Programme Specification

Business Computing {Foundation} [Frenchay]

Version: 2023-24, v3.0, Validated

Contents

Section 1: Key Programme Details

Part A: Programme Information

Programme title: Business Computing {Foundation} [Frenchay]

Highest award: BSc (Hons) Business Computing

Interim award: BSc Business Computing

Interim award: DipHE Business Computing

Interim award: CertHE Business Computing

Awarding institution: UWE Bristol

Teaching institutions: UWE Bristol

Study abroad: No

Year abroad: No

Sandwich year: Yes

Credit recognition: No

School responsible for the programme: CATE School of Computing and Creative Technologies, College of Arts, Technology and Environment

Professional, statutory or regulatory bodies: Not applicable

Modes of delivery: Full-time, Sandwich

Entry requirements: For the current entry requirements see the UWE public website.

For implementation from: 01 September 2021

Programme code: N1IA00

Section 2: Programme Overview, Aims and Learning Outcomes

Part A: Programme Overview, Aims and Learning Outcomes

Overview: This programme requires students to develop abilities in business skills, computer science and data analytics in order to fulfill the emerging roles in the field of data analytics within organisations. Data production is quickly outpacing organisations' abilities to benefit from it to generate intelligence and insight. Students are therefore expected to develop proficiency in identifying and specifying data analytics projects, gathering/organizing/linking data, designing user interaction, undertaking data analysis, develop information systems to gain business insight and finally communicating results to stakeholders. It provides a solid foundation for lifelong learning, emphasizing the development of knowledge, skills and professional values.

Features of the programme:

Educational Aims: The BSc Business Computing programming has the following general aims:

To produce graduates with a balance of domain knowledge, a practical awareness of coding, tools and data extraction and transformation.

To provide students with a broad background of business operations, procedures and culture applicable to a career in an IT environment

To inculcate in students problem-solving and other transferable skills that will be valuable to them in any career

To develop students' knowledge and practical skills to select and employ appropriate techniques and methods for understanding and developing information systems in business contexts

To continue the development of those general study skills that will enable students to become independent, lifelong learners

The BSc Business Computing programming has the following specific aims:

To provide a coherent and broad based coverage of the theory of data analytics and its application to practical problems

To provide insight into the range of business areas and specific domains where analytics may be applied to available data in order to further organizational goals;

To develop both personal and inter-personal skills to enable students to work closely and communicate with others

To provide students with a set of problem-solving, modeling and analytics skills appropriate to IT related business systems development and operations

The ability to work in an analytic role within cross-disciplinary teams.

To encourage students to uphold professional, ethical and social standards and to keep up to date with recent technological and theoretical developments

The use of real datasets, case studies and industry challenges to ensure the currency and relevance of material provided and to help contextualize course content.

Programme Learning Outcomes:

On successful completion of this programme graduates will achieve the following learning outcomes.

Knowledge and Understanding

A1.   The function of different business units and the value of intelligence to business efficiency and strategy

A2.   Business organization, operations, finance, human resource management and strategic issues and the relationship to Information Systems.

A4.　　The value of data to businesses, consumers and the economy as a whole, and the major mechanisms through which value is created from data

A5.　　Selection and application of statistical methods and statistical inference

A6.　　Application and evaluation of machine learning and text mining techniques

A7.　　Theoretical and contemporary issues surrounding business in general and business analytics in particular

A8.　　Knowledge and understanding of investigative techniques in business analytics

A9.　　Ethical, legal and professional issues in data-related work

A10.　　Programming language concepts; syntax and semantics; top-down development; programming to satisfy designs

A11.　　Relational databases; logical and physical database design; database query languages' data schemas

A12.　　Being professional in a technical environment

Intellectual Skills

B1.　　Problem formulation and problem solving

B2.　　Analysis and Critical Thinking

B3.　　Synthesis of different types of information

B4.　　Evaluation

B5.　　Balance conflicting objective

B6.　　Ability to make decision In a variety of context

Subject/Professional Practice Skills

C1.　　Use of data analysis tools and libraries for data retrieval, manipulation, storage and transformation

C2.　　Employ a range of tools and notations to support the activities listed above; e.g. editors, compilers, design workbenches, HTML, CGI, Java etc

C3.　　Analyse problems and develop solutions using leading ideas and techniques

C4.   Model business systems and solutions using standard tools and techniques

C5.   Apply descriptive, predictive, and prescriptive analytics techniques on structured, semi-structured and unstructured data to extract patterns, forecast trends, run what-if scenarios, and determine the optimal course of action

C6.   Model and design procedures, data structures, information systems

C7.   Visualisation and communication of results

Transferable Skills and other attributes

D1.   Team working

D2.   Interdisciplinary working

D3.   Communication skills

D4.   Progression to independent learning

D5.   Comprehension of professional literature; to read and use literature sources appropriate to the discipline to support learning activities

Assessment strategy: Approved to University Regulations and Procedures

Student support: As part of our School policy and a strong departmental tradition, students on this programme benefit from the opportunity to participate in field trips. These address the objective of widening horizons for the students by experiencing places or events of interest in the UK and overseas (as appropriate) and help to build a sense of learner community. We expect that such opportunities will not only inform but inspire students to develop their career aspirations.

Students will also benefit from learning from guest speakers from industry and research, including our alumni. These opportunities can also help to stimulate students' interest in particular areas of Business Computing.

In addition to timetabled sessions, students of this programme will be supported by drop-in sessions for specific skills development such as Espresso Maths and

Espresso Programming.

At level 4, students have the opportunity to attend timetabled Peer Assisted Learning (PAL) sessions in which higher level students offer advice and guidance about study issues.

There are also open access spaces available for all students, providing IT hardware and software students need for their studies. There is also the provision of other, frequently available, computer laboratories that provide similar access, often open for extended hours.

There is the provision of a IT helpdesk for student support including support for a wide range of applications used by the students, help in the form of assistants who are trained to resolve many common student problems and printed/online advice and guidance.

We have a well-stocked library with reference materials, extensive online resources, IT facilities and study spaces suitable for all learning needs.

Academic staff provide published office hours for personal support in addition to scheduled classes, and our colleagues in professional services departments offer a range of support including study support, careers advice and wellbeing.

Part B: Programme Structure

Year 1
Full-time and Sandwich students must take 120 credits from the modules in Year 1.

Year 1 Compulsory Modules (Full-time and Sandwich)
Full-time and Sandwich students must take 120 credits from the modules in Compulsory Modules (Full-time and Sandwich).

Module Code	Module Title	Credit

UFCFQN-30-0	Computational Thinking and Practice 2023-24	30
UFCFRN-30-0	Creative Technology Studies 2023-24	30
UFCFPN-30-0	Information Practitioner Foundations 2023-24	30
UFCFTN-30-0	Web Foundations 2023-24	30

Year 2
Full-time and Sandwich students must take 120 credits from the modules in Year 2.

Year 2 Compulsory Modules (Full-time and Sandwich)
Full-time and Sandwich students must take 120 credits from the modules in Compulsory Modules (Full-time and Sandwich).

Module Code	Module Title	Credit
UFCE8R-30-1	Foundational Technical Skills 2024-25	30
UFCFP3-30-1	Business Applications 2024-25	30
UFCE8Q-30-1	Business Management Fundamentals 2024-25	30
UFCF83-30-1	IT Practice: Skills, Models and Methods 2024-25	30

Year 3
Full-time and Sandwich students must take 120 credits from the modules in Year 3.

Year 3 Compulsory Modules (Full-time and Sandwich)
Full-time and Sandwich students must take 120 credits from the modules in Compulsory Modules (Full-time and Sandwich).

Module Code	Module Title	Credit
UFCFV4-30-2	Data, Schemas and Applications 2025-26	30
UFCE8T-30-2	Digital Business 2025-26	30

| UFCFN6-30-2 | IT Practice: Collaborative Project 2025-26 | 30 |
| UFCFG6-30-2 | Project Management 2025-26 | 30 |

Year 4
Full-time students must take 120 credits from the modules in Year 4.

Sandwich students who take a placement year will take Professional Experience (UFCFE6-15-3).

Year 4 Compulsory Modules (Sandwich)
Sandwich students must take 15 credits from the modules in Compulsory Modules (Sandwich).

Module Code	Module Title	Credit
UFCFE6-15-3	Professional Experience 2026-27	15

Year 4 Compulsory Modules (Full-time)
Full-time students must take 60 credits from Compulsory Modules (Full-time).

Module Code	Module Title	Credit
UFCFB5-15-3	Ethical and Professional Issues in Computing and Digital Media 2026-27	15
UFCFP6-30-3	IT Practice: Consultancy Project 2026-27	30
UFCE8U-15-3	Professional Preparation 2026-27	15

Year 4 Compulsory Modules Choice (Full-time)
Full-time students must take 30 credits from the modules in Compulsory Modules Choice (Full-time).

Module Code	Module Title	Credit
UFCFM5-30-3	Information Systems Dissertation 2026-27	30
UFCFFF-30-3	Software Development Project 2026-27	30

Year 4 Optional Modules (Full-time)

Full-time students must take 30 credits from the modules in Optional Modules (Full-time).

Module Code	Module Title	Credit
UFCFMM-30-3	Business Intelligence and Data Mining 2026-27	30
UFCF95-15-3	Entrepreneurial Skills 2026-27	15
UFCFLM-15-3	Sustainable Business and Computing 2026-27	15

Year 5

Sandwich students must take 105 credits from the modules in Year 5.

Year 5 Compulsory Modules (Sandwich)

Sandwich students must take 45 credits from Compulsory Modules (Sandwich).

Module Code	Module Title	Credit
UFCFB5-15-3	Ethical and Professional Issues in Computing and Digital Media 2027-28	15
UFCFP6-30-3	IT Practice: Consultancy Project 2027-28	30

Year 5 Compulsory Modules Choice (Sandwich)

Sandwich students must take 30 credits from the modules in Compulsory Module Choice (Sandwich).

Module Code	Module Title	Credit
UFCFM5-30-3	Information Systems Dissertation 2027-28	30
UFCFFF-30-3	Software Development Project 2027-28	30

Year 5 Optional Modules

Students must take 30 credits from the modules in Optional Modules

Module Code	Module Title	Credit

UFCFLM-15-3	Sustainable Business and Computing 2027-28	15
UFCFMM-30-3	Business Intelligence and Data Mining 2027-28	30
UFCF95-15-3	Entrepreneurial Skills 2027-28	15

Part C: Higher Education Achievement Record (HEAR) Synopsis

This programme requires students to develop abilities in business skills, computer science and data analytics in order to fulfill the emerging roles in the field of data analytics within organisations. Data production is quickly outpacing organisations' abilities to benefit from it to generate intelligence and insight. Students are therefore expected to develop proficiency in identifying and specifying data analytics projects, gathering/organizing/linking data, designing user interaction, undertaking data analysis, develop information systems to gain business insight and finally communicating results to stakeholders. It provides a solid foundation for lifelong learning, emphasizing the development of knowledge, skills and professional values.

Part D: External Reference Points and Benchmarks

The following reference points and benchmarks have been used in the in the design of the programme:

The Subject Benchmarking Statements for the computing field (http://www.qaa.ac.uk/en/Publications/Documents/SBS-Computing-16.pdf) was consulted in designing this programme. The skills recommended for computing students cover three broad categories:

computing-related cognitive skills, computing-related practical skills and generic skills for employability. The design of the programme has ensured that the skills specified for each category (and relevant to this programme) is incorporated within existing or new modules for the programme.

Additionally, the Subject Benchmarking Statements for the Business and

Management field (http://www.qaa.ac.uk/en/Publications/Documents/SBS-business-management-15.pdf) was also consulted with the aim of incorporating knowledge and understanding of some of the areas
recommended for business students as well as some of the key practical skills relevant for this programme.

QAA UK Quality Code for HE
Framework for higher education qualifications (FHEQ)
Subject benchmark statements

Strategy 2020
University policies

The programme includes the level 6 Ethics and Professional Issues module and the Individual Project, making it a candidate for BCS accreditation.

Part E: Regulations
Approved to University Regulations and Procedures.