Programme Specification

Software Development [UCW]

Version: 2025-26, v1.0, 20 Jan 2025

Contents

Section 1: Key Programme Details

Part A: Programme Information

Programme title: Software Development [UCW]

Highest award: FdSc Software Development

Interim award: CertHE Software Development

Awarding institution: UWE Bristol

Affiliated institutions: University Centre Weston

Teaching institutions: University Centre Weston

Study abroad: No

Year abroad: No

Sandwich year: No

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

Entry requirements:

For implementation from: 01 September 2025

Programme code: I10N00

Section 2: Programme Overview, Aims and Learning Outcomes

Part A: Programme Overview, Aims and Learning Outcomes

Overview: The FdSc Software Development has been developed in partnership with employers, reflecting local and national demand for software development professionals. A Software Developer provides technology enabled solutions to internal and/or external customers, in a range of areas including software, business and systems analysis, cyber security, data analysis and network infrastructure. They implement technology solutions that enable businesses to develop new products and services and to increase an organisation's productivity using digital technologies. They are confident, competent and capable independent professionals, able to operate in a range of related roles.

Within this programme you will be expected to design, build and test high-quality software solutions. The software engineer role is often broader and with higher levels of responsibility than a software developer as you need to apply engineering principles to all stages of the software development process, from requirements, analysis and design, development and data requirements whilst ensuring security robustness is embedded by design.

Features of the programme:

Educational Aims: This programme will:

Foster in you innovation, enterprise and enthusiasm for excellence in computing.

Develop your technical skills so you can make an effective and professional contribution to the work of interdisciplinary groups engaged in computing projects.

Conduct a range of different software test types within the broad categories of functional, non-functional, white box/structural and change-related testing interpreting and executing test scripts using organisationally agreed methods and standard.

Develop software solutions to meet a client requirement using a range of languages and software tools.

Demonstrate and apply effective workplace skills such as: innovation and creativity; self-management; self-awareness and reflection; goal setting and action planning; independence and adaptability; communication skills; acting on initiative; innovation and creativity, for the benefit of both personal and organisational development.

Develop your personal study, communication, presentation and interpersonal skills required for both independent, autonomous practice and teamworking.

Develop analytical problem-based learning skills and the transferable skills to prepare you for employment and continuing professional development leading to a lifelong learning approach.

Enable you to demonstrate sound knowledge of the concepts, principles and practice from a range of discipline areas within the computing field.

Analyse test objectives to design and prepare a test plan that aligns with the test strategy

Programme Learning Outcomes:

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

Programme Learning Outcomes

PO1. Design, build and test software solutions, applying engineering principles to all stages of the software development process, from requirements, analysis and design, development and data requirements.

PO2. Apply problem-solving techniques to analyse, evaluate and address cyber security threats to technology solutions and implement mitigation through technical and process solutions.

PO3. Plan, design and manage computer networks with an overall focus on the services and capabilities that network infrastructure solutions enable in an organisational context, analysing and assessing network security risks and their resolution, providing recommendations

PO4. Effectively deploy the tools used for the construction and documentation of computer applications, with particular emphasis on understanding the whole process involved in the effective deployment of computers to solve practical problems.

PO5. Analyse the extent to which a computer-based system meets the criteria defined for its current use and future development.

PO6. Develop practical data solutions to securely store, manage data structures and present data to provide new business insight.

PO7. Keep up to date with industry trends and developments to enhance relevant skills and take responsibility for own professional development

PO8. Write logical and maintainable software solutions to meet the design and organisational coding standards (Software Development Lifecycle - Implementation and Build phase).

Assessment strategy: Throughout the programme, opportunities for formative assessment will support summative assessment. A variety of assessment methods will be used including: presentations; reports; coursework, professional briefs and projects, with an emphasis on practical, industry derived skills to give students to demonstrate their proficiency and practical skills across specialist modules.

You will be assessed using scenarios that require problem solving, working both individually and as part of a team. Assessment will develop from module activity, including formative assessment, to ensure that you are fully supported. The assessments provide appropriate challenges to engage you with academic, research, work-based opportunities to support your developing professionalism.

The assessment of practical system developments and programming skills is embedded throughout the programme. As students progress through the programme, project management, development and collaboration become a key theme, and is seen as core activity within the computing industries.

Opportunities for formative feedback are utilised via practical tasks, labs and mock assessments to give students the best opportunity to prepare for summative assessments.

Student support: Personal Development, including academic writing and research skills are delivered through the Academic Development Team, which is embedded in the tutorial programme.

In addition, students may have opportunities to participate in wider opportunities available across the institution. Note: Extra-curricular trips may require student contribution to all or some of the costs and are offered subject to availability and demand.

Part B: Programme Structure

Year 1
Students must take 120 credits from the modules i n Year 1.

Year 1 Compulsory Modules
Students must take 120 credits from the modules in Compulsory Modules.

Module Code	Module Title	Credit
UFCFSM-15-1	Business Security 2025-26	15
UFCEHQ-15-1	Computational Problem-Solving 2025-26	15
UFCE4N-15-1	Computer Networks and Protocols 2025-26	15
UFC4EP-15-1	Database Development 2025-26	15
UFCFQM-30-1	Fundamentals of Software Development 2025-26	30
UFCFRE-30-1	Web Technologies and Platforms 2025-26	30

Year 2
Students must take 120 credits from the modules in Year 2.

Year 2 Compulsory modules
Students must take 120 credits from the modules in Compulsory Modules.

Module Code	Module Title	Credit
UFCEHT-30-2	Introduction to Ethical AI 2026-27	30
UFCFME-30-2	Object Oriented Software Design and Development 2026-27	30
UFCEJ4-15-2	Practical Data Science 2026-27	15
UFCF9R-15-2	Project Management 2026-27	15
UFCF8R-30-2	Webapp Development 2026-27	30

Part C: Higher Education Achievement Record (HEAR) Synopsis

Computer development and digital applications evolve rapidly within the technology industries, but the fundamental knowledge and skills that enable their development, remains the same. For this reason, skill development, theoretical knowledge and the application of underpin the programme.

Alongside both skill and digital knowledge, application and understanding; students are actively encouraged to pursue personal career ambitions; not just for industry employment, but to develop life long learning, financial sustainability and industry engagement.

Part D: External Reference Points and Benchmarks

There are no PSRB requirements for this programme. This programme has been designed to embed the principles, knowledge, application and skills outlined in the UK Quality Code for Higher Education's Subject Benchmark Statement for Computing (March 2022). Furthermore, this programme has also been aligned to the Higher Technical Qualification (HTQ) Software Developer standard ST0116 and will be submitted for approval.

Part E: Regulations

Approved to University Regulations and Procedures