

**PROGRAMME SPECIFICATION
(Taught Postgraduate)**



1	Awarding Institution	Newcastle University
2	Teaching Institution	Newcastle University
3	Final Award	Certificate of Higher Education
4	Programme Title	International Year One in Computer Science Newcastle University International Study Centre
5	Programme Code	1031U – Sept intake 1032U – Jan intake
6	Programme Accreditation	n/a
7	QAA Subject Benchmark(s)	n/a
8	FHEQ Level	4
9	Last updated	September 2025

10 Programme Aims

To provide a programme which:

1. Equips international students with the English language competence they need to study at Stage 2 of Newcastle University (or in another UK HEI accepting this award).
2. Provides international students with the intellectual development and subject specific knowledge they need to be academically capable of studying Computing at Stage 2 at Newcastle University (or in another UK HEI accepting this award).
3. Provides practical experience of British university teaching methods.
4. Enables students to develop confidence in communicating with native speakers.
5. Encourages students to undertake self-evaluation to help them analyse their progress.
6. Provides students with subject knowledge to prepare them for graduate study.

11 Learning Outcomes

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas. The programme outcomes have references to the benchmark statements.

Knowledge and Understanding

On completing the programme students will have gained and be able to demonstrate competency in:

- A1 a diverse range of programming paradigms and languages supported by programming language principles.
- A2 the principles of software engineering.
- A3 the theoretical and mathematical foundations of Computer Science.
- A4 techniques for the development of data representations and algorithms
- A5 computer and network organisation and hardware architecture
- A6 the legal, ethical, and social aspects of professional practice, personal development, social roles, and effects of computing systems
- A7 research techniques.
- A8 operating effectively in teams.
- A9 the principles of cybersecurity.

- A10. Have increased knowledge and understanding of English grammar and vocabulary, including the conventions of academic English.
- A11. Understand the basic requirements for writing a competent essay/case study report or laboratory report.

Teaching and Learning Methods

Knowledge and understanding is primarily taught through lectures and practical programming sessions (A1-A9) supported by reading and seminar activities and discussion. English is primarily taught in smaller classes and reinforced through practice (A10, A11). Case studies and project work will involve an element of student research (A7). Average English and Academic class size is 18.

Assessment Strategy

Knowledge and understanding are assessed by means of closed and open book written examinations, and coursework, including team and individual project reports and log books (A1-A11).

Intellectual Skills

- On completing the programme students will have demonstrated skills in the areas of:
- B1 carrying out the process of software development, including: the analysis of requirements; the production of specifications; and robust, reliable, and secure software.
 - B2 several programming languages and paradigms.
 - B3 designing useful and usable software.
 - B4 applying theoretical concepts in the design and analysis of software.
 - B5 Read academic texts and other sources of information with some degree of analytical skill
 - B6 Discuss and evaluate the results of experiments or other forms of research either orally or in writing

Teaching and Learning Methods

These skills are best taught and learned through practice. Programming sessions, seminar and calculation class work will assist in development of B1- B4 and B6. English for Academic Purposes module addresses B5 specifically.

Assessment Strategy

All of the above intellectual skills will be assessed as part of the overall assessment of case study and project reports and/or oral presentations, calculation class exercises, programming work and reports. The Portfolio 1 and Portfolio 2 modules will assess B1-B6. In other modules, coursework is used to develop these skills (B1-B4). Unseen examinations will assess B5 and B6.

Practical Skills

- On completing the programme students will be able to demonstrate they have the skills to:
- C1 conduct investigations using the technical and professional literature.
 - C2 use tools and techniques to support software development especially in teams.
 - C3 address problems using theoretical analysis and empirical evaluation.
 - C4 interacting with people to capture requirements and communicate the results.
 - C5 produce technical documentation.
 - C6. Present scientific data and ideas in clear and logical form, either tabulated, graphically or in written or oral English
 - C7. Develop strategies for effective note taking in lectures and seminars
 - C8. Read and take notes from an academic text or other sources of information
 - C9. Take part in a discussion in a seminar context

<p>C10. Write an essay or laboratory report in an academic context in understandable English following the appropriate conventions</p> <p>C11. Apply proper referencing and other aspects of good academic practice</p>
<p>Teaching and Learning Methods</p> <p>The EAP module will deliver C6-C11, but the lessons learned will be reinforced and practiced in other modules. The skills, C7- C9, will be taught through the English for Academic Purposes modules largely through small group teaching with plenty of practice and C6 will also be introduced in those modules. However, every other module will also use and reinforce these skills. Programming practicals and seminar exercises will develop C1 – C5.</p>
<p>Assessment Strategy</p> <p>Practical skills will be assessed through observation of programming work and reports, seminar exercises and in some tests and exams (C1-C5). English language competency will be tested directly on an IELTS equivalent basis in the English for Academic Purposes module IYO Computing using a mixture of tests and coursework and covering reading, writing, speaking and listening (C7-C11). Other modules will indirectly assess English language competence and the ability to take notes and use sources, as they all require an ability to express ideas in English. C6, C10- C11 will be assessed through assessment of project reports and essays submitted in academic modules.</p>
<p>Transferable/Key Skills</p> <p>On completing the programme students will be able to demonstrate competency in:</p> <p>D1 effective communication skills and intercultural communication in study group context</p> <p>D2 problem solving.</p> <p>D3 initiative.</p> <p>D4 adaptability.</p> <p>D5 teamwork.</p> <p>D6 numeracy.</p> <p>D7 planning and organisation.</p>
<p>Teaching and Learning Methods</p> <p>All modules provide guidance on techniques with practice. Portfolios 1 and 2 modules have elements of team work (D1, D4, D5) and presenting completed work with research (D2, D3, D6, D7). Independent study is required in all modules and students will learn how to work on their own to complete assessed tasks (D3, D7). Numeracy is covered by a Mathematics module at Stage 1 and exercises in the programming modules (D6). Students will further develop D1 through attendance at selected classes which are part of modules from appropriate undergraduate degree programmes</p>
<p>Assessment Strategy</p> <p>Key (transferable) skills are assessed by both written and oral presentations (D1-D7). Some group work is required and students' success in working in teams will therefore be assessed via the quality of the end product and presentation (D1-D5, D7). D2, D6, D7 and D1 will be assessed via coursework assessment, essays and reports.</p>
<p>12 Programme Curriculum, Structure and Features</p>
<p>Basic structure of the programme</p> <p>A two semester 120 credit programme which combines the study of English for Academic Purposes module with Fundamentals of Computing, Computer Systems Design and Architectures, Foundations of Data Science, Programming Portfolio 1, Programming Portfolio 2 modules</p>

Key features of the programme (including what makes the programme distinctive)
The programme is specially designed for international students to adapt their skills and abilities for studying Computer Science programmes at Stage 2 at the School of Computing, SAgE Faculty, Newcastle University
Programme regulations (link to on-line version)

13 Support for Student Learning
Generic information regarding University provision is available at the following link. Generic Information

14 Methods for evaluating and improving the quality and standards of teaching and learning
Generic information regarding University provision is available at the following link. Generic Information <i>Accreditation reports</i> <i>Additional mechanisms</i>

15 Regulation of assessment
Generic information regarding University provision is available at the following link. Generic Information

In addition, information relating to the programme is provided in:
The University Prospectus: http://www.ncl.ac.uk/undergraduate/degrees/#subject Degree Programme and University Regulations: http://www.ncl.ac.uk/regulations/docs/

Please note. This specification provides a concise summary of the main features of the programme and of the learning outcomes that a typical student might reasonably be expected to achieve if she/he takes full advantage of the learning opportunities provided.

Mapping of Intended Learning Outcomes onto Curriculum/Modules

Module Code	Module	Type	Intended Learning Outcomes			
			A	B	C	D
INU1231 INU1631	Fundamentals of Computing	Compulsory	3,4	4		6
INU1232 INU1632	Computer Systems Design & Architectures	Compulsory	2,3,4,5,6,9	1,3,4	1,2,3,5	7
INU1233 INU1633	Foundations of Data Science	Compulsory	1,2,3,4	1,2,3,4	1,2,3,4	2,4,6
INU1234 INU1634	Programming Portfolio 1	Compulsory	1,2,3,4,5,6,7,8	1,2,3,4,5,6	1,2,3,4,5	1,2,3,4,5,6,7
INU1235 INU1635	Programming Portfolio 2	Compulsory	1,2,3,4,5,6,7,8	1,2,3,4,5,6	1,2,3,4,5	1,2,3,4,5,6,7
INU1101 INU1501	English for Academic Purposes	Compulsory	7,10,11	5,6	6,7,8,9,10,11	1,7

International Year One in Computer Science Curriculum Mapping and Assessment Criteria

Curriculum Mapping

In terms of syllabus and technical content, the IYOC programme maps identically to the Stage 1 Computing programme (120 credits) with the reduction in credits for the two Portfolio modules to 20 credits each and the addition of English for Academic Purposes content (20 credits). Each Semester is equally balanced with students taking 60 credits per semester on IYOC, as shown in Table 1.

Simplified Academic Calendar for Stage 1 Computing.

Module	Module Title	Semester 1	Semester 2
CSC1031	Fundamentals of Computing	10 CR	10 CR
CSC1032	Computer Systems Design and Architectures	10 CR	10 CR
CSC1033	Foundations of Data Science	10 CR	10 CR
CSC1034	Programming Portfolio 1	30 CR	
CSC1035	Programming Portfolio 2		30 CR
Total Credits	120 CR	60 CR	60 CR

Simplified Academic Calendar for IYOC

Module	Module Title	Semester 1	Semester 2
INU1231/INU1631	Fundamentals of Computing	10 CR	10 CR

INU1232/INU1632	Computer Systems Design and Architectures	10 CR	10 CR
INU1233/INU1633	Foundations of Data Science	10 CR	10 CR
INU1234/INU1634	Programming Portfolio 1	20 CR	
INU1235/INU1635	Programming Portfolio 2		20 CR
INU1101/INU1501	English for Academic Purposes IYO	10 CR	10 CR
Total Credits	120 CR	60 CR	60 CR

Table 1: Comparison of Stage 1 Computing and IYOC Academic Calendars

Assessment Criteria

All modules align on International Year One in Computer Science (IYOC) and Stage 1 Computing, hence assessment criteria for all IYOC modules will be very similar to modules on Stage 1 Computing. Grade Schemes will be provided by Stage 1 Computing module leaders, and these will be adhered to on IYOC. Where appropriate, Stage 1 Computing module leader moderation will ensure comparable marking standards on both programmes.

Student will be expected to achieve a minimum mark of 40% overall to pass a module. Students will be expected to pass all modules to progress onto Stage 2 Computing programme.