DIGITAL CODING - 2024/5

Module code: MAN2200

Module Overview

Programming is an integral part of digital capabilities in today's employment scenario. This module is designed to provide undergraduate students with the necessary basic background in modern programming concepts and practice. The module covers basic programming concepts such as data types and structures, loops and conditional statements, along with some practical applications of programming. Throughout the module, students will engage with professional programming practices and tools and will have the opportunity to collaborate with peers to develop their skills.

Module provider

Surrey Business School

Module Leader

DIAS Fabio (SBS)

Number of Credits: 15

ECTS Credits: 7.5

Framework: FHEQ Level 5

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

Overall student workload

Independent Learning Hours: 90

Lecture Hours: 10

Laboratory Hours: 20

Guided Learning: 20

Captured Content: 10

Module Availability

Semester 2

Prerequisites / Co-requisites

N/A

Module content

Indicative content includes:

- Introduction to basic programming codes including variables; loops; operators; conditions
- Basic data types such as list, tuple, dictionary; data structures
- Basic theory of Object Oriented Programming (OOP)
- Introduction to algorithms and pseudocode
- Building procedures and functions
- Data collection and analysis using a modern programming language

Assessment pattern

Assessment type	Unit of assessment	Weighting
Online Scheduled Summative Class Test	School-timetabled exam/test 50 min	20
Coursework	Final project	80

Alternative Assessment

Alternative assessment for ‘Final project’ is an ‘Individual Coursework’

Assessment Strategy

The assessment strategy is designed to provide students with the opportunity to demonstrate their understanding of the concepts and practice of modern programming. Their ability to apply programming to business world and develop their own coding.

The summative assessment for this module consists of:

- A midterm test that addresses learning outcomes 1 and 2
- A coursework at the end of the semester covering all the learning outcomes

Formative assessment and feedback Formative assessments

such as a sample class test and exam paper will be available to support students in preparation for summative assessments and to provide ongoing feedback. Such feedback will help students identify their strengths and weaknesses and help develop revision plans

for the summative assessments. Students are also expected to engage with other feedback provided during seminars and feedback and advice hours throughout the semester.

Module aims

- Provide conceptual foundations for understanding, analysing and interpreting modern programming language.
- Enable students to apply programming to business world.
- Enable students to have ability to develop their own coding.

Learning outcomes

		Attributes Developed
001	Understand the importance of modern programming skills in data analysis.	CK
002	Understand and develop basic algorithms in pseudocode.	CKPT
003	Write programming functions and process data files including reading, modifying and writing data to external files.	CKP
004	Apply programming skills to real world examples and data.	CKP
005	Evaluate different coding and develop the ability to distinguish the optimized methodologies.	CKPT

Attributes Developed

C - Cognitive/analytical

K - Subject knowledge

T - Transferable skills

P - Professional/Practical skills

Methods of Teaching / Learning

The learning and teaching strategy is designed to:

Facilitate students, understanding and application of modern programming. Engage students with appropriate skills necessary for the 21st century

The learning and teaching methods include:

Elements of lectures, laboratories, and guided reading

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: MAN2200

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: Global and Cultural Capabilities: This module provides students with a variety of real-life examples and data across the globe. Students are encouraged to engage with, and learn from, diverse perspectives through interaction and teamwork. Students will develop their ability to work in groups effectively with other students with diverse backgrounds to broaden their world view and own perspectives and interpretations. Digital Capabilities: Students will develop programming skills that will help them analyse financial data. They will develop proficiency in a plethora of digital resources and online databases, including Excel, Python, Bloomberg, Datastream, and Capital IQ. Students are encouraged to use current media and cloud/file sharing for communication and teamwork. Employability: The module aims to develop digital coding skills that are highly sought after by employers. During the course of module delivery, students develop the ability to evaluate problems, devise solutions, and critically analyse the solutions. As a result, students build and enhance individual and professional skills. Resourcefulness and Resilience: This module uses concepts learnt in previous finance and accounting modules and further develops knowledge and skills related to financial modelling. 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
Accounting and Finance (Dual degree with SII-DUFE) BSc (Hons)	2	Compulsory	A weighted aggregate mark of 40% is required to pass the module
Accounting and Finance BSc (Hons)	2	Compulsory	A weighted aggregate mark of 40% is required to pass the module
Business Management (Marketing) BSc (Hons)	2	Optional	A weighted aggregate mark of 40% is required to pass the module
Business Management BSc (Hons)	2	Optional	A weighted aggregate mark of 40% is required to pass the module
Business Management with Business Analytics BSc (Hons)	2	Optional	A weighted aggregate mark of 40% is required to pass the module
Business Management with Entrepreneurship and Innovation BSc (Hons)	2	Compulsory	A weighted aggregate mark of 40% is required to pass the module
International Business Management (Dual degree with SII-DUFE) BSc (Hons)	2	Optional	A weighted aggregate mark of 40% is required to pass the module
International Business Management (SII DUFE) BSc (Hons)	2	Optional	A weighted aggregate mark of 40% is required to pass the module
International Business Management BSc (Hons)	2	Optional	A weighted aggregate mark of 40% is required to pass the module