Programme Specification

Software Engineering {JEP} [Neusoft]

Version: 2026-27, v1.0, Validated

Contents

Section 1: Key Programme Details

Part A: Programme Information

Programme title: Software Engineering {JEP} [Neusoft]

Highest award: BSc (Hons) Software Engineering

Interim award: BSc Software Engineering

Interim award: DipHE Software Engineering

Interim award: CertHE Software Engineering

Awarding institution: UWE Bristol

Affiliated institutions: Neusoft Institute, Guangdong

Teaching institutions: Neusoft Institute, Guangdong and UWE Bristol

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 the current entry requirements see the UWE public website.

Students must have the equivalent of IELTS level 4.5 to enter the programme. In the first two years of study students are required to study English Language. They will be required to achieve the equivalent of IELTS level 6.0 by the end of year two. Students who do not achieve the equivalent of IELTS level 6.0 at the end of year 2 will not be permitted to join year 3 of the programme.

For implementation from: 01 September 2026

Programme code: I3NH13

Section 2: Programme Overview, Aims and Learning Outcomes

Part A: Programme Overview, Aims and Learning Outcomes

Overview: Delivered as part of the Joint Educational Programme Software Engineering in partnership with Neusoft Institute, Guangdong.

This programme inspires students to create business-oriented software systems, emphasising ethical practice and strong industry partnerships - globally connected but locally grounded.

Partner universities may create their own version of a balanced curriculum that engages students in various learning and practical activities.

Features of the programme: Not just coding – we look at all aspects of software development, from initial stakeholder analysis, through design coding and testing. We also look at higher level business processes that define how different components of the business work together to deliver customer value.

Hands-on approach that focuses on the practice of Software Engineering through simulated projects, in-house collaboration, and external consultancy.

Professional Skills are key to student development, including presentation skills, team-work, reflective practice, ethics and sustainability, and building a positive professional profile.

Future proofed education – not just training, but a focus on core software engineering skills.

Employer engagement – Hone skills with practical consultancy projects in collaboration with local companies and charities.

Educational Aims: The educational aims of the programme are to:

Provide students with a broad background understanding of business operations, procedures and culture, as applicable to a career in an IT environment.

Enable students to recognise the nature, role and importance of information systems within business organisations and the importance of information security.

Develop students' knowledge and practical skills to select and employ appropriate technologies, tools, techniques and methods for understanding and developing information systems in business contexts.

Develop deep technical competence in the software development process as applied in business.

Equip students to play a key role in software project management.

Develop both personal and inter-personal skills to enable the students to work closely and communicate with others in all aspects of the software development process.

Provide students with a set of problem-solving and modelling skills appropriate to IT related business systems development and operations.

Enable the students to play a central role in an IT project; and gain business experience in a project oriented environment.

Develop the students' critical, evaluative team working and problem-solving abilities that will be valuable to them in any career.

Continue the development of those general study skills that will enable students to become independent, lifelong learners including career and employability awareness.

Programme Learning Outcomes:

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

Programme Learning Outcomes

PO1. Design and validate software requirements specifications using structured approaches such as use cases and formal models, ensuring they are complete, unambiguous, and correct.

PO2. Analyse, design, and justify software architectures and system designs, defining components, their relationships, and underlying principles to ensure effective implementation.

PO3. Develop and verify software through effective coding, debugging, and testing practices to deliver reliable, high-quality systems.

PO4. Apply software quality assurance and configuration management practices across the development lifecycle to ensure systems meet stakeholder requirements.

PO5. Plan, manage, and evaluate software projects to balance technical goals and deadlines, applying principles of software engineering economics to support informed decision-making and business objectives.

PO6. Evaluate and apply software engineering process models and improvement strategies, aligning them with business processes to support organisational goals.

PO7. Apply and evaluate software engineering models and methods, including semi-formal representations such as UML, to analyse, specify, and design software systems.

PO8. Design and integrate security as a cross-cutting concern throughout the software engineering process, embedding it as a critical quality attribute across all activities.

PO9. Critically evaluate professional, ethical, and sustainability responsibilities in software engineering practice, recognising their long-term impact on society.

PO1
0.

Demonstrate the application of theoretical foundations of computing, and show how artificial intelligence can be applied to enhance software development practice.

Assessment strategy: A UWE Bristol module is made up of one or more JEP course units. To pass a UWE module, a student must achieve a mark of 40% for each of the JEP course units and a mark of 40% overall.

Until a student has passed all of the JEP course units that make up a UWE module, they will not pass the UWE module.

Students will be bound by the general assessment regulations of the University. The University regulations provide a framework for the assessment of students' competence, knowledge and understanding, and the grading of students for progression and the conferring of awards. It allows, and expects, staff to give feedback to students and to evaluate the effectiveness of their own teaching.

Assessment is part of the process of helping students to learn and is intended to support them in developing knowledge and understanding as set out in sections three and four of this document. In addition, assessment aids the development of a range of cognitive and intellectual skills, and techniques. Forms of assessment are varied and include in-class tests, group and individual projects, presentations, reflective writing and practical work.

The process of reflection is explicit in many assessments and implicit in them all; alongside feedback from assessments, it is integral to the development of independent learning and student skills of self-assessment. Additionally, feedback is an important means of motivating students to further learning. Assessment is also an important vehicle for the development of a range of transferable skills.

Moderation and verification of assessments at a programme level provides information on overall levels of attainment and ensures that standards are maintained, and is a useful indicator of any areas where extra scrutiny may be needed.

The procedures of assessment involve a number of mechanisms to ensure validity and reliability. These include the moderation of all assessments and their marking schemes and assessment criteria, by a peer and by the External Examiner.

As they progress, students are increasingly expected to undertake independent study and research activities, in particular when completing the practice and project elements of the course. The project will be facilitated by a traditional summative assessment approach at the culmination of the work, however, there will be extensive use of formative feedback, milestones, and guidance from staff during the project (and other, independent-study and research-based assessment undertaken by students); the practice based modules are assessed iteratively, for example by portfolio.

Students will receive feedback, particularly during the practical and self-study elements of the programme to ensure they can keep track of their progress and development. This will also be a key factor in ensuring student engagement and retention on the programme of study. Where possible and practical, verbal, face-to-face feedback will be the preferred method of delivery; this is particularly appropriate where students are expected to present and defend their work. This is becoming increasingly important in a world with ubiquitous AI, where written assessment must be thoroughly scrutinised.

All of the skills are demonstrated in varying degrees in all assessments with the exception of teamwork, which is required in important elements of the coursework, and IT skills, needed for most of the coursework. It would be impossible to progress to completion on the award without demonstrating a basic competence in all of these skills. These skills are demonstrated in a variety of contexts including:

Examination.
Poster presentations.
Individual and group projects.
Practical assignments.
Portfolio of exercises.

Student support: Academic Support

Academic advice and support is the responsibility of the staff delivering the module in question. Staff are expected to be available outside normal timetabled hours, either by appointment or during published "surgery" hours, in order to offer advice and guidance on matters relating to the material being taught and on its assessment.

Computing Facilities.

The School offers specialised computing facilities and user support alongside the general University provisions. Their nature and extent changes from time to time, as hardware and software provision is updated to follow technological change and as availability of resources permits. Wireless Connectivity is available throughout the University including the library. This enables students to work in small groups in a variety of formal and informal spaces while also being able to access library catalogues, the University's Virtual Learning Environment (VLE) and the internet.

In addition, extra industry sessions will focus on employability, including career development, placement opportunities and internships. Recent graduates will lead alumni sessions to provide students with an insight into the nature of their day-to-day working life.

Part B: Programme Structure

 JEP Course Units

Year 2

Full time students will study Neusoft course units, not mapped to UWE credit:

GE6265 Mao ZeDong Thought and Introduction to Theoretical System of Socialism with Chinese Characteristics(2.5)
GE6308 Introduction to Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era (2.5)
GE6275 Basic Principles of Marxism(2.5)
GE6245   Innovation & Entrepreneurship Practice (1)
IN3351   Professional Ability Training (4)
IN3313   Technical English (4) - mapped to UWE non-credit bearing course
Advanced Skills in Practical English UWE0002

Students will study Neusoft course units, mapped to 120 UWE credits as detailed below:

Mapped to UFCFFS-30-1 Foundations of Computing:
IN3328 Foundations of Theoretical Computing(4)
IN3230 Discrete Mathematics(4)

Mapped to UFCFC3-30-1 Introduction to OO Systems Development:
IN3330 Object Oriented Programming (Java)(2)
IN3329 Software Testing(4)

Mapped to UFCEV6-30-1 Information Systems Development:
IN3331 Introduction to Information Systems Development(4)
IN3332 Introduction to Data Modelling(2)
IN3333 Introduction to Web Development(2)

Mapped to UFCF83-30-1 IT Practice: Skills, Models and Methods:
IN3334 Research and Academic Skills(4)
IN3335 Business and Professional Skills (4)

Year 2 Compulsory JEP course units mapped to UWE credit
JEP students must take 30 Neusoft credits from the modules in Compulsory JEP course units mapped to UWE credit.

Module Code	Module Title	Credit
UWE0002	Advanced Skills in Practical English 2027-28	0
UFCEMV-0-1	Business and Professional Skills 2027-28	4

UFCEKW-0-1	Discrete Mathematics 2027-28	4
UFCEKT-0-1	Foundations of Theoretical Computing 2027-28	4
UFCEMS-0-1	Introduction to Data Modelling 2027-28	2
UFCEMR-0-1	Introduction to Information Systems Development 2027-28	4
UFCEMT-0-1	Introduction to Web Development 2027-28	2
UFCEKX-0-1	Object Oriented Programming (Java) 2027-28	2
UFCEMU-0-1	Research and Academic Skills 2027-28	4
UFCEMQ-0-1	Software Testing 2027-28	4

Year 3

Full time students will study Neusoft course units not mapped to UWE credit:

IN3352   Comprehensive Ability Training (4)

Full time students will study Neusoft course units, mapped to 120 UWE credits as detailed below:

Mapped to UFCFN6-30-2 IT Practice: Collaborative Project:
IN3056System Analysis and Design(4)
IN3218IT Project Management (2)

Mapped to UFCFB6-30-2 Object-Oriented Systems Development:
IN3336Object Oriented Analysis and Design(2)
IN3337Software and Architectural Design Patterns(2)
IN3338Object Oriented Development(4)

Mapped to UFCFV4-30-2 Data, Schemas and Applications:
IN3339Data Schemas(2)
IN3340Advanced Data Modelling(2)
IN3341Web Data Applications(4)

Mapped to UFCFW4-30-2 Design and Analysis of Data Structures and Algorithms:
IN3342Advanced Algorithms(4)
INXXXXFunctional Programming (4)

Year 3 Compulsory Neusoft course units mapped to UWE credit
JEP students must take 30 Neusoft credits from the modules in Compulsory JEP course units mapped to UWE credit.

Module Code	Module Title	Credit
UFCEXM-0-2	Functional Programming 2028-29	4
UFCENJ-0-2	Advanced Algorithms 2028-29	4
UFCENE-0-2	Advanced Data Modelling 2028-29	2
UFCEND-0-2	Data Schemas 2028-29	2
UFCEMX-0-2	IT Project Management 2028-29	2

UFCEN8-0-2	Object Oriented Development 2028-29	4
UFCEN4-0-2	Object-Oriented Analysis and Design 2028-29	2
UFCEN6-0-2	Software and Architectural Design Patterns 2028-29	2
UFCEMW-0-2	System Analysis and Design 2028-29	2
UFCENH-0-2	Web Data Applications 2028-29	4

Year 4
Full time students will either:

study Neusoft course units, mapped to 120 UWE credits as detailed below:

Mapped to UFCFP6-30-3 IT Practice: Consultancy Project:
IN3307 Graduate Internship (8)

Mapped to UFCFFF-30-3 Software Development Project:
IN3308 Graduate Project (Thesis) (8)

Mapped to UFCFAF-30-3 Development of Information Systems Projects:
IN3344 Business Process Modelling and Enterprise Architecture (4)
IN3345 Advanced Information Systems Development (4)

Mapped to UFCESY-15-3 Professional Software Engineering
INXXXX Professional Software Engineering (4)

Mapped to UFCESX Artificial Intelligence for Software Development
INXXXX Artificial Intelligence for Software Development (4)

OR

Study 120 credits of UWE modules at UWE.

Year 4 Compulsory Neusoft course units mapped to UWE credit
JEP students must take 40 Neusoft credits from the modules in Compulsory JEP course units mapped to UWE credit.

Module Code	Module Title	Credit

UFCEX9-0-3	Professional Software Engineering 2029-30	4
UFCEX7-0-3	Artificial Intelligence for Software Development 2029-30	4
UFCEP6-0-3	Advanced Information Systems Development 2029-30	4
UFCEP4-0-3	Business Process Modelling and Enterprise Architecture 2029-30	4
UFCEPA-0-3	Graduate Internship 2029-30	8
UFCEPC-0-3	Graduate Project (Thesis) 2029-30	8

UWE Modules

Year 1
Full time students will study Neusoft course units, not mapped to UWE credit:

GE6219Military Theory + Military Skills(4)
GE6187Physical Education (I-VI)(4)
GE6175Policy and Political Situation Analysis (I - VIII)(2)
GE6267Morality and Self Purification and Law Basics(2.5)
GE6274Sinicization of Marxism and Mission of Young Students(1)
GE6273Outline of Chinese Modern History (2.5)
GE6023Mental Health Education for College Students(2)
IN3305   IELTS I and II (8)
IN3225Advanced Mathematics I and II (Science and Technology) (10)
GE6246   Physics (4)
IN3317Linear Algebra(4)
IN3318Probability and Mathematical Statistics(4)
IN3303Introduction to Software Engineering(2)
IN3306Program Design Basics (Python)(4)
IN3269Computer Network(4)
IN3350Basic Ability Training (4)
GE6339Ideological and Political Practice (2.5)
GE6436National Security Education (1)
IN3304English for Academic Purposes (I - IV)(16) mapped to UWE non-credit bearing course English for Academic Purposes

Year 1 Compulsory UWE mapped modules

Students must take IN3304 English for Academic Purposes (I - IV)(16) which is mapped to UWE non-credit bearing course English for Academic Purposes

Module Code	Module Title	Credit
IN3304	English for Academic Purposes 2026-27	0

Year 2

Full time students will study Neusoft course units, not mapped to UWE credit:

GE6265Mao ZeDong Thought and Introduction to Theoretical System of Socialism with Chinese Characteristics(2.5)
GE6308Introduction to Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era (2.5)
GE6275Basic Principles of Marxism(2.5)
GE6245   Innovation & Entrepreneurship Practice (1)
IN3351   Professional Ability Training (4)
IN3313   Technical English (4) - mapped to UWE non-credit bearing course Advanced Skills in Practical English UWE0002

Students will study Neusoft course units, mapped to 120 UWE credits as detailed below:

Mapped to UFCFFS-30-1 Foundations of Computing:
IN3328Foundations of Theoretical Computing(4)
IN3230Discrete Mathematics(4)

Mapped to UFCFC3-30-1 Introduction to OO Systems Development:
IN3330Object Oriented Programming (Java)(2)
IN3329Software Testing(4)

Mapped to UFCEV6-30-1 Information Systems Development:
IN3331Introduction to Information Systems Development(4)
IN3332Introduction to Data Modelling(2)
IN3333Introduction to Web Development(2)

Mapped to UFCF83-30-1 IT Practice: Skills, Models and Methods:
IN3334Research and Academic Skills(4)
IN3335Business and Professional Skills (4)

Year 2 Compulsory UWE mapped modules

120 credits of UWE modules are mapped to the Neusoft compulsory course units taken by JEP students.

Module Code	Module Title	Credit
UWE0002	Advanced Skills in Practical English 2027-28	0
UFCFFS-30-1	Foundations of Computing 2027-28	30
UFCEV6-30-1	Information Systems Development 2027-28	30
UFCFC3-30-1	Introduction to OO Systems Development 2027-28	30
UFCF83-30-1	IT Practice: Skills, Models and Methods 2027-28	30

Year 3
Full time students will study Neusoft course units not mapped to UWE credit:

IN3352   Comprehensive Ability Training (4)

Full time students will study Neusoft course units, mapped to 120 UWE credits as detailed below:

Mapped to UFCFN6-30-2 IT Practice: Collaborative Project:
IN3056System Analysis and Design(4)
IN3218IT Project Management (2)

Mapped to UFCFB6-30-2 Object-Oriented Systems Development:
IN3336Object Oriented Analysis and Design(2)
IN3337Software and Architectural Design Patterns(2)
IN3338Object Oriented Development(4)

Mapped to UFCFV4-30-2 Data, Schemas and Applications:
IN3339Data Schemas(2)
IN3340Advanced Data Modelling(2)
IN3341Web Data Applications(4)

Mapped to UFCFW4-30-2 Design and Analysis of Data Structures and Algorithms:
IN3342Advanced Algorithms(4)
INXXXXFunctional Programming (4)

Year 3 Compulsory UWE mapped Modules
120 credits of UWE modules are mapped to the Neusoft compulsory course units taken by JEP students.

Module Code	Module Title	Credit
UFCFW4-30-2	Design and Analysis of Data Structures and Algorithms 2028-29	30
UFCFV4-30-2	Data, Schemas and Applications 2028-29	30
UFCFN6-30-2	IT Practice: Collaborative Project 2028-29	30
UFCFB6-30-2	Object-Oriented Systems Development 2028-29	30

Year 4
Full time students will either:

study Neusoft course units, mapped to 120 UWE credits as detailed below:

Mapped to UFCFP6-30-3 IT Practice: Consultancy Project:
IN3307 Graduate Internship (8)

Mapped to UFCFFF-30-3 Software Development Project:
IN3308 Graduate Project (Thesis) (8)

Mapped to UFCFAF-30-3 Development of Information Systems Projects:
IN3344 Business Process Modelling and Enterprise Architecture (4)
IN3345 Advanced Information Systems Development (4)

Mapped to UFCESY-15-3 Professional Software Engineering
INXXXX Professional Software Engineering (4)

Mapped to UFCESX Artificial Intelligence for Software Development
INXXXX Artificial Intelligence for Software Development (4)

OR

Study 120 credits of UWE modules at UWE.

Year 4 Compulsory Modules (Studied at UWE)
Students must take 120 credits from the modules in Compulsory Modules (Studied at UWE).

Module Code	Module Title	Credit
UFCESY-15-3	Professional Software Engineering 2029-30	15
UFCESX-15-3	Artificial Intelligence for Software Development 2029-30	15
UFCFP6-30-3	IT Practice: Consultancy Project 2029-30	30
UFCFAF-30-3	Development of Information Systems Projects 2029-30	30
UFCFFF-30-3	Software Development Project 2029-30	30

Year 4 Compulsory Modules (Studied at Neusoft)
120 credits of UWE modules are mapped to the Neusoft compulsory course units taken by JEP students.

Module Code	Module Title	Credit
UFCESX-15-3	Artificial Intelligence for Software Development 2029-30	15
UFCESY-15-3	Professional Software Engineering 2029-30	15
UFCFAF-30-3	Development of Information Systems Projects 2029-30	30
UFCFP6-30-3	IT Practice: Consultancy Project 2029-30	30
UFCFFF-30-3	Software Development Project 2029-30	30

Part C: Higher Education Achievement Record (HEAR) Synopsis

This programme provides graduates with the mix of skills and capabilities required by UK business for the specification, design and delivery of IT systems, services and solutions in a range of business contexts and application domains.

It develops technically competent individuals who think and communicate effectively and who can conduct inquiry, solve problems, undertake critical analysis and deliver effective software systems solutions in a constantly changing business context.

It provides a solid foundation for lifelong learning, emphasising the development of knowledge, skills and professional values essential to the practice of systems development.

Part D: External Reference Points and Benchmarks

In designing this programme, the School has drawn upon the following external reference points:

UWE Bristol Strategy 2030

UWE Enhancement framework for academic programmes and practice
UK Quality Code for Higher Education 2024
The Software Engineering Body of Knowledge (SWEBOK).

The QAA UK quality code for Higher Education Qualifications describes the attributes and skills expected of Honours graduates. It is our view that the learning outcomes of the programme are fully consistent with the qualification descriptor in the Framework, and hence that graduates are able to demonstrate that they meet the expectations of the Framework.

The Enhancement Framework (EF), developed in line with the principles of Strategy 2030, acts as a key reference point for shaping the Software Engineering programme. Alignment of programme development with the EF ensures that curriculum design reflects the University's commitment to outstanding learning.

The Software Engineering programme is closely aligned with UWE Bristol's Strategy 2030. Through consultancy projects, placements, and industry collaborations, the programme supports the Community and Business Engagement strategy, preparing graduates to contribute directly to regional and global digital economies. Issues of ethics and sustainability are addressed through critical reflection on professional practice. The programme embeds Equality, Diversity, and Inclusivity by fostering accessible, inclusive teaching and recognising the diverse needs of learners. Student wellbeing is prioritised in line with the Health and Wellbeing strategy, with strong academic and pastoral support integrated into delivery. Finally, the programme benefits from the People strategy and Campus Environments workstream which ensures that staff expertise and digital learning environments provide the best foundation for student success.

The Software Engineering Body of Knowledge (SWEBOK) is an international standard (ISO/IEC 19759:2015) maintained by the IEEE Computer Society that defines the generally accepted knowledge areas in software engineering. This directly informs the set of programme outcomes developed for the Software Engineering programme.

Part E: Regulations

Approved to University Regulations and Procedures.