University of the West of Scotland

Module Descriptor

Session: 2023/24

Last modified: 12/04/2023 19:35:07
Status: Published

Title of Module: Blockchain Technologies for Finance

Code: COMP11106	**SCQF Level: 11** (Scottish Credit and Qualifications Framework)	**Credit Points: 20**	**ECTS: 10** (European Credit Transfer Scheme)
School:	School of Computing, Engineering and Physical Sciences		
Module Co-ordinator:	Graeme A. McRobbie		

Summary of Module

The module aims to introduce students to the current developments in FinTech and its impact on investors, the financial services industry, markets and the global economy. It explores the on going developments, issues, and debates and pinpoints the importance of FinTech and related concepts for different stakeholders. At the successful completion of this module students should be able to understand and critically evaluate issues on FinTech, Blockchain and related concepts and link their understanding with the recent developments in the global digital economy in general, and the financial services industry, in particular.

Outline Syllabus: Introduction to FinTech and its roles in the digital economy; Digital Identity and Cloud Computing;Data Science and Big Data Analytics, Blockchain and Distributed Ledger Technology; Cryptoassets; Open Banking: Digital Payments Systems; Disruption in Asset Servicing and Capital Markets; Disruption in Investment Management and alternative Data in Portfolio Management; Online Marketplace Lending and Crowdfunding; WealthTech, RegTech and InsurTech; The Impact and legal implications of FinTech

This module will work to develop a number of the key 'I am UWS' Graduate Attributes to make those who complete this module.
Universal: critical thinker; ethically-minded; and research-minded
Work Ready: problem-solver; effective communicator; and ambitious
Successful: autonomous; resilient; and driven

Module Delivery Method

Face-To-Face	Blended	Fully Online	HybridC	HybridO	Work-based Learning
					✓

Face-To-Face
Term used to describe the traditional classroom environment where the students and the lecturer meet synchronously in the same room for the whole provision.

Blended
A mode of delivery of a module or a programme that involves online and face-to-face delivery of learning, teaching and assessment activities, student support and feedback. A programme may be considered “blended” if it includes a combination of face-to-face, online and blended modules. If an online programme has any compulsory face-to-face and campus elements it must be described as blended with clearly articulated delivery information to manage student expectations

Fully Online
Instruction that is solely delivered by web-based or internet-based technologies. This term is used to describe the previously used terms distance learning and e learning.

HybridC
Online with mandatory face-to-face learning on Campus

HybridO
Online with optional face-to-face learning on Campus

Work-based Learning
Learning activities where the main location for the learning experience is in the workplace.

Campus(es) for Module Delivery						
The module will **normally** be offered on the following campuses / or by Distance/Online Learning: (Provided viable student numbers permit)						
Paisley:	Ayr:	Dumfries:	Lanarkshire:	London:	Distance/Online Learning:	Other:
✓				✓		

Term(s) for Module Delivery					
(Provided viable student numbers permit).					
Term 1	✓	Term 2	✓	Term 3	✓

Learning Outcomes: (maximum of 5 statements)

On successful completion of this module the student will be able to:

L1. Demonstrate an understanding about current developments in FinTech and its impact on investors, the financial services industry, markets and the global economy

L2. Explore contemporary issues in cloud computing, blockchain, cryptoassets, and other related subjects in the financial services industry

L3. Understand the real nature of digital payment systems and the role of FinTech in the disruption in asset servicing and capital markets

Employability Skills and Personal Development Planning (PDP) Skills	
SCQF Headings	During completion of this module, there will be an opportunity to achieve core skills in:
Knowledge and Understanding (K and U)	SCQF Level 11. Knowledge & understanding of working principle of Blockchain Technologies for Finance
Practice: Applied Knowledge and Understanding	SCQF Level 11. Knowledge of practical skills to apply basic theoretical concepts to design and implementation of Blockchain Technologies for Finance
Generic Cognitive skills	SCQF Level 11. Students will develop ability to critically examine and appreciate the central issues in the main sub-areas of Blockchain Technologies for Finance
Communication, ICT and Numeracy Skills	SCQF Level 11. Compiling individual report students will develop communication skills as well as the ability to write technical report
Autonomy, Accountability and Working with others	SCQF Level 11. Students will be encouraged to work with others in tutorials and lab sessions for finding information and solving problems on the assigned task. In doing so, students will develop a sense of accountability to the other members

Pre-requisites:	Before undertaking this module the student should have undertaken the following:

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

* Indicates that module descriptor is not published.

Learning and Teaching	
This module is delivered using a combination of formal interactive lectures and worsksops Workshops will be used to reinforce the taught component and formative assessments will allow for monitoring progress.	
Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	**Student Learning Hours** (Normally totalling 200 hours): (Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture/Core Content Delivery	24
Laboratory/Practical Demonstration/Workshop	24
Independent Study	152
	200 Hours Total

****Indicative Resources: (eg. Core text, journals, internet access)**

The following materials form essential underpinning for the module content and ultimately for the learning outcomes:

Blockchain & Fintech: A Comprehensive Blueprint to Understanding Blockchain & Financial Technology - Richard Hayen

Financial Technology: FinTech, Blockchain, Smart Contracts - Jeff Reed*

Blockchain Revolution: How the Technology Behind Bitcoin Is Changing Money, Business, and the World - Don Tapsco*

(**N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)

Engagement Requirements

In line with the Academic Engagement Procedure, Students are defined as academically engaged if they are regularly engaged with timetabled teaching sessions, course-related learning resources including those in the Library and on the relevant learning platform, and complete assessments and submit these on time. Please refer to the Academic Engagement Procedure at the following link: Academic engagement procedure

Supplemental Information

Programme Board	Computing
Assessment Results (Pass/Fail)	No
Subject Panel	Applied and Business Computing
Moderator	tbc
External Examiner	tbc
Accreditation Details	pending
Changes/Version Number	1

Assessment: (also refer to Assessment Outcomes Grids below)
A class test under strict examination conditions. The class test is intended to assess the student's understanding of the principles underpinning the technologies and frameworks studied in the module. The class test is worth 50% of the overall mark.
A portfolio of practical work demonstrating the practical application of blockchain technologies in producing a to a problem. The portfolio of practical work is worth 50% of the overall mark
(N.B. (i) **Assessment Outcomes Grids** for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed. (ii) An **indicative schedule** listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Handbook.)

Assessment Outcome Grids (Footnote A.)

Component 1

Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Class test (written)	✓			50	0

Component 2

Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Dissertation/ Project report/ Thesis	✓	✓	✓	50	0
			Combined Total For All Components	100%	0 hours

Footnotes
A. Referred to within Assessment Section above
B. Identified in the Learning Outcome Section above

Note(s):
1. More than one assessment method can be used to assess individual learning outcomes.
2. Schools are responsible for determining student contact hours. Please refer to University Policy on contact hours (extract contained within section 10 of the Module Descriptor guidance note).
   This will normally be variable across Schools, dependent on Programmes &/or Professional requirements.

Equality and Diversity
UWS Equality and Diversity Policy
(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)