Module Descriptor

Title	Quantitative Methods For Accounting And Finance		
Session	2026/27	**Status**	Approved
Code	ACCT08023	**SCQF Level**	8
Credit Points	20	**ECTS (European Credit Transfer Scheme)**	10
School	**Business and Creative Industries**		
Module Co-ordinator	Dr Chaman Shrestha		

Summary of Module

This module equips students in accounting and finance with essential quantitative techniques necessary for financial analysis and decision-making. Students will gain a solid understanding of key concepts, including the time value of money, data collection and analysis, elementary statistics, probability theory, probability distributions, sampling and estimation, hypothesis testing, and simple linear regression.

These quantitative methods form the foundation of financial analysis and are critical for evaluating opportunities, assessing risks, and making data-driven financial decisions. The application of statistical techniques enables students to analyse financial data, measure risk and return, and interpret key economic variables. Probability theory, sampling, and hypothesis testing provide tools to support decision-making under uncertainty, ensuring accuracy in financial forecasts and risk assessments. Simple linear regression aids in understanding the relationships between financial variables and making informed predictions.

By the end of this module, students will be able to apply these quantitative techniques to real-world accounting and finance scenarios, enhancing their analytical skills and preparing them for advanced financial studies and professional certifications.

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

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

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

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

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

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

Learning Outcomes	
L1	To apply the time value of money concepts in financial decision making.
L2	To explain and interpret discriptive statistics in accounting and finance.
L3	To test competing hypothesis using basic univariate and multivariate analysis.
L4	To run and interpret regression models for financial predications.
L5	

Employability Skills and Personal Development Planning (PDP) Skills	
SCQF Headings	**During completion of this module, there will be an opportunity to achieve core skills in:**
Knowledge and Understanding (K and U)	**SCQF 8** Demonstrate an awareness and understanding of the time value of money, statistical tools, probability concepts, hypothesis testing, and regression models in financial analysis.
Practice: Applied Knowledge and Understanding	**SCQF 8** Apply statistical techniques to analyse financial data, conduct hypothesis testing, and use regression models to evaluate financial relationships and make informed decisions.
Generic Cognitive skills	**SCQF 8** Develop problem-solving and decision-making skills by applying quantitative methods and statistical tools in financial analysis. Analyse and interpret financial data, evaluate risks through hypothesis testing, and synthesise complex information for strategic decision-making.
Communication, ICT and Numeracy Skills	**SCQF 8** Develop effective communication skills to present financial data and analysis clearly using Microsoft Applications. Utilise ICT tools and statistical softwares (excel, SPSS, eViews) for data processing, analysis, and reporting. Enhance numeracy and financial literacy by applying quantitative techniques, statistical models, and financial calculations in decision-making.
Autonomy, Accountability and Working with Others	**Please select SCQF Level** Develop independent problem-solving skills and take responsibility cost and mamagement accouring analysis and decision-making. Work collaboratively in teams, demonstrating accountability and professionalism in cost analysis and evaluation.

Prerequisites	**Module Code**	**Module Title**

	Other	
Co-requisites	**Module Code**	**Module Title** Financial Accounting & Management Accounting

Learning and Teaching	
In line with current learning and teaching principles, a 20-credit module includes 200 learning hours, normally including a minimum of 36 contact hours and maximum of 48 contact hours.	
Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	**Student Learning Hours** (Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture / Core Content Delivery	24
Laboratory / Practical Demonstration / Workshop	24
Independent Study	152
Please select	
Please select	
Please select	
TOTAL	200

Indicative Resources
The following materials form essential underpinning for the module content and ultimately for the learning outcomes: Core reading 1) David R. Anderson, Dennis J. Sweeney, Thomas A. Williams, Jeffrey D. Camm, James J. Cochran, Michael J. Fry, Jeffrey W. Ohlmann., 2020, Essentials of Modern Business Statistics with Microsoft® Excel®, 8th Edition, Cengage Further reading 1) Curwin J., Slater R, Eadson, D. (current ed) Quantitative Methods for Business Decisions, Cengage Learning
(N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)

Attendance and Engagement Requirements
In line with the Student Attendance and Engagement Procedure, Students are academically engaged if they are regularly attending and participating in timetabled on-campus and online teaching sessions, asynchronous online learning activities, course-related learning resources, and complete assessments and submit these on time.

For the purposes of this module, academic engagement equates to the following:
Prior lectures, students are advised to read the relevant course resources, including the chapters from the core text. You must practice end-of-chapter questions. During lectures, you should stay attentive, actively participate, and ask questions when needed. After lectures, you must complete all workshop/tutorial questions and continue practicing. In tutorials, you should verify your answers, follow the steps carefully, and seek clarification when needed. If further help is required, you should arrange a meeting with the lecturer or tutor. Further, please see Regulation 5.3.6 for details.

Equality and Diversity
The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: UWS Equality, Diversity and Human Rights Code.
(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)

Supplemental Information

Divisional Programme Board	**Accounting Finance Law**
Overall Assessment Results	☐ **Pass / Fail** ☒ **Graded**
Module Eligible for Compensation	☐ **Yes** ☒ **No** **If this module is eligible for compensation, there may be cases where compensation is not permitted due to programme accreditation requirements. Please check the associated programme specification for details.**
School Assessment Board	Accounting, Finance & Law
Moderator	Dr Mary Fletcher
External Examiner	Lovewell Chiti
Accreditation Details	
Module Appears in CPD catalogue	☐ **Yes** ☒ **No**
Changes / Version Number	

Assessment (also refer to Assessment Outcomes Grids below)
Assessment 1
Computer based Class test with a pass mark of 40% but where the overall mark is 40 a mark of 30% or more will be counted as a pass. Weighting is 40%
Assessment 2
Report with a pass mark of 40% but where the overall mark is 40 a mark of 30% or more will be counted as a pass. Weighting is 60%
Assessment 3
(N.B. (i) Assessment Outcomes Grids for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed.

(ii) An indicative schedule listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Module Handbook.)

Component 1							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Computer based class test	☒	☒	☐	☐	☐	40%	1.5

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

Component 3							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
	☐	☐	☐	☐	☐		
Combined total for all components						100%	1.5 hours

Change Control

What	**When**	**Who**