Undergraduate Programme Specification

Session	2026/27	**Last Modified**	18/06/2026
Named Award Title	Certificate of Higher Education (CertHE) Computing Studies		
Award Title for Each Award	Certificate of Higher Education (CertHE) Computing Studies		
Date of Approval	June 2026		
Details of Cohort Applies to	All students entering or progressing on the programme from September 2026/27		
Awarding Institution	University of the West of Scotland	**Teaching Institution(s)**	University of the West of Scotland
Language of Instruction & Examination		English	
Award Accredited by		Not Applicable	
Maximum Period of Registration		**2 years**	
Duration of Study			
Full-time	1 year	**Part-time**	N/A
Placement (compulsory)	Not applicable		
Mode of Study	☒ Full-time ☐ Part-time		
Campus	☐ Ayr ☐ Dumfries	☐ Lanarkshire ☒ London ☐ Paisley	☐ Online / Distance Learning ☐ Other (specify)
School	**Computing, Engineering and Physical Sciences**		
Divisional Programme Board	**Computing**		
Programme Leader	Manesh Thankappan		

Admissions Criteria Candidates must be able to satisfy the general admission requirements of the University of the West of Scotland as specified in Chapter 2 of the University Regulatory Framework together with the following programme requirements:
SQA National Qualifications:

- **UCAS Tariff:** normally 64 **UCAS tariff points** (or equivalent) in an appropriate subject area (e.g., computing, IT, science, engineering, mathematics), reflecting common CertHE entry benchmarks.
  or

- **Scottish/UK qualifications equivalent** to the above (e.g., SQA National Qualifications, A-levels, BTEC, T Levels).
  or

- **Access to HE Diploma** (Pass), preferably in a computing/IT-related route.

- **A-Levels equivalent -Around CC**

- **BTEC (MPP or MM depending on diploma type)**

- **International Baccalaureate-Around 24 points**

In addition, applicants will normally be expected to hold:

- **GCSE English and Mathematics at grade 4/C (or equivalent).**

- **English language Requirements:** For applicants whose first language is not English, a minimum English language proficiency of IELTS 6.0 (or equivalent) is required, in line with the University's Programme Specification and admissions policy.

Or SQA National Qualifications / Edexcel Foundation
An appropriate BTEC or equivalent Level 3 vocational qualification

The level of entry and/or credit awarded being subject to the content of the qualifications.

Other Required Qualifications/Experience

The University of the West of Scotland (UWS) recognises that learning takes place in a variety of contexts. Learning can happen in a formal setting through a structured programme of study and in an informal setting through work or other activities such as volunteering. Both formal and informal learning can be assessed either for entry to a programme of study or, where the learning is at the right level, for credit towards a specific programme. This process is called the Recognition of Prior Learning (RPL).

Recognition of Prior Learning (RPL) and Accreditation of Prior Experiential Learning (APEL) may be used for admission in accordance with Chapter 2 of the UWS Regulatory Framework. Applicants who do not meet the standard academic entry requirements may be considered on the basis of relevant professional qualifications, industry certifications, prior certificated learning, or significant relevant work experience. Applicants will be required to attend an interview and/or complete assessments of English language proficiency, numeracy and digital literacy.

Further desirable skills pre-application
Applicants to the CertHE Computing Studies programme at UWS will benefit from possessing the following desirable skills and attributes prior to application:

- Basic Programming Knowledge: Familiarity with the use of languages like Python, Java and SQL will be advantageous.

- Mathematical Aptitude: A good foundation in algebra, statistics, or calculus is helpful for understanding key concepts in Data Analytics and Cyber Security.

- Analytical Thinking: The ability to approach problems methodically and being able to critically evaluate simulation results or processes.

- Digital Literacy: Comfort with basic computer applications or cloud platforms.

- Communication Skills: Proficiency in written and verbal communication for articulating ideas and collaborating effectively.

- Curiosity and Innovation: A keen interest in technology trends, especially in the advancements in Cyber Security solutions and threats.

- Time Management: Strong organisational skills to manage coursework and independent study effectively.

While not mandatory, these skills will give prospective students a head start in mastering the challenges and opportunities presented in this rapidly evolving field.

General Overview

This programme has been developed in response to a growing need, identified by both the Scottish and UK Governments, for individuals equipped with foundational computing and digital skillsets to address the challenges posed by rapidly evolving computer systems and increasing cyber threats. As organisations across all sectors continue to digitise operations, the demand for individuals with technical awareness of systems, networking, programming, and cyber security principles has intensified. The CertHE Computing Studies provides an accessible and structured pathway for learners to acquire these essential competencies within a supportive higher education environment.

The programme has been designed as a developmental learning journey that supports students in their transition to higher education and prepares them for successful progression to degree-level study. Students begin their studies with Aspire: Foundations for Success, which develops core academic skills including academic writing, critical thinking, digital literacy, independent learning, communication, and reflective practice. During the first term, students build confidence through foundational modules in computing systems, fundamental of programming, and mathematics, establishing the knowledge and study skills required for higher-level technical learning. In the second term, students apply and extend these skills through web design, networking, and pathway-specific study in either cyber security or data analysis. Throughout the programme, students benefit from dedicated tutorials, regular progress monitoring, formative feedback opportunities, and embedded academic skills development to support their progression to SCQF Level 8 study.

Graduates of the CertHE Computing Studies will be eligible to progress to SCQF Level 8 study, including Year 2 of BEng (Hons) Cyber Security or BSc (Hon) Data Science and Artificial Intelligence, subject to progression requirements, or to related undergraduate programmes in computing and cyber security. The programme is therefore positioned both as a standalone qualification and as a progression route into honours-level study.

There is currently a recognised shortage of skilled computing and cyber security professionals within the UK labour market. This programme contributes to addressing that

gap by developing students' foundational understanding of computing systems, networking, programming, and cyber security fundamentals. Students will gain the ability to identify and describe common cyber security threats and vulnerabilities, assess risks in defined scenarios, and contribute to the development of secure solutions using established best-practice principles. Through collaborative tasks and applied technical learning, graduates will be prepared either to progress to further study or to undertake entry-level technical roles within the digital and cyber sector.

Typical Delivery Method

The CertHE Computing Studies is delivered primarily through face-to-face teaching at the UWS London Campus, providing students with a structured, supportive, and interactive learning environment. Teaching takes place through a combination of lectures, tutorials, workshops, and supervised laboratory sessions, allowing students to engage directly with academic staff and peers. This in-person delivery model is particularly beneficial for mature and returning learners, as it fosters confidence, encourages active participation, and allows for immediate clarification of technical concepts.

A strong emphasis is placed on practical, hands-on learning within the programme. Modules such as Introduction to Computer Programming, Foundations of Computer Networking, Introduction to Cyber Security, Foundations of Data Analysis and Fundamentals of Web Development are supported through structured lab-based activities delivered in the dedicated computing laboratory, which houses 55 high-specification PCs equipped with industry-relevant software, networking simulation tools, development environments, and cyber security applications. This enables students to apply theoretical knowledge in controlled, professionally relevant scenarios, reinforcing technical understanding through experiential learning.

Teaching methods incorporate innovative and active learning approaches, including flipped classroom activities, collaborative problem-solving exercises, guided coding sessions, case-study discussions, and practical demonstrations. Students are encouraged to work in pairs or small groups during workshops, simulating professional team environments commonly found in computing and IT settings. Guest lectures and industry talks further enrich the learning experience by connecting academic content with current sector practices.

All module materials, including lecture slides, lab guides, reading resources, and assessment briefs, are made available through the University's Virtual Learning Environment (VLE). Digital platforms such as MS Teams and email are used to facilitate communication and provide additional academic support outside scheduled sessions. This blended support model ensures that students can consolidate learning at their own pace while maintaining regular engagement with teaching staff. Collectively, this delivery approach promotes active learning, technical competence, academic confidence, and readiness for progression to further study or entry-level computing roles.

As this programme is designed as a transition route into degree-level study, students receive additional academic support through structured tutorials, formative assessment activities, study skills development, and regular progress reviews. These activities are intended to build academic confidence, encourage engagement, and support the development of independent learning skills required for successful progression to honours-level study**.**

Any additional costs

A laptop (with minimum i3/i5 processor, 8GB/16GB RAM, and 128 GB HDD) is preferable for students to conduct experiments and assignments outside university hours.

Graduate Attributes, Employability & Personal Development Planning

UWS' Graduate Attributes focus on academic, personal and professional skills throughout the programmes. These skills develop graduates who are universally prepared and work-ready. The Comuting Studies programme provides opportunities throughout the levels to ensure these skills are developed and focussed appropriately.

Critical, analytical and investigative skills are developed and used to solve industry-related problems wherever possible. The programme promotes cultural awareness and emotional intelligence with a variety of group exercises developing resilient, ambitious and enterprising leadership qualities whilst ensuring that group members are emotionally and culturally aware. Respectful communication and behaviours are essential.

Ethical awareness and social responsibility are developed throughout and are formalised during the final year project where School/University ethical approval is sought if required.

Links to current University programme research are promoted throughout the programme, with opportunities for students to become involved in aspects of the research from the earliest opportunity, either discretely or as part of an assessment.

Employability - The School regularly receives interest from companies to engage with our students and we are keen to facilitate this where we see benefits for our students. The School also runs a number of specific employability events at the London campus, including employer speed networking events and an annual 'Working with Industry' event. Guest speakers are invited in the form of industry experts and former students to provide insight.

Personal Development Planning (PDP) within the programme is based on four standards:

1) personal tutor support
2) numerous modules linked to PDP outcomes
3) support for the development of an e-portfolio
4) various events relating to PDP

A personal tutor is allocated to each student and students are expected to meet with their personal tutors on a regular basis - at least once per term - to discuss issues relating to PDP, including progress, development goals and aspirations.

A number of modules core to the CertHE Computing Studies programme have been identified as being strongly linked to Personal Development Planning (PDP) themes. In particular:

Level 7: APPD07001 Aspire: Foundations for Success

The Aspire module provides structured opportunities for students to engage in reflective practice, goal setting, skills evaluation, and career planning. In addition, PDP themes are embedded across other Level 7 modules, particularly through collaborative activities, presentations, applied technical tasks, and reflective components within computing and cyber-related subjects.

Work Based Learning/Placement Details

Sandwich placement is not offered as part of this programme.

Attendance and Engagement

In line with the Student Attendance and Engagement Procedure, Students are academically engaged if they are regularly attending and participating in timetabled on-campus and online teaching sessions, asynchronous online learning activities, course-related learning resources, and complete assessments and submit these on time.

For the purposes of this programme, academic engagement equates to the following:

Students are academically engaged if they are regularly attending and participating in timetabled teaching sessions, asynchronous online learning activities, and course-related learning resources, and complete assessments and submit these on time.

Students are also required to be in regular contact with their academic tutor, regularly engaging with materials and discussions on the learning platform, and engaging in independent study.

Equality and Diversity

The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: UWS Equality, Diversity and Human Rights Code.

Aligned with the University's commitment to equality and diversity, this programme supports equality of opportunity for students from all backgrounds and learning needs. Using the VLE, material will be presented electronically in formats that allow flexible access to and manipulation of content.

Module Co-ordinators will ensure that language is inclusive and culturally sensitive within any university-created material. However, some external resources, such as textbooks or websites, may still contain outdated or non-inclusive terminology, and students will be made aware of this.

The programme complies with university regulations and guidance on inclusive learning and teaching practice. Students can speak to the the relevant Module Co-ordinator to ensure that specialist assistive equipment, support provision and adjustment to assessment practice can be put in place, in accordance with the University's policies and regulations.

Programme structures and requirements, SCQF level, term, module name and code, credits and awards (Chapter 1, Regulatory Framework)

Learning Outcomes

SCQF LEVEL 7 Learning Outcomes	
Knowledge and Understanding	
A1	Describe and explain the dynamic nature of the computing, cyber security, and data-driven technology sectors.
A2	Define and discuss the key areas, concepts and principles in computing, security, and data analysis.
A3	Describe and explain the standard mathematical and statistical concepts used in computing.
A4	
A5	
Practice - Applied Knowledge and Understanding	
B1	Develop computing applications by applying knowledge and understanding of the principles and techniques of structured programming.
B2	Compile, execute, debug and document software using a current Integrated Development Environment (IDE).
B3	Employ the professional skills, techniques, practices associated with computing systems, cyber security, and data analysis.
B4	
B5	
Communication, ICT and Numeracy Skills	
C1	Solve problems of a non-routing nature using appropriate computational and analytical approaches.
C2	Practice numeracy in understanding and presenting cases involving a quantitative dimension.
C3	Use a range of ICT applications to support and enhance work, adjusting features to suit the purpose.
C4	Practice electronic, oral and written communication skills suitable for their target audience.
C5	
Generic Cognitive Skills - Problem Solving, Analysis, Evaluation	
D1	Present and evaluate information, arguments, and ideas in a structured and coherent manner.
D2	Participate within the legal, ethical and professional framework within which they study.
D3	
D4	
D5	

Autonomy, Accountability and Working with Others	
E1	Define and explain key issues in relation to the accountability and responsibilities of computer professionals to clients, the community and society at large.
E2	Manage limited resources within defined areas of computing work.
E3	
E4	
E5	

Level 7 Modules

CORE

SCQF Level	Module Code	Module Title	Credit	Term			Footnotes
				1	2	3	
7	APPD07001	Aspire: Foundations For Success	20	☒	☒	☒	
7	COMPXXXXX	Introduction to Computer Programming	20	☒	☒	☒	
7	MATHXXXX	Mathematics for Computing Studies	10	☒	☒	☒	
7	COMPXXXXX	Introduction to Computing Systems	10	☒	☒	☒	
7	COMPXXXXX	Foundations of Computer Networking	20	☒	☒	☒	
7	COMPXXXXX	Fundamentals of Web Development	20	☒	☒	☒	

Footnotes for Core Modules

The delivery format on London campus is cyclic, based on 3 term delivery and student intake.

Each intake students will take the modules based on the following module group:

Module group 1: Aspire: Foundations for Success*, Introduction to Computer Programming; , Mathematics for Computing Studies and Introduction to Computing Systems;

Module group 2: Foundations of Computer Networking; Fundamentals of Web Development and Introduction to Cyber Security OR Foundations of Data Analysis.

*Aspire will be delivered in every intake for new entrants in the first term of entry.

Level 7 Modules

OPTION

SCQF Level	Module Code	Module Title	Credit	Term			Footnotes
				1	2	3	
7	COMPXXXXX	Introduction to Cyber Security	20	☒	☒	☒	

7	MATHXXXXX	Foundations of Data Analysis	20	☒	☒	☒	
				☐	☐	☐	

Students may choose to progress toward the BEng (Hons) Cyber Security pathway if they choose the Introduction to Cyber Security module in Term 2. Alternatively, students may choose to progress toward the BSc (Hons) Data Science and Artificial Intelligence pathway if they select Foundations of Data Analysis in Term 2.

Level 7
Criteria for Progression and Award
Please refer to UWS Regulatory Framework for related regulations

Standard UWS progression regulations will apply.

Students who achieve 120 credits at SCQF level 7, including the core modules above, will be eligible for the final award Certificate of Higher Education (Cert HE) Computing Studies.

Where a student is unable to complete one of the core modules or pathway option modules within the CertHE Computing Studies programme, and where all normal reassessment opportunities have been exhausted, the student may be considered for a CertHE Combined Studies award in accordance with the UWS Regulatory Framework, including the relevant provisions for credit minima and Combined Studies awards under Chapter 1 of the Regulatory Framework. Subject to meeting the required credit criteria, students may be offered an alternative SCQF Level 7 module, where available and appropriate, to support achievement of the required credit volume.

Regulations of Assessment
Candidates will be bound by the general assessment regulations of the University as specified in the University Regulatory Framework. An overview of the assessment details is provided in the Student Handbook and the assessment criteria for each module is provided in the module descriptor which forms part of the module pack issued to students. For further details on assessment please refer to Chapter 3 of the Regulatory Framework. To qualify for an award of the University, students must complete all the programme requirements and must meet the credit minima detailed in Chapter 1 of the Regulatory Framework.

Version no: 1

Change/Version Control

What	**When**	**Who**
Initial Version of PS	10 March 2026	Manesh Thankappan
Updated version of PS after initial school scrutiny on 10-04-2026	26 April 2026	Manesh Thankappan
Updated version of PS after Validation of Programme on 8th June 2026	18 June 2026	Manesh Thankappan