# FINANCIAL MATHEMATICS WITH EXCEL - 2024/5

# Module code: MAN1145

#### Module Overview

The module teaches tools and techniques of Business Mathematics, together with the development and application of Excel skills.

Module provider

Surrey Business School

Module Leader

SOPP Rachel (SBS)

Number of Credits: 15

ECTS Credits: 7.5

Framework: FHEQ Level 4

Module cap (Maximum number of students): N/A

#### Overall student workload

Independent Learning Hours: 95

Seminar Hours: 20

Laboratory Hours: 10

Guided Learning: 20

Captured Content: 5

Semester 1

Prerequisites / Co-requisites

N/A

Topics include, but not exhausted to:

- Basic numeracy
- Data collection, analysis and presentation
- Probability Distributions
- Linear and Multiple Regression
- Forecasting
- Time Value of Money
- Spreadsheet skills MS Excel
- Problem-solving using mathematical tools, including the use of Excel

### Assessment pattern

Assessment type	Unit of assessment	Weighting
Online Scheduled Summative Class Test	Excel class test set time and date (90 minutes)	50
Examination	Examination (90 minutes)	50

#### Alternative Assessment

N/A

## Assessment Strategy

The assessment strategy is designed to provide students with the opportunity to demonstrate their ability to use mathematical skills to solve numerical problems, both on paper and using Excel.

The summative assessment for this module consists of:

- A class test that addresses learning outcomes 1 and 2
- A final term examination covering learning outcomes 3 to 5

Formative assessment and feedback:

Students will receive verbal feedback during seminars/PC laboratory sessions through direct questioning, also from class exercises which will challenge their understanding of the building blocks. Class exercises and indicative questions given before the class test and examination will help students prepare for the assessments and students will be encouraged to research these and ask questions.

### Module aims

- Enable students to use mathematical and statistical methods to solve quantitative business problems, both on paper and using Excel.
- Prepare students with the Excel skills and mathematical tools required in future modules within the undergraduate degree programme and enhance employability.

#### Learning outcomes

		Attributes Developed
001	Demonstrate competence in spreadsheet software (MS Excel) in data analysis and visualisation.	KCPT
003	Analyse and present data in an effective manner.	KCPT
002	Use Excel skills effectively in solving quantitative business problems.	KCPT
004	Use probability, statistical and other mathematical tools in problem solving.	KCPT
005	Apply financial mathematics techniques to business scenarios.	КСРТ

#### Attributes Developed

- C Cognitive/analytical
- K Subject knowledge
- T Transferable skills
- P Professional/Practical skills

## Methods of Teaching / Learning

The learning and teaching strategy:

Give students the opportunity to gain knowledge and understanding of mathematical tools relevant to finance and accounting

#### modules.

Engage students to develop excel skills enhancing digital literacy.

The learning and teaching methods include:

Elements of seminars, PC laboratory tutorials, workshops, guided reading and captured content including illustrative practice exercises.

Indicated Lecture Hours (which may also include seminars, tutorials, workshops and other contact time) are approximate and may include in-class tests where one or more of these are an assessment on the module. In-class tests are scheduled/organised separately to taught content and will be published on to student personal timetables, where they apply to taken modules, as soon as they are finalised by central administration. This will usually be after the initial publication of the teaching timetable for the relevant semester.

## Reading list

https://readinglists.surrey.ac.uk

Upon accessing the reading list, please search for the module using the module code: MAN1145

## Other information

Surrey Business School is committed to developing graduates with strengths in Employability, Digital Capabilities, Global and Cultural Capabilities, Sustainability, and Resourcefulness and Resilience. This module is designed to allow students to develop knowledge, skills, and capabilities particularly in the following areas: Digital Capabilities: Students will use excel throughout the module to learn module contents. The excel skills aid the development of finance and accounting related modelling and enhance their digital capabilities. Employability: The module aims to develop excel skills and financial awareness that will aid in enhancing employability. During the course of module delivery, students develop the ability to evaluate problems and devise solutions. As a result, students build and enhance individual and professional skills. Resourcefulness and Resilience: Students solve problems as well as critically analyse the solutions, thereby fostering an openness to different perspectives and developing their own viewpoint. In addition, through the independent and guided learning, students develop attributes such as confidence, adaptability, self-regulation, self-efficacy, problem solving and decision-making abilities.

## Programmes this module appears in

Programme	Semester	Classification	Qualifying conditions
<u>Accounting and Finance (Dual degree with SII-</u> <u>DUFE ) BSc (Hons)</u>	1	Compulsory	A weighted aggregate mark of 40% is required to pass the module
Accounting and Finance BSc (Hons)	1	Compulsory	A weighted aggregate mark of 40% is required to pass the module

Please note that the information detailed within this record is accurate at the time of publishing and may be subject to change. This record contains information for the most up to date version of the programme / module for the 2024/5 academic year.