address core considerations – including data management and	Identify best-of-kind practices and effect highly principled solutions within a professional, legal and ethical framework to consistently address a wide breadth of relevant considerations –

	and sustainability – in the work that they undertake	use, security, equality, diversity and inclusion (EDI) and sustainability – in the work that they undertake	including data management and use, security, equality, diversity and inclusion (EDI) and sustainability – in the work that they undertake

6. **Programme Structure (NB: to include:)**

This Stage 1 and 2 Programme comprises the following modules (See Appendix 1 for the Definitive Module Records):

Students will be able to choose between a full-time and a part-time programme of study. The programme will run on a two-semester model:

Semester 1 – September to January

Semester 2 – February to May

Full-Time Programme (two year)

Year 1

Module Code	Module Name	Semester	Credits	Level
HIGH1308	Professional Preparation and Personal Development	1/2	20	4
HIGH1309	Programming Principles and Techniques	1	20	4
HIGH1310	Security	2	20	4
HIGH1311	Computer Networks	1	20	4
HIGH1312	Web and Database Technologies	1/2	20	4
HIGH1313	Gamification	1/2	20	4

Year 2

Module Code	Module Name	Semester	Credits	Level
HIGH2308	Work-Based Learning – Self Development and Industry Knowledge	1	20	5
HIGH2309	Research Methods Project	2	20	5
HIGH2310	Cloud Computing	2	20	5
HIGH2311	Emerging Technologies	2	20	5
In addition to the 4 core modules above, students will need to select one of the pathways below and complete both modules within their selected pathway				
HIGH2312	Internet of Things (IoT) (Computing pathway)	1	20	5
HIGH2313	Cyber Security (Computing pathway)	2	20	5
HIGH2314	Game Asset Management (Games pathway)	1	20	5
HIGH2315	Games Development (Games pathway)	2	20	5

Part-Time Programme (four years)

Year 1

Module Code	Module Name	Semester	Credits	Level
HIGH1308	Professional Preparation and Personal Development	1/2	20	4
HIGH1309	Programming Principles and Techniques	1	20	4
HIGH1313	Gamification	1/2	20	4

Year 2

Module Code	Module Name	Semester	Credits	Level
HIGH1310	Security	2	20	4
HIGH1311	Computer Networks	1	20	4
HIGH1312	Web and Database Technologies	1/2	20	4

Year 3

Module Code	Module Name	Semester	Credits	Level
HIGH2308	Work-Based Learning – Self Development and Industry Knowledge	1	20	5
HIGH2309	Research Methods Project	2	20	5
HIGH2310	Cloud Computing	2	20	5

Year 4

Module Code	Module Name	Semester	Credits	Level
Students will complete one core module, HIGH2311 Emerging Technologies, and select one of the pathways below and complete both modules within their selected pathway				
HIGH2311	Emerging Technologies	2	20	5
	AND			
HIGH2312	Internet-of-Things (IoT) (Computing pathway)	1	20	5
HIGH2313	Cyber Security (Computing pathway)	2	20	5
	OR			
HIGH2314	Game Asset Management (Games pathway)	1	20	5
HIGH2315	Games Development (Games pathway)	2	20	5

7.   Programme Aims

This Programme aims to provide students who are resident in Jersey with an opportunity to undertake and study a range of Level 4 and 5 modules in Computing offered in Jersey. It is intended:

1.   to provide students with a broad education in Computing with a focus on understanding and analysing problems, designing solutions and managing implementation.

2.   to ensure students have access and exposure to latest industry developments and to equip the students to adapt and learn new skills as the computing and digital industry evolves throughout their careers.

3.   to develop a range of intellectual and research skills, including critical thinking skills, report writing, presentations and interpersonal and independent working skills, all of which will have relevance for a variety of employment opportunities in the modern workplace.

4.   to provide students with experience in the workplace and to develop their communication and interpersonal skills during these work placements or simulated projects.

8.   Programme Intended Learning Outcomes (PILOs)

8.1.   Knowledge and understanding

On successful completion graduates should have developed:

1. research strategies and approaches in order to solve problems and generate ideas

2. understanding of the digital industry standard tools and software in the practical approaches to given scenarios

3. an understanding of a range of digital and computing specialisms and the ability to make an informed career choice on completion of the course

4. an understanding of workplace environments and their roles and responsibilities within specific digital areas

5. the ability to build security into all aspects of computer and network usage

8.2. Cognitive and intellectual skills

On successful completion graduates should have developed the ability to:

1. integrate a variety of problem-solving approaches and to apply them to relevant problems

2. make realistic recommendations, cognisant of the latest developments and research impacting on the computing and digital industry

3. critically evaluate whether solutions meet specified requirements

8.3. Key and transferable skills

On successful completion graduates should have developed the ability to:

1. construct well argued, referenced documents, underpinned by relevant ideas, that address a given problem with relevant arguments

2. undertake effective project management and make best use of the skills and knowledge of professionals to research and collaborate

3. manage their own learning and increase their independence as reflective learners through using feedback effectively

8.4. Employment related skills

On successful completion graduates should have developed:

1. communication and interpersonal skills through collaboration with peers and members of the digital industry and reflecting on and evaluating contributions in workplace settings
2. practical experience of stakeholder engagement, problem solving and industry relevant environments within the computing and digital industry sector
3. an understanding of the current digital industry climate in terms of current and future developments and key skills required for a preferred career path

8.5. Practical skills

On successful completion graduates should have developed the ability to:

1. specify, design and construct reliable, secure and usable digital-based solutions
2. plan and manage projects to deliver digital solutions within constraints such as requirements and timescale
3. recognise and respond to security risks and safety aspects that may be involved in the deployment of digital solutions across all the course content
4. critically evaluate and analyse provided scenarios and problems and devise suitable solutions, within the given constraints

9. Admissions Criteria, including RPL and Disability Service arrangements

This is a Level 4 and 5 programme therefore candidates would be expected to have achieved a Level 3 Diploma/Extended Diploma in a related field or the equivalent of Level 3 study or significant work experience in a related field at a managerial, delivery or strategic level.

All applicants must have or be working towards GCSE (or equivalent) Maths and English at Grade C or above.

Entry Requirements for FdSc (Hons) Digital Technologies	
A-level/AS-level	Candidates are interviewed before an offer is made. Normal minimum entry requirements are 112 UCAS points at A level
BTEC National Diploma/QCF Extended Diploma	Candidates are interviewed before an offer is made. Merit profile
Access to Higher Education at level 3	Pass an Access to HE Diploma in Science with 33 or more credits at merit or distinction
Relevant work experience – Accredited Prior Learning.	If candidates do not have relevant Level 3 qualifications, then they will need to have least 2 years work experience at a high level in a related field e.g. software development, support desk, analyst, cyber security, networking, etc. This will represent Accredited Prior Experiential Learning and proof of working knowledge of industry relevant skills which can be used as entry criteria. This will be considered and approved by the UCJ admissions team.
	Notes: Other relevant Level 3 qualifications will be assessed on a case-by-case basis for equivalency. University College Jersey may make contextual offers, based on an applicant's individual circumstances.

Students that have a disability will be provided with the appropriate support through Highlands Learning Support team.

Classes will be made physically accessible to all students. This includes but not limited to classrooms with wheelchair access, support for students with learning needs e.g. dyslexia, Irlens syndrome.

10. **Non-Standard Regulations (NB: all non-standard regulations must be approved by QSSC)**

N/A

11. **Transitional Arrangements for existing students looking to progress onto the programme**

One cohort of students who will transition from the HNC Computing on to Stage 2 in September 2024 of the FdSc Digital Technologies. APCL will be required.

Appendices

Programme Specification Mapping (UG) – core/elective modules

Appendix 1: (UG) Mapping table that reflects which core modules contribute to the Programme Intended Learning Outcomes (PILOs)
Tick those Programme Learning Outcomes the module contributes to through its assessed learning outcomes. Insert rows and columns as required.

Core modules	Programme Intended Learning Outcomes contributed to (for more information see Section 8)																		Compensation Y/N	Assessment Element(s) and weightings 01 (online open book assesment) E1 (exam), E2 (clinical exam), T1 (test), C1 (coursework), A1 (Pass/Fail), P1 (practical)
	8.1 Knowledge and understanding					8.2 Cognitive and intellectual skills			8.3 Key and transferable skills			8.4 Employment related skills			8.5 Practical skills					
	1	2	3	4	5	1	2	3	1	2	3	1	2	3	1	2	3	4		
PILOs met at Level 4																				
HIGH1308 Professional Preparation and Personal Development			√	√					√	√	√	√	√	√					Y	C1 70% A1 Pass/Fail
HIGH1309 Programming Principles and Techniques	√	√	√			√	√	√	√		√	√		√	√	√		√	Y	C1 100%
HIGH1310 Security	√	√	√		√	√	√	√	√		√			√	√	√	√	√	Y	C1 60% P1 40%
HIGH1311 Computer Networks	√	√	√		√	√	√	√	√		√			√	√	√	√	√	Y	C1 50% P1 50%
HIGH1312 Web and Database Technologies	√	√	√		√	√	√	√	√		√			√	√	√		√	Y	C1 100%
HIGH1313 Gamification	√	√	√			√	√	√	√					√	√	√			Y	C1 80% P1 20%
PILOs met at Level 5																				
HIGH2308 Work-Based Learning – Self Development and Industry Knowledge			√	√					√	√	√	√	√	√					Y	C1 100%
HIGH2309 Research Methods Project	√	√	√			√	√	√	√		√		√	√					Y	C1 80% P1 20%
HIGH2310 Cloud Computing	√	√	√		√	√	√	√	√		√			√	√	√	√	√	Y	C1 100%
HIGH2311 Emerging Technologies	√	√	√			√	√	√	√		√			√	√	√		√	Y	C1 80% P1 20%

ELECTIVE MODULES: tick those Programme Learning Outcomes the module contributes to through its assessed learning outcomes. Insert rows and columns as required.

Elective Modules		8.1 Knowledge & understanding					8.2 Cognitive & intellectual skills			8.3 Key & transferable skills			8.4 Employment related skills			8.5 Practical skills				Compensation Y/N	Assessment Element(s) and weightings
		1	2	3	4	5	1	2	3	1	2	3	1	2	3	1	2	3	4		01 - online open book assesment; E1 - exam; E2 - clinical exam; T1 - test; C1 - coursework; A1 – pass/fail; P1 - practical
Level 5	HIGH2312 Internet of Things (IoT) (Computing pathway)	√	√	√		√	√	√	√	√		√	√		√	√	√		√	Y	C1 60% P1 40%
	HIGH2313 Cyber Security (Computing pathway)	√	√	√		√	√	√		√		√			√	√	√	√	√	Y	C1 60% P1 40%
	HIGH2314 Game Asset Management (Games pathway)	√	√	√			√	√	√	√		√			√	√	√		√	Y	C1 100%
	HIGH2315 Games Development (Games pathway)	√	√	√			√	√	√	√		√			√	√	√		√	Y	C1 100%
Level 5 LOs																					

UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD. *Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.*

MODULE CODE: HIGH1308   **MODULE TITLE:** Professional Preparation and Personal Development

CREDITS: 20   **FHEQ LEVEL:** 4   **HECOS CODE(S) [max 3]:** 110102

PRE-REQUISITES: None   **CO-REQUISITES:** None   **COMPENSATABLE:** Y

SHORT MODULE DESCRIPTOR:

The aim of the module is for learners to develop their professional skills that will assist them in gaining employment and career development. Learners will have the opportunity to attend skills workshops based around CV development and interview skills. They will also produce a development plan that they will be put into action during their work-based learning placement or simulated project with a local business.

ELEMENTS OF ASSESSMENT – *see Definitions of Elements and Components of Assessment*					
E1 (Examination)		**C1** (Coursework)	100%	**P1** (Practical)	
E2 (Clinical Examination)		**A1** (Generic assessment)	Pass/Fail		
T1 (Test)		**O1**(online open book assessment)			

SUBJECT ASSESSMENT PANEL to which module should be linked: Computing

Professional body minimum pass mark requirement: N/A

MODULE AIMS:

This module will enable students to:
- Use external courses to improve their professional performance.
- Understand the business needs to the local computing sector.
- Better understand their skill sets and areas that require development.
- Understand their impact on an organisation and how they can improve.

ASSESSED LEARNING OUTCOMES: (additional guidance below; please refer to the Programme Specification for relevant Programme Intended Learning Outcomes.

At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes (ALOs)	Programme Intended Learning Outcomes (PILOs) contributed to
1. Develop their professional performance via skills workshops and online identity	8.3.1, 8.3.2, 8.4.1, 8.4.2

2. Develop professional performance and local business awareness by taking part in an industry networking event	8.1.3, 8.1.4, 8.3.2, 8.4.1, 8.4.2, 8.4.3
3. Develop, complete and review a skills development plan across an extended timeframe.	8.3.1, 8.3.2
4. Evaluate your development based on a 360 review from work-based learning or simulated project.	8.3.3, 8.4.1, 8.4.2, 8.4.3

DATE OF APPROVAL: 16/04/2024	**FACULTY/OFFICE:** Partnerships
DATE OF IMPLEMENTATION: 01/09/2024	**SCHOOL/PARTNER:** University College Jersey
DATE(S) OF APPROVED CHANGE: XX/XX/XXXX	**SEMESTER:** Semester 1 and 2

Notes:

Additional Guidance for Learning Outcomes:

To ensure that the module is pitched at the right level check your intended learning outcomes against the following nationally agreed standards

- Office for Students, Sector-recognised Standards
- Office for Students, Quality and Standards Conditions of Registration
- Subject benchmark statements
- Professional, regulatory and statutory (PSRB) accreditation requirements (where necessary e.g. health and social care, medicine, engineering, psychology, architecture, teaching, law)

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

Items in this section must be considered annually and amended as appropriate, in conjunction with the Module Review Process. <u>Some parts of this page may be published on the website as a guide for prospective students.</u> Further details for current students should be provided in module guidance notes.

ACADEMIC YEAR: 2024-25   **NATIONAL COST CENTRE:** 121
MODULE LEADER: Shaun Heslop   **OTHER MODULE STAFF:**

Summary of Module Content

The module is all about self-awareness and how learners can put in place factors now that can benefit their future progression and career pathway choices.
The focus of the module will be based around the development of learners' own skills and how a clear plan can assist in this development.
To achieve this, they will complete the following:

- CV workshop
- Interview skills workshop
- Practice interview
- CV development
- LinkedIN profile
- Meet and greet event
- A comprehensive skills audit based on soft and technical skills
- Learners will identify the key areas for future development over the next couple years
- Learners will create a development plan that they will put into action during their work placements or participation in a simulated project with a local business
- They will receive 360-degree feedback (a number of people that they work with that hold different positions) from their placement/project

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities	Hours	Comments/Additional Information (briefly explain activities, including formative assessment opportunities)
Lecture	21	Lecture style delivery with group exercises
Supervised workshop	21	Group and individual research and development, supervised by tutor
Guided independent study	158	Directed reading and research; completion of formative assessment tasks; development and completion of course work.
Total	200	(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)

SUMMATIVE ASSESSMENT

Element Category	Component Name & associated ALO	Component Weighting
Coursework	Formal report (ALO 1 and 3)	60%
	Reflective report (ALO 4)	40%
Assessment	Attendance at CV and interview skills workshop and mock interview (ALO 1) Attendance at meet and greet event (ALO 2)	Pass/Fail

REFERRAL ASSESSMENT

Element Category	Component Name	Component Weighting
Coursework	Formal report (ALO 1, 3 and 4)	100%
A1 Assessment	Formal report – interview questions responses and meet and greet questions responses and (ALO 1 and 2)	Pass/Fail

To be completed when presented for Minor Change approval and/or annually updated		
Updated by: XX/XX/XXXX	Date:	**Approved by**: Date: XX/XX/XXXX

UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD. *Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.*

MODULE CODE: HIGH1309   **MODULE TITLE:** Programming Principles and Techniques
CREDITS: 20   **FHEQ LEVEL:** 4   **HECOS CODE(S) [max 3]:** 110102
PRE-REQUISITES: None   **CO-REQUISITES:** None   **COMPENSATABLE:** Y
SHORT MODULE DESCRIPTOR:
The aim of the module is to introduce learners to event-driven programming and how it is best used in practice. Learners will create a range of small programs that perform specific business-related tasks. Learners will then be provided with a problem that will require them to select appropriate methods to implement a suitable solution and ensure that the solution has been tested thoroughly.

ELEMENTS OF ASSESSMENT – *see Definitions of Elements and Components of Assessment*

E1 (Examination)		**C1** (Coursework)	100%	**P1** (Practical)	
E2 (Clinical Examination)		**A1** (Generic assessment)			
T1 (Test)		**O1** (online open book assessment)			

SUBJECT ASSESSMENT PANEL to which module should be linked: Computing

Professional body minimum pass mark requirement: N/A

MODULE AIMS:
This module will enable students to:
- Understand why and how programming paradigms are used in specific circumstances and business solutions with a focus on event-driven programming.
- Create simple programs to serve specific functions.
- Select and implement suitable programming technique to solve a specified problem.

ASSESSED LEARNING OUTCOMES: (additional guidance below; please refer to the Programme Specification for relevant Programme Intended Learning Outcomes.

At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes (ALOs)	Programme Intended Learning Outcomes (PILOs) contributed to
1. Research and analyse event-driven programming	8.1.1, 8.1.2, 8.1.3, 8.4.1
2. Design, implement, debug and test a simple program	8.1.2, 8.2.1, 8.5.1,

3. Analyse and evaluate a problem and develop an appropriate program to solve that problem	8.1.2, 8.2.1, 8.2.2, 8.2.3, 8.3.1, 8.3.3, 8.4.3, 8.5.1, 8.5.2, 8.5.4

DATE OF APPROVAL: 16/04//2024	**FACULTY/OFFICE:** Partnerships
DATE OF IMPLEMENTATION: 01/09/2024	**SCHOOL/PARTNER:** University College Jersey
DATE(S) OF APPROVED CHANGE: XX/XX/XXXX	**SEMESTER:** Semester 1

Notes:

Additional Guidance for Learning Outcomes:

To ensure that the module is pitched at the right level check your intended learning outcomes against the following nationally agreed standards

- Office for Students, Sector-recognised Standards
- Office for Students, Quality and Standards Conditions of Registration
- Subject benchmark statements
- Professional, regulatory and statutory (PSRB) accreditation requirements (where necessary e.g. health and social care, medicine, engineering, psychology, architecture, teaching, law)

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

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ACADEMIC YEAR: 2024-25   **NATIONAL COST CENTRE:** 121
MODULE LEADER: Gerard Sargent   **OTHER MODULE STAFF:**

Summary of Module Content
Research into event-driven programming
Testing and debugging of software
Data types
Data structures
Integrated Development Environment – IDE
Coding standards

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities	Hours	Comments/Additional Information (briefly explain activities, including formative assessment opportunities)
Lecture	24	Lecture style delivery with group exercises
Supervised workshop	18	Group and individual research and development, supervised by tutor
Guided independent study	158	Directed reading and research; completion of formative assessment tasks; development and completion of course work.
Total	200	(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)

SUMMATIVE ASSESSMENT

Element Category	Component Name & associated ALO	Component Weighting
	Essay (ALO 1)	30%
Coursework	Formal report (ALO 2-3)	70%
		100%

REFERRAL ASSESSMENT

Element Category	Component Name	Component Weighting
Coursework	New Formal report (ALO 1-3)	100%

To be completed when presented for Minor Change approval and/or annually updated		
Updated by: XX/XX/XXXX	Date:	Approved by: Date: XX/XX/XXXX

UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD. *Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.*

MODULE CODE: HIGH1310 **MODULE TITLE:** Security
CREDITS: 20 **FHEQ LEVEL:** 4 **HECOS CODE(S) [max 3]:** 110102
PRE-REQUISITES: None **CO-REQUISITES:** None **COMPENSATABLE:** Y
SHORT MODULE DESCRIPTOR:
Security is paramount within the interconnected world, helping to safeguard individuals and organisations against cyber threats, data breaches, and loss. Learners will explore various threats and risks organisations are susceptible to, as well as understanding how to prevent them. Security frameworks, legislation and policies are all fundamental in ensuring consistency.

ELEMENTS OF ASSESSMENT – *see Definitions of Elements and Components of Assessment*					
E1 (Examination)		**C1** (Coursework)	60%	**P1** (Practical)	40%
E2 (Clinical Examination)		**A1** (Generic assessment)			
T1 (Test)		**O1**(online open book assessment)			

SUBJECT ASSESSMENT PANEL to which module should be linked: Computing

Professional body minimum pass mark requirement: N/A

MODULE AIMS:
This module will enable students to:
- Attain a comprehensive understanding of the security landscape, focusing on the identification and analysis of various security threats. Students will explore and evaluate different countermeasures and security frameworks, as well as the relevant legislation and policies that govern and ensure system security.
- Gain the skills and knowledge required to perform risk assessments on network infrastructure. Students will learn to apply appropriate methodologies to identify, evaluate, and prioritise potential risks. Students will be involved in practical exercises where they will gain hands-on experience in conducting risk assessments, analyse the results, and produce conclusions to inform decision-making and enhance network security.
- Obtain a thorough understanding of network security principles and practices. Students will learn to identify and implement effective security measures to protect network infrastructure which considers a range of protective strategies, tools, and technologies. Students will be able to apply these measures in practical scenarios to protect networks against potential threats and vulnerabilities.
- Develop students' proficiency in evaluating network security measures through systematic testing. Students will learn to design and implement comprehensive test plans to assess the effectiveness of network security. Students will document test procedures, analyse results, and present findings and recommendations to determine overall network security.

ASSESSED LEARNING OUTCOMES: (additional guidance below; please refer to the Programme Specification for relevant Programme Intended Learning Outcomes.

At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes (ALOs)	Programme Intended Learning Outcomes (PILOs) contributed to
1. Research and analyse security threats and countermeasures, frameworks, legislation, and policies to secure systems	8.1.1, 8.1.2, 8.1.3, 8.1.5, 8.3.1, 8.3.3, 8.4.3
2. Conduct a risk assessment on a network using an appropriate method and conclude findings	8.1.1, 8.1.5, 8.2.2, 8.2.3, 8.3.1, 8.5.3
3. Understand and implement security measures to protect a network	8.1.1, 8.1.2, 8.1.3, 8.1.5, 8.2.1, 8.2.2, 8.3.1, 8.5.1, 8.5.2, 8.5.3, 8.5.4
4. Test network security measures using tools with a supporting test plan and present findings and recommendations	8.1.1, 8.1.2, 8.1.3, 8.1.5, 8.2.1, 8.2.2, 8.2.3, 8.3.1, 8.3.3, 8.4.3, 8.5.1, 8.5.2, 8.5.3, 8.5.4

DATE OF APPROVAL: 16/04/2024	**FACULTY/OFFICE:** Partnerships
DATE OF IMPLEMENTATION: 01/09/2024	**SCHOOL/PARTNER:** University College Jersey
DATE(S) OF APPROVED CHANGE: XX/XX/XXXX	**SEMESTER:** Semester 2

Notes:

Additional Guidance for Learning Outcomes:

To ensure that the module is pitched at the right level check your intended learning outcomes against the following nationally agreed standards
- Office for Students, Sector-recognised Standards
- Office for Students, Quality and Standards Conditions of Registration
- Subject benchmark statements
- Professional, regulatory and statutory (PSRB) accreditation requirements (where necessary e.g. health and social care, medicine, engineering, psychology, architecture, teaching, law)

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

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ACADEMIC YEAR: 2024-25   **NATIONAL COST CENTRE:** 121
MODULE LEADER: Perry de Caux   **OTHER MODULE STAFF:**

Summary of Module Content
- Security Threats and Risks
- Physical Security Solutions
- Software Security Solutions
- Security Frameworks, Models, and Standards
- Legislation and Policies
- Risk Assessment and Management
- Network Security Measures
- Security Tools
- Testing

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities	Hours	Comments/Additional Information (briefly explain activities, including formative assessment opportunities)
Lecture	21	Lecture style delivery with group exercises
Supervised workshop	21	Group and individual research and development, supervised by tutor
Guided independent study	158	Directed reading and research; completion of formative assessment tasks; development and completion of course work.
Total	200	(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)

SUMMATIVE ASSESSMENT

Element Category	Component Name & associated ALO	Component Weighting
Coursework (C1)	Written Security Assignment (ALO 1)	30%
	Risk Assessment Report (ALO 2)	30%
	Testing and Evaluative Report (ALO 4)	40%

	Practical (P1)	Practical Skills Security Assessment (ALO 3)	100%

REFERRAL ASSESSMENT

Element Category	Component Name	Component Weighting
Coursework (C1)	Formal Report (ALO1, 2 and 4)	100%
Coursework (in lieu of original assessment)	Report (ALO 3)	100%

To be completed when presented for Minor Change approval and/or annually updated		
Updated by: XX/XX/XXXX	Date:	**Approved by**: Date: XX/XX/XXXX

UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD. *Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.*

MODULE CODE: HIGH1311   **MODULE TITLE:** Computer Networks
CREDITS: 20   **FHEQ LEVEL:** 4   **HECOS CODE(S) [max 3]:** 110102
PRE-REQUISITES: None   **CO-REQUISITES:** None   **COMPENSATABLE:** Y
SHORT MODULE DESCRIPTOR:
The aim of the module is for learners to understand our reliance on computer networks and the impact they have on our daily lives. Knowledge of various hardware, connection mediums, software, and services, are essential for designing efficient network solutions. Implementing, configuring, and testing are fundamental for ensuring that networks implemented are functional and meet the expected requirements and designs.

ELEMENTS OF ASSESSMENT – *see Definitions of Elements and Components of Assessment*					
E1 (Examination)		**C1** (Coursework)	50%	**P1** (Practical)	50%
E2 (Clinical Examination)		**A1** (Generic assessment)			
T1 (Test)		**O1**(online open book assessment)			

SUBJECT ASSESSMENT PANEL to which module should be linked: Computing

Professional body minimum pass mark requirement: N/A

MODULE AIMS:
This module will enable students to:
- Gain a foundational understanding of computer networks by exploring the core concepts and technologies that underpin them. Students will analyse the fundamental principles of networking, including the architecture, standards, protocols, and devices that facilitate communication throughout networks. Students will learn how various technologies are integrated and utilised to create efficient network infrastructures.
- Design and document network solutions through the creation of logical and physical network diagrams. Students will learn to interpret network requirements and translate them into detailed visual representations with appropriate formatting. Students will develop the ability to produce accurate and effective network diagrams to support the planning, implementing, and managing of network infrastructure.
- Develop students' practical skills in implementing and configuring a functional network. Students will learn to set up network hardware and software, configure network settings, and ensure the network operates efficiently and securely. Through practical labs, students will gain experience in troubleshooting and optimising network performance, preparing them to overcome and manage networking challenges effectively.
- Conduct comprehensive testing of network solutions using appropriate tools and techniques. Students will learn to design and execute test plans tailored to specific

network infrastructure to evaluate network solutions. Students will develop skills to analyse test findings critically, identify potential issues, and provide informed recommendations for improvement.

ASSESSED LEARNING OUTCOMES: (additional guidance below; please refer to the Programme Specification for relevant Programme Intended Learning Outcomes.

At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes (ALOs)	Programme Intended Learning Outcomes (PILOs) contributed to
1. Analyse network fundamentals and technologies used within computer networks	8.1.2, 8.3.1, 8.3.3, 8.4.3
2. Design a network solution	8.1.1, 8.1.2, 8.2.1, 8.2.2, 8.5.1, 8.5.2, 8.5.3, 8.5.4
3. Implement and configure a functional network	8.1.2, 8.1.3, 8.1.5, 8.2.1, 8.2.3, 8.4.3, 8.5.1, 8.5.2, 8.5.3
4. Test a network solution using relevant tools and evaluate findings	8.1.1, 8.1.2, 8.1.3, 8.1.5, 8.2.1, 8.2.2, 8.2.3, 8.3.1, 8.3.3, 8.4.3, 8.5.1, 8.5.2, 8.5.3, 8.5.4

DATE OF APPROVAL: 16/04/2024	**FACULTY/OFFICE:** Partnerships
DATE OF IMPLEMENTATION: 01/09/2024	**SCHOOL/PARTNER:** University College Jersey
DATE(S) OF APPROVED CHANGE: XX/XX/XXXX	**SEMESTER:** Semester 1

Notes:

Additional Guidance for Learning Outcomes:

To ensure that the module is pitched at the right level check your intended learning outcomes against the following nationally agreed standards
- Office for Students, Sector-recognised Standards
- Office for Students, Quality and Standards Conditions of Registration
- Subject benchmark statements
- Professional, regulatory and statutory (PSRB) accreditation requirements (where necessary e.g. health and social care, medicine, engineering, psychology, architecture, teaching, law)

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

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ACADEMIC YEAR: 2024-25   **NATIONAL COST CENTRE:** 121
MODULE LEADER: Perry de Caux   **OTHER MODULE STAFF:**

Summary of Module Content
- Network Models and Standards
- Network System Types
- Network Protocols
- Networking Devices and Software
- Wireless Networks
- Designing a Network
- Device Implementation and Configuration
- Test Plan and Testing Tools
- Vulnerability Considerations

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities	Hours	Comments/Additional Information (briefly explain activities, including formative assessment opportunities)
Lecture	18	Lecture style delivery with group exercises
Supervised workshop	24	Group and individual research and development, supervised by tutor
Guided independent study	158	Directed reading and research; completion of formative assessment tasks; development and completion of course work.
Total	200	(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)

SUMMATIVE ASSESSMENT

Element Category	Component Name & associated ALO	Component Weighting
Coursework (C1)	Written Network Assignment (ALO 1)	30%
	Network Design Report (ALO 2)	30%
	Testing and Evaluative Report (ALO 4)	40%

	Practical (P1)	Practical Skills Network Assessment (ALO 3)	100%

REFERRAL ASSESSMENT

Element Category	Component Name	Component Weighting
Coursework (C1)	Formal Report (ALO 1, 2 and 4)	100%
Coursework (in lieu of original assessment)	Report (ALO 3)	100%

To be completed when presented for Minor Change approval and/or annually updated		
Updated by: XX/XX/XXXX	Date:	**Approved by**: Date: XX/XX/XXXX

UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD. *Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.*

MODULE CODE: HIGH1312   **MODULE TITLE:** Web and Database Technologies
CREDITS: 20   **FHEQ LEVEL:** 4   **HECOS CODE(S) [max 3]:** 110102
PRE-REQUISITES: None   **CO-REQUISITES:** None   **COMPENSATABLE:** Y
SHORT MODULE DESCRIPTOR:
The aim of the module is for learners to learn and understand databases and their integration with web technologies. Learners will be expected to create their own relational database and integrate with their web solution. Students must ensure that their solution is comprehensively tested against a detailed plan that they have created.

ELEMENTS OF ASSESSMENT – *see Definitions of Elements and Components of Assessment*					
E1 (Examination)		**C1** (Coursework)	100%	**P1** (Practical**)**	
E2 (Clinical Examination)		**A1** (Generic assessment)			
T1 (Test)		**O1**(online open book assessment)			

SUBJECT ASSESSMENT PANEL to which module should be linked: Computing

Professional body minimum pass mark requirement: N/A

MODULE AIMS:
This module will enable students to:
- Design and implement a relational database solution using relevant software.
- Integrate a database into a new web solution.
- Thoroughly test and review software solutions in preparation for release.

ASSESSED LEARNING OUTCOMES: (additional guidance below; please refer to the Programme Specification for relevant Programme Intended Learning Outcomes.

At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes (ALOs)	Programme Intended Learning Outcomes (PILOs) contributed to
1. Design and implement a relational database solution	8.1.1, 8.1.2, 8.1.3, 8.2.1, 8.5.1, 8.5.2
2. Normalise, query, test and evaluate a database solution	8.1.1, 8.2.1, 8.2.3, 8.3.3, 8.5.2,

3. Design and implement a branded website using relevant technologies and tools and integrate a database.	8.1.1, 8.1.2, 8.1.3, 8.2.1, 8.2.2, 8.4.3, 8.5.1, 8.5.2
4. Comprehensively test and evaluate your website	8.1.5, 8.2.3, 8.3.1. 8.3.3, 8.5.4
DATE OF APPROVAL: 16/04/2024	**FACULTY/OFFICE:** Partnerships
DATE OF IMPLEMENTATION: 01/09/2024	**SCHOOL/PARTNER:** University College Jersey
DATE(S) OF APPROVED CHANGE: XX/XX/XXXX	**SEMESTER:** Semester 1 and 2

Notes:

Additional Guidance for Learning Outcomes:

To ensure that the module is pitched at the right level check your intended learning outcomes against the following nationally agreed standards

- Office for Students, Sector-recognised Standards
- Office for Students, Quality and Standards Conditions of Registration
- Subject benchmark statements
- Professional, regulatory and statutory (PSRB) accreditation requirements (where necessary e.g. health and social care, medicine, engineering, psychology, architecture, teaching, law)

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

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ACADEMIC YEAR: 2024-25   **NATIONAL COST CENTRE:** 121
MODULE LEADER: Gerard Sargent   **OTHER MODULE STAFF:**

Summary of Module Content

- Relational database and the different relationship types
- Entity Relationship Diagrams
- Data validation
- Queries
- Data inputting
- Back-end development
- Front-end development
- SEO
- Fluidity
- User Experience and User Interface (UE and UI)
- Content Management Systems
- React.js
- GitHub

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities	Hours	Comments/Additional Information (briefly explain activities, including formative assessment opportunities)
Lecture	21	Lecture style delivery with group exercises
Supervised workshop	21	Group and individual research and development, supervised by tutor
Guided independent study	158	Directed reading and research; completion of formative assessment tasks; development and completion of course work.
Total	200	(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)

SUMMATIVE ASSESSMENT

Element Category	Component Name & associated ALO	Component Weighting

Coursework	Database solution report (ALO 1)	30%
	Database test report (ALO 2)	15%
	Web solution report (ALO 3)	40%
	Web test report (ALO 4)	15%

REFERRAL ASSESSMENT

Element Category	Component Name	Component Weighting
Coursework	Formal report (ALO 1-4)	100%

To be completed when presented for Minor Change approval and/or annually updated		
Updated by: XX/XX/XXXX	Date:	**Approved by**: Date: XX/XX/XXXX

UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD. *Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.*

MODULE CODE: HIGH1313   **MODULE TITLE:** Gamification
CREDITS: 20   **FHEQ LEVEL:** 4   **HECOS CODE(S) [max 3]:** 110102
PRE-REQUISITES: None   **CO-REQUISITES:** None   **COMPENSATABLE:** Y
SHORT MODULE DESCRIPTOR:
The aim of the module is for learners to understand how gamification influences various disciplines and is used to improve experiences for users. Learners will be expected to understand how different strategies can be implemented and make use of these strategies in the development of their own gamification solution for a business process.

ELEMENTS OF ASSESSMENT – *see Definitions of Elements and Components of Assessment*					
E1 (Examination)		**C1** (Coursework)	80%	**P1** (Practical**)**	20%
E2 (Clinical Examination)		**A1** (Generic assessment)			
T1 (Test)		**O1**(online open book assessment)			

SUBJECT ASSESSMENT PANEL to which module should be linked: Computing

Professional body minimum pass mark requirement: N/A

MODULE AIMS:
This module will enable students to:
- Investigate the impact of gaming within diverse fields of study – education, employee training and health
- Assess the effectiveness of various gamification techniques – personalization, microlearning, levelling up/progress, accomplishments, time limits
- Develop a relevant business solution that is influenced by gamification

ASSESSED LEARNING OUTCOMES: (additional guidance below; please refer to the Programme Specification for relevant Programme Intended Learning Outcomes.

At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes (ALOs)	Programme Intended Learning Outcomes (PILOs) contributed to
1. Research and analyse the influence of gamification across business activities	8.1.2, 8.1.3, 8.3.1, 8.4.3,
2. Evaluate the various gamification strategies that can be utilised using real world examples	8.2.2, 8.3.1, 8.4.3,
3. Design and present the gamification of an existing business process	8.1.1, 8.2.1, 8.2.2, 8.2.3, 8.3.1, 8.4.3, 8.5.1, 8.5.2,

DATE OF APPROVAL: 16/04/2024	FACULTY/OFFICE: Partnerships
DATE OF IMPLEMENTATION: 01/09/2024	SCHOOL/PARTNER: University College Jersey
DATE(S) OF APPROVED CHANGE: XX/XX/XXXX	SEMESTER: Semester 1 and 2

Notes:

Additional Guidance for Learning Outcomes:

To ensure that the module is pitched at the right level check your intended learning outcomes against the following nationally agreed standards

- Office for Students, Sector-recognised Standards
- Office for Students, Quality and Standards Conditions of Registration
- Subject benchmark statements
- Professional, regulatory and statutory (PSRB) accreditation requirements (where necessary e.g. health and social care, medicine, engineering, psychology, architecture, teaching, law)

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

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ACADEMIC YEAR: 2024-25   **NATIONAL COST CENTRE:** 121
MODULE LEADER: Rafael Pires   **OTHER MODULE STAFF:**

Summary of Module Content

Research gamification uses: health industry, wellbeing, education, staff training, food industry and retail.

Strategies involved: personalisation, microlearning, milestones, promotional games, leaderboards, rewards, points systems, badges, simulation platforms, friend or other user competitions.

Implementation of own gamification solution using relevant strategies.

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities	**Hours**	**Comments/Additional Information (briefly explain activities, including formative assessment opportunities)**
Lecture	27	Lecture style delivery with group exercises
Supervised workshop	15	Group and individual research and development, supervised by tutor
Guided independent study	158	Directed reading and research; completion of formative assessment tasks; development and completion of course work.
Total	**200**	**(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)**

SUMMATIVE ASSESSMENT

Element Category	Component Name & associated ALO	Component Weighting
Coursework (C1)	Formal report (ALO 1-2) Design report (ALO 3)	50% 50%
Practical (P1)	Presentation (ALO 3)	100%

REFERRAL ASSESSMENT

Element Category	Component Name	Component Weighting
Coursework (C1)	Formal report (ALO 1-3)	100%
Coursework (in lieu of original assessment)	Report (ALO 3)	100%

To be completed when presented for Minor Change approval and/or annually updated		
Updated by: XX/XX/XXXX	Date:	**Approved by**: Date: XX/XX/XXXX

UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD. *Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.*

MODULE CODE: HIGH2308   **MODULE TITLE:** Work-Based Learning: Self Development and Industry Knowledge

CREDITS: 20   **FHEQ LEVEL:** 5   **HECOS CODE(S) [max 3]:** 110102

PRE-REQUISITES: None   **CO-REQUISITES:** None   **COMPENSATABLE:** Y

SHORT MODULE DESCRIPTOR:

The aim of the module is for learners to build on the personal development from the first year. Learners will review the feedback from last year and devise a new development plan to be utilised in their next placement/project. To better inform future development, learners will research industry, focusing on business processes and different level decisions and how these relate to associated industry positions.

ELEMENTS OF ASSESSMENT – *see Definitions of Elements and Components of Assessment*						
E1 (Examination)		**C1** (Coursework)	100%	**P1** (Practical**)**	
E2 (Clinical Examination)		**A1** (Generic assessment)			
T1 (Test)		**O1**(online open book assessment)			

SUBJECT ASSESSMENT PANEL to which module should be linked: Computing

Professional body minimum pass mark requirement: N/A

MODULE AIMS:

This module will enable students to:

- Recognise various business methods and decision-making approaches and understand their connection to different industry roles.
- Establish long-term development plans.
- Identify future opportunities and growth based feedback and analysis of their own development.

ASSESSED LEARNING OUTCOMES: (additional guidance below; please refer to the Programme Specification for relevant Programme Intended Learning Outcomes.

At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes (ALOs)	Programme Intended Learning Outcomes (PILOs) contributed to
1. Research and analyse business processes and level decisions and how they relate the different industry positions.	8.1.3, 8.1.4, 8.4.3

2. Review, evaluate and implement a new skills development plan across an extended timeframe.	8.3.1, 8.3.2
3. Critically evaluate your development and future progression based on a 360 review from work-based learning or simulated project.	8.1.3, 8.1.4, 8.3.3, 8.4.1, 8.4.2, 8.4.3

DATE OF APPROVAL: 16/04/2024	**FACULTY/OFFICE:** Partnerships
DATE OF IMPLEMENTATION: 01/09/2024	**SCHOOL/PARTNER:** University College Jersey
DATE(S) OF APPROVED CHANGE: XX/XX/XXXX	**SEMESTER:** Semester 1

Notes:

Additional Guidance for Learning Outcomes:

To ensure that the module is pitched at the right level check your intended learning outcomes against the following nationally agreed standards

- Office for Students, Sector-recognised Standards
- Office for Students, Quality and Standards Conditions of Registration
- Subject benchmark statements
- Professional, regulatory and statutory (PSRB) accreditation requirements (where necessary e.g. health and social care, medicine, engineering, psychology, architecture, teaching, law)

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

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ACADEMIC YEAR: 2024-25   **NATIONAL COST CENTRE:** 121
MODULE LEADER: Shaun Heslop   **OTHER MODULE STAFF:**

Summary of Module Content

The module is all about the continuation of the learner's self-awareness and how they can put in place factors now that can benefit their future progression and career pathway choices.
Learners will review the previous year's development and feedback to create a plan for the upcoming work placement/simulated project.
To achieve this, they will complete the following:

- Learners will identify the key areas for future development over the next couple of years
- Learners will create a development plan that they will put into action during their work placements or participation in a simulated project with a local business
- They will receive 360-degree feedback (a number of people that they work with that hold different positions) from their placement/project.
- Learners will develop potential progression routes for the next 2+ years

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities	**Hours**	**Comments/Additional Information (briefly explain activities, including formative assessment opportunities)**
Lecture	21	Lecture style delivery with group exercises
Supervised workshop	12	Individual research and development, supervised by tutor
Guided independent study	167	Directed reading and research; completion of formative assessment tasks; development and completion of course work; work placement or simulated project.
Total	**200**	**(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)**

SUMMATIVE ASSESSMENT

Element Category	Component Name & associated ALO	Component Weighting
Coursework	Formal report (ALO 1-2)	70%
	Reflective report (ALO 3)	30%
		100%

REFERRAL ASSESSMENT

Element Category	Component Name	Component Weighting
Coursework	Formal report (ALO 1-3)	100%

To be completed when presented for Minor Change approval and/or annually updated		
Updated by: XX/XX/XXXX	Date:	**Approved by**: Date: XX/XX/XXXX

UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD. *Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.*

MODULE CODE: HIGH2309   **MODULE TITLE:** Research Methods Project
CREDITS: 20   **FHEQ LEVEL:** 5   **HECOS CODE(S) [max 3]:** 110102
PRE-REQUISITES: None   **CO-REQUISITES:** None   **COMPENSATABLE:** Y
SHORT MODULE DESCRIPTOR:
Students will develop practical research skills, including data collection, analysis, and interpretation. Students will be provided with an overarching digital technologies theme that they will then devise a suitable research proposal. Students will complete research projects that have the potential for impact in their respective fields, equipping them with valuable research experience and a deep understanding of research in action.

ELEMENTS OF ASSESSMENT – *see Definitions of Elements and Components of Assessment*					
E1 (Examination)		**C1** (Coursework)	80%	**P1** (Practical)	20%
E2 (Clinical Examination)		**A1** (Generic assessment)			
T1 (Test)		**O1**(online open book assessment)			

SUBJECT ASSESSMENT PANEL to which module should be linked: Computing

Professional body minimum pass mark requirement: N/A

MODULE AIMS:
This module will enable students to:
- Apply research methodologies to given concepts in digital technologies taking into account ethical considerations
- Conduct meaningful data analysis to inform decisions and outcomes
- Foster effective collaboration with industry partners to drive innovation in digital technologies
- Strengthen the ability to present research work and project initiatives

ASSESSED LEARNING OUTCOMES: (additional guidance below; please refer to the Programme Specification for relevant Programme Intended Learning Outcomes.

At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes (ALOs)	Programme Intended Learning Outcomes (PILOs) contributed to
1. Select and apply research methodologies to a given concept in digital technologies, supported by a literature review	8.1.1, 8.1.2, 8.1.3, 8.3.1, 8.4.3
2. Analyse and interpret data collected, ensuring accuracy, validity and reliability	8.1.1, 8.1.3, 8.3.1, 8.4.3

3. Present research to key stakeholders, discussing implications of the research outcomes	8.2.1, 8.2.2, 8.2.3, 8.3.3, 8.4.2, 8.4.3,
4. Critically reflect on the research process, identifying strengths and areas for improvement	8.2.3, 8.3.1, 8.3.3, 8.4.3,

DATE OF APPROVAL: 16/04/2024	**FACULTY/OFFICE:** Partnerships
DATE OF IMPLEMENTATION: 01/09/2024	**SCHOOL/PARTNER:** University College Jersey
DATE(S) OF APPROVED CHANGE: XX/XX/XXXX	**SEMESTER:** Semester 2

Notes:

Additional Guidance for Learning Outcomes:

To ensure that the module is pitched at the right level check your intended learning outcomes against the following nationally agreed standards

- Office for Students, Sector-recognised Standards
- Office for Students, Quality and Standards Conditions of Registration
- Subject benchmark statements
- Professional, regulatory and statutory (PSRB) accreditation requirements (where necessary e.g. health and social care, medicine, engineering, psychology, architecture, teaching, law)

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

Items in this section must be considered annually and amended as appropriate, in conjunction with the Module Review Process. <u>Some parts of this page may be published on the website as a guide for prospective students.</u> Further details for current students should be provided in module guidance notes.

ACADEMIC YEAR: 2024-25   **NATIONAL COST CENTRE:** 121
MODULE LEADER: Paul Spencer   **OTHER MODULE STAFF:** Shaun Heslop

Summary of Module Content

- Qualitative, quantitative and mixed methods
- Ethical considerations
- Literature review
- Sampling
- Data collection methods
- Data analysis
- Practical implications of research outcomes
- Collaboration with industry partners
- Reflection on the research process

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities	Hours	Comments/Additional Information (briefly explain activities, including formative assessment opportunities)
Lecture	21	Lecture style delivery with group exercises
Supervised workshop	21	Feedback from tutor. Q&A with tutor.
Guided independent study	158	Directed reading and research; completion of formative assessment tasks; development and completion of course work.
Total	**200**	**(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)**

SUMMATIVE ASSESSMENT

Element Category	Component Name & associated ALO	Component Weighting
Coursework (C1)	Formal Report (ALO 1-2)	75%
	Reflective report (ALO 4)	25%
Practical (P1)	Presentation (ALO 3)	100%

REFERRAL ASSESSMENT

Element Category	Component Name	Component Weighting
Coursework (C1)	Report (ALO1, 2 and 4)	100%
Coursework (in lieu of original assessment)	Report (ALO 3)	100%

To be completed when presented for Minor Change approval and/or annually updated		
Updated by: XX/XX/XXXX	Date:	Approved by: Date: XX/XX/XXXX

UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD. *Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.*

MODULE CODE: HIGH2310   **MODULE TITLE:** Cloud Computing
CREDITS: 20   **FHEQ LEVEL:** 5   **HECOS CODE(S) [max 3]:** 110102
PRE-REQUISITES: None   **CO-REQUISITES:** None   **COMPENSATABLE:** Y
SHORT MODULE DESCRIPTOR:
Cloud computing is central to most organisations and its various uses are replacing existing business systems. Computing specialisms all have a cloud element and employers are increasingly requiring a level of cloud understanding. Learners are expected to be able to analyse a computing problem and plan and develop a cloud solution that incorporates clear security measures and justify future improvements.

ELEMENTS OF ASSESSMENT – *see Definitions of Elements and Components of Assessment*					
E1 (Examination)		**C1** (Coursework)	100%	**P1** (Practical)	
E2 (Clinical Examination)		**A1** (Generic assessment)			
T1 (Test)		**O1** (online open book assessment)			

SUBJECT ASSESSMENT PANEL to which module should be linked: Computing

Professional body minimum pass mark requirement: N/A

MODULE AIMS:
This module will enable students to:
- Identify the relevant service and deployment models to be implemented in specific scenarios
- Develop cloud solutions based on specific requirements
- Protect cloud solutions from appropriate security threats
- Analyse cloud solutions and identify weaknesses and improvements

ASSESSED LEARNING OUTCOMES: (additional guidance below; please refer to the Programme Specification for relevant Programme Intended Learning Outcomes.

At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes (ALOs)	Programme Intended Learning Outcomes (PILOs) contributed to
1. Research and analyse the different technologies involved with cloud computing using real world examples	8.1.3, 8.3.1, 8.3.3

2. Plan, justify and develop a cloud solution using a cloud provider and take into consideration operating costs	8.1.1, 8.1.2, 8.1.3, 8.2.1, 8.3.1, 8.3.3, 8.4.3, 8.5.1, 8.5.2
3. Analyse and implement the key security issues involved with cloud environments	8.1.1, 8.1.2, 8.1.3, 8.1.5, 8.3.1, 8.3.3, 8.4.3, 8.5.1, 8.5.3
4. Critically evaluate their solution against original plan and explain future improvements	8.1.1, 8.1.2, 8.1.3, 8.2.1, 8.2.2, 8.2.3, 8.3.1, 8.3.3, 8.4.3, 8.5.1, 8.5.2, 8.5.4

DATE OF APPROVAL: 16/04/2024	**FACULTY/OFFICE:** Partnerships
DATE OF IMPLEMENTATION: 01/09/2024	**SCHOOL/PARTNER:** University College Jersey
DATE(S) OF APPROVED CHANGE: XX/XX/XXXX	**SEMESTER:** Semester 2

Notes:

Additional Guidance for Learning Outcomes:

To ensure that the module is pitched at the right level check your intended learning outcomes against the following nationally agreed standards

- Office for Students, Sector-recognised Standards
- Office for Students, Quality and Standards Conditions of Registration
- Subject benchmark statements
- Professional, regulatory and statutory (PSRB) accreditation requirements (where necessary e.g. health and social care, medicine, engineering, psychology, architecture, teaching, law)

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

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ACADEMIC YEAR: 2024-25 **NATIONAL COST CENTRE:** 121
MODULE LEADER: Shaun Heslop **OTHER MODULE STAFF:**

Summary of Module Content

- Service models - Infrastructure as a Service, Platform as a Service and Software as a Service
- Deployment models – Public, Hybrid and Private
- Microsoft Azure
- Azure core features – Bastion, Virtual Machines, SQL Databases, Network Security Groups, Virtual Networks
- Encryption
- GDPR, Data residency, Misconfiguration

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities	Hours	Comments/Additional Information (briefly explain activities, including formative assessment opportunities)
Lecture	27	Lecture style delivery with group exercises
Supervised workshop	15	Group and individual research and development, supervised by tutor
Guided independent study	158	Directed reading and research; completion of formative assessment tasks; development and completion of course work.
Total	200	(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)

SUMMATIVE ASSESSMENT

Element Category	Component Name & associated ALO	Component Weighting
Coursework (C1)	Essay (ALO 1)	20%
	Formal report (ALO 2-4)	60%
	Screen Recording (ALO 3)	20%

REFERRAL ASSESSMENT

Element Category	Component Name	Component Weighting
Coursework (C1)	Formal report (ALO 1-4)	100%

To be completed when presented for Minor Change approval and/or annually updated		
Updated by: XX/XX/XXXX	Date:	**Approved by**: Date: XX/XX/XXXX

UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD. *Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.*

MODULE CODE: HIGH2311   **MODULE TITLE:** Emerging Technologies
CREDITS: 20   **FHEQ LEVEL:** 5   **HECOS CODE(S) [max 3]:** 110102
PRE-REQUISITES: None   **CO-REQUISITES:** None   **COMPENSATABLE:** Y
SHORT MODULE DESCRIPTOR:
Emerging technologies have the potential to provide great benefits to society and improve present solutions. Emerging technologies are often touted as having the potential to revolutionise computing practices, but it is the small local improvements that are keenly felt by users. Learners will research emerging technologies and look to specialise in one area as they work towards a particular technological solution.

ELEMENTS OF ASSESSMENT – *see Definitions of Elements and Components of Assessment*					
E1 (Examination)		**C1** (Coursework)	80%	**P1** (Practical)	20%
E2 (Clinical Examination)		**A1** (Generic assessment)			
T1 (Test)		**O1**(online open book assessment)			

SUBJECT ASSESSMENT PANEL to which module should be linked: Computing

Professional body minimum pass mark requirement: N/A

MODULE AIMS:
This module will enable students to:
- Understand future technologies and their potential impact on the digital technologies business sector
- Understand a current emerging technology and its business impact
- Design and pitch new technology solutions that enhance current business practices.

ASSESSED LEARNING OUTCOMES: (additional guidance below; please refer to the Programme Specification for relevant Programme Intended Learning Outcomes.

At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes (ALOs)	Programme Intended Learning Outcomes (PILOs) contributed to
1. Analyse a range of emerging technologies and evaluate their future impacts	8.1.2, 8.3.1, 8.3.3, 8.4.3

2. Research a chosen emerging technology looking at real world uses and the impacts it provides	8.1.2, 8.1.3, 8.2.3, 8.3.1, 8.3.3, 8.4.3
3. Design, present and evaluate an emerging technology solution for a particular use	8.1.1, 8.1.2, 8.1.3, 8.2.1, 8.2.2, 8.2.3, 8.3.1, 8.3.3, 8.4.3, 8.5.1, 8.5.2, 8.5.4

DATE OF APPROVAL: 16/04/2024	**FACULTY/OFFICE:** Partnerships
DATE OF IMPLEMENTATION: 01/09/2024	**SCHOOL/PARTNER:** University College Jersey
DATE(S) OF APPROVED CHANGE: XX/XX/XXXX	**SEMESTER:** Semester 2

Notes:

Additional Guidance for Learning Outcomes:

To ensure that the module is pitched at the right level check your intended learning outcomes against the following nationally agreed standards

- Office for Students, Sector-recognised Standards
- Office for Students, Quality and Standards Conditions of Registration
- Subject benchmark statements
- Professional, regulatory and statutory (PSRB) accreditation requirements (where necessary e.g. health and social care, medicine, engineering, psychology, architecture, teaching, law)

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

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ACADEMIC YEAR: 2024-25   **NATIONAL COST CENTRE:** 121
MODULE LEADER: Gerard Sargent   **OTHER MODULE STAFF:**

Summary of Module Content
- Artificial Intelligence
- Virtual Reality
- Blockchain
- Augmented Reality
- Web 3.0
- Edge Computing
- 5G
- Internet of Things

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities	Hours	Comments/Additional Information (briefly explain activities, including formative assessment opportunities)
Lecture	21	Lecture style delivery with group exercises
Supervised workshop	21	Group and individual research and development, supervised by tutor
Guided independent study	158	Directed reading and research; completion of formative assessment tasks; development and completion of course work.
Total	200	(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)

SUMMATIVE ASSESSMENT

Element Category	Component Name & associated ALO	Component Weighting
Coursework (C1)	Essay (ALO 1)	25%
	Formal report (ALO 2)	25%
	Formal report (ALO 3)	50%
Practical (P1)	Presentation (ALO 3)	100%

REFERRAL ASSESSMENT

Element Category	Component Name	Component Weighting
Coursework (C1)	Formal report (ALO 1-3)	100%
Coursework(in lieu of original assessment)	Report (ALO 3)	100%

To be completed when presented for Minor Change approval and/or annually updated		
Updated by: XX/XX/XXXX	Date:	**Approved by**: Date: XX/XX/XXXX

UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD. *Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.*

MODULE CODE: HIGH2312   **MODULE TITLE:** Internet of Things (IoT)
CREDITS: 20   **FHEQ LEVEL:** 5   **HECOS CODE(S) [max 3]:** 110102
PRE-REQUISITES: None   **CO-REQUISITES:** None   **COMPENSATABLE:** Y
SHORT MODULE DESCRIPTOR:
We live in a world of billions of connected things. Smart cities, autonomous vehicles, and next generation networks are here. Learners will explore current trends throughout the IoT industry and understand how they are being supported with new and existing technologies. Learners will plan, design, and implement their own IoT solution to solve a problem they deem necessary.

ELEMENTS OF ASSESSMENT – *see Definitions of Elements and Components of Assessment*					
E1 (Examination)		**C1** (Coursework)	60%	**P1** (Practical)	40%
E2 (Clinical Examination)		**A1** (Generic assessment)			
T1 (Test)		**O1**(online open book assessment)			

SUBJECT ASSESSMENT PANEL to which module should be linked: Computing

Professional body minimum pass mark requirement: N/A

MODULE AIMS:
This module will enable students to:
- Gain an in-depth understanding of current trends throughout the Internet of Things (IoT) industry. Students will explore and analyse various IoT use cases across different industries, focusing on the underlying architectures and technologies that enable applications. Through research and critical analysis, students will gain insights into the implementation of IoT solutions, examining the components, protocols, and frameworks involved.
- Obtain the skills to plan and design IoT solutions that address relevant real-world problems. Students will learn to conceptualise and plan development of IoT systems, including detailed designs and diagrams that illustrate the architecture, components, and data flow of the proposed solution. Students will engage in planning and ensuring their solutions are feasible, scalable, and effective in solving specific issues.
- Develop practical skills and knowledge to create and develop IoT systems that address specific problems. Students will learn to implement and deploy IoT solutions, integrating appropriate hardware and software components. Students will also emphasise the importance of evaluating the overall suitability and effectiveness of the IoT system for its intended use. Completing development, students will assess the system's performance, scalability, and impact, gaining the ability to make informed improvements and recommendations.

ASSESSED LEARNING OUTCOMES: (additional guidance below; please refer to the Programme Specification for relevant Programme Intended Learning Outcomes.

At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes (ALOs)	Programme Intended Learning Outcomes (PILOs) contributed to
1. Research and analyse current trends, architecture, and technologies used throughout IoT solutions	8.1.1, 8.1.3, 8.1.5, 8.2.2, 8.3.1, 8.4.1
2. Plan and design an IoT solution to solve a problem	8.1.1, 8.1.2, 8.2.1, 8.2.2, 8.5.1, 8.5.2, 8.5.4
3. Develop an IoT system and evaluate the overall solution in solving a problem	8.1.2, 8.1.3, 8.1.5, 8.2.1, 8.2.2, 8.2.3, 8.3.3, 8.5.1, 8.5.2, 8.5.4

DATE OF APPROVAL: 16/04/2024	**FACULTY/OFFICE:** Partnerships
DATE OF IMPLEMENTATION: 01/09/2024	**SCHOOL/PARTNER:** University College Jersey
DATE(S) OF APPROVED CHANGE: XX/XX/XXXX	**SEMESTER:** Semester 1

Notes:

Additional Guidance for Learning Outcomes:

To ensure that the module is pitched at the right level check your intended learning outcomes against the following nationally agreed standards
- Office for Students, Sector-recognised Standards
- Office for Students, Quality and Standards Conditions of Registration
- Subject benchmark statements
- Professional, regulatory and statutory (PSRB) accreditation requirements (where necessary e.g. health and social care, medicine, engineering, psychology, architecture, teaching, law)

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

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ACADEMIC YEAR: 2024-25   **NATIONAL COST CENTRE:** 121
MODULE LEADER: Perry de Caux   **OTHER MODULE STAFF:**

Summary of Module Content

- Current Trends in IoT and Use Cases
- IoT Architecture, Frameworks, Protocols, and Tools
- Hardware Components (Sensors, Actuators, Connections, Devices)
- Software and Packages
- Wired Networks
- Wireless Networks (WSNs, NB-IoT, eLTE, M2M)
- Problem-Solving
- Project Planning
- Designing an IoT System (e.g. SysML Diagrams, Network Diagrams, UI Designs)
- Developing and Programming an IoT System to Solve a Problem

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities	**Hours**	**Comments/Additional Information (briefly explain activities, including formative assessment opportunities)**
Lecture	21	Lecture style delivery with group exercises
Supervised workshop	21	Group and individual research and development, supervised by tutor
Guided independent study	158	Directed reading and research; completion of formative assessment tasks; development and completion of course work.
Total	**200**	**(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)**

SUMMATIVE ASSESSMENT

Element Category	Component Name & associated ALO	Component Weighting
Coursework (C1)	Written IoT Research Assignment (ALO 1)	30%
	IoT Design Report (ALO 2)	50%
	IoT Evaluation Report (ALO 3)	20%

	Practical Skills IoT Assessment (ALO 3)	100%
Practical (P1)		

REFERRAL ASSESSMENT

Element Category	Component Name	Component Weighting
Coursework (C1)	Formal report (ALO 1-3)	100%
Coursework (in lieu of original assessment)	Report (ALO 3)	100%

To be completed when presented for Minor Change approval and/or annually updated		
Updated by: XX/XX/XXXX	Date:	**Approved by**: Date: XX/XX/XXXX

UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD. *Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.*

MODULE CODE: HIGH2313   **MODULE TITLE:** Cyber Security
CREDITS: 20   **FHEQ LEVEL:** 5   **HECOS CODE(S) [max 3]:** 110102
PRE-REQUISITES: None   **CO-REQUISITES:** None   **COMPENSATABLE:** Y
SHORT MODULE DESCRIPTOR:
As society becomes increasingly reliant on interconnected systems and digital platforms, the need for cybersecurity expertise has never been more crucial. This module explores the current threat landscape and types of attacks we are facing as well as how to protect against them. Learners will delve into social engineering, network security, cryptography, ethical hacking, and security operations.

ELEMENTS OF ASSESSMENT – *see Definitions of Elements and Components of Assessment*					
E1 (Examination)		**C1** (Coursework)	60%	**P1** (Practical)	40%
E2 (Clinical Examination)		**A1** (Generic assessment)			
T1 (Test)		**O1**(online open book assessment)			

SUBJECT ASSESSMENT PANEL to which module should be linked: Computing

Professional body minimum pass mark requirement: N/A

MODULE AIMS:
This module will enable students to:
- Gain a thorough understanding of various cybersecurity threats, including exploits, malware, and internet-based threats. Students will explore the nature and impact of these threats on information systems, networks, and organisations. The module will also cover strategies and frameworks for protecting against such threats, equipping students with the knowledge of effective cybersecurity practices to manage and maintain security.
- Attain a comprehensive understanding of how to secure information systems by exploring a variety of methods, techniques, and technologies used in the industry. Students will learn about different approaches to system security, including encryption, access control, intrusion detection, and security protocols. The module will offer insights into best practices and emerging trends in cybersecurity to protect against potential attacks.
- Obtain the knowledge and skills to design and implement various security measures to protect systems from attacks. Students will explore a range of appropriate security techniques and focus on the practical applications of these measures, gaining hands-on experience in securing systems. Through real-world scenarios, students will learn to develop robust security strategies to defend against potential threats and ensure system integrity by executing testing and utilising relevant tools.

ASSESSED LEARNING OUTCOMES: (additional guidance below; please refer to the Programme Specification for relevant Programme Intended Learning Outcomes.

At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes (ALOs)	Programme Intended Learning Outcomes (PILOs) contributed to
1. Investigate cyber security threats and techniques used by threat actors, examining strategies to counteract them	8.1.1, 8.1.3, 8.1.5, 8.3.1, 8.3.3, 8.4.3, 8.5.3
2. Analyse cyber security methods and techniques used to protect data, systems, and organisations	8.1.5, 8.3.1, 8.3.3, 8.5.3
3. Design and implement a secure system evaluating overall effectiveness	8.1.1, 8.1.2, 8.1.3, 8.1.5, 8.2.1, 8.2.2, 8.3.1, 8.3.3, 8.5.1, 8.5.2, 8.5.3, 8.5.4

DATE OF APPROVAL: 16/04/2024	**FACULTY/OFFICE:** Partnerships
DATE OF IMPLEMENTATION: 01/09/2024	**SCHOOL/PARTNER:** University College Jersey
DATE(S) OF APPROVED CHANGE: XX/XX/XXXX	**SEMESTER:** Semester 2

Notes:

Additional Guidance for Learning Outcomes:

To ensure that the module is pitched at the right level check your intended learning outcomes against the following nationally agreed standards
- Office for Students, Sector-recognised Standards
- Office for Students, Quality and Standards Conditions of Registration
- Subject benchmark statements
- Professional, regulatory and statutory (PSRB) accreditation requirements (where necessary e.g. health and social care, medicine, engineering, psychology, architecture, teaching, law)

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

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ACADEMIC YEAR: 2024-25   **NATIONAL COST CENTRE:** 121
MODULE LEADER: Perry de Caux   **OTHER MODULE STAFF:**

Summary of Module Content
- Cyber Security, Threat Landscape, and Cyber Crime
- Malware and Attacks
- Social Engineering
- Cyber Security Strategies
- Communications and Network Security
- Cryptography
- Ethical Hacking
- Designing Secure Solutions
- Implementing Secure Solutions
- Security Testing
- Security Operations

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities	**Hours**	**Comments/Additional Information (briefly explain activities, including formative assessment opportunities)**
Lecture	21	Lecture style delivery with group exercises
Supervised workshop	21	Group and individual research and development, supervised by tutor
Guided independent study	158	Directed reading and research; completion of formative assessment tasks; development and completion of course work.
Total	**200**	**(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)**

SUMMATIVE ASSESSMENT

Element Category	Component Name & associated ALO	Component Weighting

	Written Cyber Security Research Assignment (ALO 1)	30%
Coursework (C1)	Cyber Security Analysis Report (ALO 2)	30%
	Cyber Security Solution Report (ALO 3)	40%
Practical (P1)	Practical Skills Cyber Security Assessment (ALO 3)	100%

REFERRAL ASSESSMENT

Element Category	Component Name	Component Weighting
Coursework (C1)	Formal report (ALO 1-3)	100%
Coursework (in lieu of original assessment)	Report (ALO 3)	100%

UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD. *Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.*

MODULE CODE: HIGH2314   **MODULE TITLE:** Game Asset Management
CREDITS: 20   **FHEQ LEVEL:** 5   **HECOS CODE(S) [max 3]:** 110102
PRE-REQUISITES: None   **CO-REQUISITES:** None   **COMPENSATABLE:** Y
SHORT MODULE DESCRIPTOR:
The aim of the module is for learners to develop a detailed Game Design Document and game world assets. Learners will need to study the key components of a successful design document before creating their own document. Using this document, learners will develop original assets using a range of different tools and techniques. Learners will need to evaluate their completed assets against their original planned design.

ELEMENTS OF ASSESSMENT – *see Definitions of Elements and Components of Assessment*					
E1 (Examination)		**C1** (Coursework)	100%	**P1** (Practical**)**	
E2 (Clinical Examination)		**A1** (Generic assessment)			
T1 (Test)		**O1**(online open book assessment)			

SUBJECT ASSESSMENT PANEL to which module should be linked: Computing

Professional body minimum pass mark requirement: N/A

MODULE AIMS:
This module will enable students to:
- Understand the key elements of a successful Game Design Document
- Develop comprehensive Game Design Documents
- Use a range of game design tools and techniques to develop game assets
- Evaluate intended outputs against final outputs and justify any differences

ASSESSED LEARNING OUTCOMES: (additional guidance below; please refer to the Programme Specification for relevant Programme Intended Learning Outcomes.

At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes (ALOs)	Programme Intended Learning Outcomes (PILOs) contributed to

1. Research and analyse the various elements that can be incorporated into a successful Game Design Document.	8.1.1, 8.1.2, 8.3.1
2. Develop a Game Design Document that incorporates detailed planning for game world environments and assets.	8.1.1, 8.1.2, 8.2.1, 8.2.2, 8.3.1, 8.4.3, 8.5.1, 8.5.2, 8.5.4
3. Utilising suitable software, prototype and develop game world environments and original game assets.	8.1.2, 8.1.3, 8.2.1, 8.2.2, 8.4.3, 8.5.1, 8.5.2
4. Critically evaluate your completed assets against the original game design document.	8.2.1, 8.2.2, 8.2.3, 8.3.1, 8.3.3, 8.5.4

DATE OF APPROVAL: 16/04/2024	**FACULTY/OFFICE:** Partnerships
DATE OF IMPLEMENTATION: 01/09/2024	**SCHOOL/PARTNER:** University College Jersey
DATE(S) OF APPROVED CHANGE: XX/XX/XXXX	**SEMESTER:** Semester 1

Notes:

Additional Guidance for Learning Outcomes:

To ensure that the module is pitched at the right level check your intended learning outcomes against the following nationally agreed standards

- Office for Students, Sector-recognised Standards
- Office for Students, Quality and Standards Conditions of Registration
- Subject benchmark statements
- Professional, regulatory and statutory (PSRB) accreditation requirements (where necessary e.g. health and social care, medicine, engineering, psychology, architecture, teaching, law)

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

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ACADEMIC YEAR: 2024-25   **NATIONAL COST CENTRE:** 121
MODULE LEADER: Rafael Pires   **OTHER MODULE STAFF:**

Summary of Module Content
- Game Design Document
- 3D software – Maya, Blender
- Photogrammetry
- Game elements - genre, age, narrative, characters, world design, difficulty, levels, gameplay, sound, UI and controls.
- Monetisation

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities	**Hours**	**Comments/Additional Information (briefly explain activities, including formative assessment opportunities)**
Lecture	15	Lecture style delivery with group exercises
Supervised workshop	27	Individual research and development, supervised by tutor
Guided independent study	158	Directed reading and research; completion of formative assessment tasks; development and completion of course work; work placement or simulated project.
Total	**200**	**(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)**

SUMMATIVE ASSESSMENT

Element Category	Component Name & associated ALO	Component Weighting
Coursework	Essay (ALO 1)	20%
	Formal report (ALO 2-3)	60%
	Reflective report (ALO 4)	20%

REFERRAL ASSESSMENT

Element Category	Component Name	Component Weighting
Coursework	Formal report (ALO 1-4)	100%

To be completed when presented for Minor Change approval and/or annually updated		
Updated by: Date: XX/XX/XXXX		**Approved by**: Date: XX/XX/XXXX

UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD. *Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.*

MODULE CODE: HIGH2315   **MODULE TITLE:** Games Development
CREDITS: 20   **FHEQ LEVEL:** 5   **HECOS CODE(S) [max 3]:** 110102
PRE-REQUISITES: None   **CO-REQUISITES:** None   **COMPENSATABLE:** Y
SHORT MODULE DESCRIPTOR:
The aim of the module is for learners to understand the various game engines that are used in the development of video games and the different reasons that they are preferred choices. Learners will develop a functional game using the assets and Game Design Document that they have developed in the HIGH2314 module. Learners will need to test their final game and make changes that enhance the usability of the game.

ELEMENTS OF ASSESSMENT – *see Definitions of Elements and Components of Assessment*					
E1 (Examination)		**C1** (Coursework)	100%	**P1** (Practical)	
E2 (Clinical Examination)		**A1** (Generic assessment)			
T1 (Test)		**O1**(online open book assessment)			

SUBJECT ASSESSMENT PANEL to which module should be linked: Computing

Professional body minimum pass mark requirement: N/A

MODULE AIMS:
This module will enable students to:
- Understand the suitability of different games engines for various scenarios
- Successfully use a selected games engine to develop a game solution.
- Comprehensively test a video game and develop future plans based on the results

ASSESSED LEARNING OUTCOMES: (additional guidance below; please refer to the Programme Specification for relevant Programme Intended Learning Outcomes.

At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes (ALOs)	Programme Intended Learning Outcomes (PILOs) contributed to
1. Analyse and evaluate different games engines, looking at specific features and future development.	8.1.2, 8.3.1, 8.4.3
2. Select and use a suitable games engine to develop a functional game using an existing Game Design Document and existing assets.	8.1.2, 8.2.1, 8.2.2, 8.4.3, 8.5.1, 8.5.2, 8.5.4

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3. Plan and make improvements to a video game based on user testing feedback.	8.1.1, 8.1.2, 8.1.3, 8.2.1, 8.2.2, 8.2.3, 8.3.1, 8.3.3, 8.4.3, 8.5.1, 8.5.4
DATE OF APPROVAL: 16/04/2024	**FACULTY/OFFICE:** Partnerships
DATE OF IMPLEMENTATION: 01/09/2024	**SCHOOL/PARTNER:** University College Jersey
DATE(S) OF APPROVED CHANGE: XX/XX/XXXX	**SEMESTER:** Semester 2

Notes:

Additional Guidance for Learning Outcomes:

To ensure that the module is pitched at the right level check your intended learning outcomes against the following nationally agreed standards

- Office for Students, Sector-recognised Standards
- Office for Students, Quality and Standards Conditions of Registration
- Subject benchmark statements
- Professional, regulatory and statutory (PSRB) accreditation requirements (where necessary e.g. health and social care, medicine, engineering, psychology, architecture, teaching, law)

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

Items in this section must be considered annually and amended as appropriate, in conjunction with the Module Review Process. <u>Some parts of this page may be published on the website as a guide for prospective students.</u> Further details for current students should be provided in module guidance notes.

ACADEMIC YEAR: 2024-25   **NATIONAL COST CENTRE:** 121
MODULE LEADER: Rafael Pires   **OTHER MODULE STAFF:**

Summary of Module Content
- Games Engines (Unreal, Unity)
- Coding (C++)
- Testing plan and user testing
- Gaming trends
- Games engine features – debugging, collaboration, 2D/3D graphics, builds, VR, AI, UI.
- Games engine architecture – scripting, collisions, assets, physics, UI.

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities	Hours	Comments/Additional Information (briefly explain activities, including formative assessment opportunities)
Lecture	12	Lecture style delivery with group exercises
Supervised workshop	30	Individual research and development, supervised by tutor
Guided independent study	158	Directed reading and research; completion of formative assessment tasks; development and completion of course work; work placement or simulated project.
Total	200	(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)

SUMMATIVE ASSESSMENT

Element Category	Component Name & associated ALO	Component Weighting
Coursework	Formal report (ALO 1)	25%
	Screen recording (ALO 2)	50%
	Formal report (ALO 3)	25%

REFERRAL ASSESSMENT

Element Category	Component Name	Component Weighting
Coursework	Formal report (ALO 1-3)	100%

To be completed when presented for Minor Change approval and/or annually updated		
Updated by: XX/XX/XXXX	Date:	**Approved by**: Date: XX/XX/XXXX