Programme Specification: Post Graduate Taught

For Academic Year 2026/27

1. Course Summary

Names of programme and award title(s)	Pre-Masters Computer Science
Award type	Pre-Masters
Mode of study	Full-time
Framework of Higher Education Qualification (FHEQ) level of final award	Level 6
Normal length of the programme	1 semester Entry points: September and January
Maximum period of registration	Normal length as specified above, plus 18 months
Location of study	The British International College, Nepal
Accreditation (if applicable)	n/a
Regulator	Office for Students (OfS)
Tuition Fees	Please refer to the British International College website for information in relation to Tuition Fees.

How this information might change: *Please read the important information at http://www.keele.ac.uk/student-agreement/. This explains how and why we may need to make changes to the information provided in this document and to help you understand how we will communicate with you if this happens.*

** We reserve the right to increase fees in subsequent years of study by an inflationary amount. Please refer to the accompanying Student Terms & Conditions for full details. Further information on fees can be found at http://www.keele.ac.uk/studentfunding/tuitionfees/*

2. Overview of the Programme

The Pre-Masters programme is aimed at developing a foundational knowledge of the underlying principles and concepts of programming, software engineering, mathematics, and database systems. Students successfully completing the programme, having met relevant admissions criteria, will be able to then move to the Keele University MSc Advanced Computer Science programme.

3. Aims of the programme

Keele University has designed this Pre-Masters programme in close partnership with British International College (BIC) Nepal. The Pre-Masters programme is generally for students who do not meet Keele's minimum entry requirements for the MSc Advanced Computer Science programme. The programme is delivered in a way that fosters a supportive environment for students. This programme will give students the required background in mathematics, programming, and database management systems.

4. What you will learn

The intended learning outcomes of the programme (what students should know, understand and be able to do at the end of the programme), can be described under the following headings:

- Subject knowledge and understanding
- Subject specific skills

- Key or transferable skills (including employability skills)

Subject knowledge and understanding

Successful students will be able to:

- Core principles of programming and software engineering, including problem decomposition, algorithmic thinking, and structured program design
- Fundamental mathematical concepts underpinning computer science, including algebra, calculus, and probability, and their application to computational and data-driven problems.
- Key concepts of database systems, including data modelling, relational databases, and the role of database management systems in modern computing applications
- The relationship between theory and practice in computing, demonstrating how theoretical concepts inform the design, implementation, and evaluation of computational solutions.
- A strong emphasis on the underlying discipline and/or applications.
- The mastery of the practical methodology of the relevant area of computing, whether for general application in software development or in specialised applications relating to the storing, processing, and communication of information.
- Understand and respond effectively and creatively to a range of assessment types.
- Demonstrate the appropriate level of information literacy.
- Demonstrate competence in a diverse range of communication

Subject specific skills

Successful students will be able to:

- Employ features of a high-level programming language to develop solutions to simple programming problems
- Demonstrate a critical approach to knowledge acquisition commensurate with postgraduate level study.
- Deliver a realistic solution to a Computer Science problem
- Understand the various mathematical concepts like algebra, calculus, and probability, and apply the knowledge to various real-world applications
- Understand the benefits and characteristics of database models and database management systems (DBMS)

Key or transferable skills (including employability skills)

Successful students will be able to:

- Take responsibility for their own learning by setting academic goals, identifying appropriate learning resources, and managing independent study in preparation for postgraduate-level study.
- Communicate effectively in written and oral forms, using appropriate academic and technical language to address both technical and non-technical audiences.
- Apply problem-solving skills to analyse computing-related problems and propose appropriate solutions.
- Reflect critically on their own academic development, identifying strengths, areas for improvement, and strategies for progression to MSc-level study.
- Manage time effectively to meet assessment deadlines and balance competing academic demands.
- Demonstrate awareness of professional behaviours expected in computing-related academic and workplace environments.

Keele Graduate Attributes

The Keele Graduate Attributes are the qualities (skills, values and mindsets) which you will have the opportunity to develop during your time at Keele through both the formal curriculum and also through co- and extra-curricular activities (e.g., work experience, and engagement with the wider University community such as acting as ambassadors, volunteering, peer mentoring, student representation, membership and leadership of clubs and societies). Our Graduate Attributes consist of four themes: **academic expertise, professional skills, personal effectiveness, and social, environmental and ethical responsibility.** You will have opportunities to engage actively with the range of attributes throughout your time at Keele: through your academic studies, through self-assessing your own strengths, weaknesses, and development needs, and by setting personal development goals. You will have opportunities to discuss your progress in developing graduate attributes with, for example, Academic Mentors, to prepare for your future career and lives beyond Keele.

5. How is the programme taught?

The programme is taught at BIC in Nepal. Each module is delivered in accordance with Keele's quality and

standards expectations, using the same materials and teaching methods. Where appropriate and agreed in advance, examples and case studies are adapted to the local context without altering core content. BIC Associate Tutors approved by Keele work in close partnership with Keele Module Tutors to deliver each module using the same teaching materials, session plans, and assessment briefs. The modules will be taught in the same way as they (or equivalent modules) are taught at Keele.

You will use a variety of learning tools in studying for this programme. The principal method for you to acquire knowledge is the use of formal lectures. These are supplemented by tutorials and practical sessions, dependent on the topics being covered in the module. Self-study using material provided and that which you research for yourself will supplement the formal learning opportunities. Formal lectures and self-study materials are used to introduce concepts to the student. The tutorials and practicals enable both the consolidation of this material and an understanding of the practicalities of its application in a modern business environment. The tutorials and practicals achieve this aim by having the students apply the taught concepts to real-world problems in a situation where individual progress can be monitored.

All taught modules will be delivered in block mode, i.e., each of these modules will be delivered over a period of six consecutive weeks.

Apart from these formal activities, students are also provided with regular opportunities to talk through particular areas of difficulty and any special learning needs they may have, with their Academic Mentor or module lecturers on a one-to-one basis.

NB: All the taught content for this programme delivered at the BIC Nepal is provided by Keele University.

6. Teaching Staff

The programme is taught at BIC, in Nepal, by Associate Tutors who are approved by Keele University, who work closely with Keele Module Tutors to deliver each module according to Keele's quality and standards expectations.

The academic staff based within BIC's Computer Science Department comprise of five Professors, four associate professors, and five additional teaching members.

The University will attempt to minimise changes to our core teaching teams, however, delivery of the programme depends on having a sufficient number of staff with the relevant expertise to ensure that the programme is taught to the appropriate academic standard.

Staff turnover, for example where key members of staff leave, fall ill or go on research leave, may result in changes to the programme's content. The University will endeavour to ensure that any impact on students is limited if such changes occur.

7. What is the structure of the programme?

There are two intakes for this programme in September and January . The programme is organised into three modules. Each module is usually a self-contained unit of study, and each is usually assessed separately with the award of credits on the basis of 1 credit = 10 hours of student effort. An outline of the structure of the programme is provided in the tables below.

The programme has three compulsory modules.

A summary of the credit requirements is as follows.

Year	Compulsory	Optional
Level 6	45	N/A

Module Lists

Level 6

September intake

Compulsory modules	Module Code	Credits	Period
Mathematics for Computational Sciences	CSC-30087	15	Semester 1
Foundations of Programming and Software Engineering	CSC-30089	15	Semester 1
Introduction to Database Systems	CSC-30121	15	Semester 1

January intake

Compulsory modules	Module Code	Credits	Period
Mathematics for Computational Sciences	CSC-30087	15	Sem2
Introduction to Programming and Software Engineering	CSC-30089	15	Sem 2
Introduction to Database Systems	CSC-30121	15	Sem 2

Learning Outcomes

The table below sets out what students learn in the programme and the modules in which that learning takes place. Details of how learning outcomes are assessed through these modules can be found in module specifications.

Level 6

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Subject Knowledge and Understanding	
Learning Outcome	**Module in which this is delivered**
A combination of theory and practice, with practice being guided by theoretical considerations.	All Modules
A strong emphasis on the underlying discipline and/or applications.	All Modules
The mastery of the practical methodology of the relevant area of computing, whether for general application in software development or in specialised applications relating to the storing, processing, and communication of information.	All Modules
An understanding of, and attention to, the many and varied aspects of quality.	All Modules
Understand and respond effectively and creatively to a range of assessment types.	All Modules
Demonstrate the appropriate level of information literacy.	All Modules
Demonstrate competence in a diverse range of communication modes.	All Modules

Subject Specific Skills	
Learning Outcome	**Module in which this is delivered**
Employ features of a high-level programming language to develop solutions to simple programming problems	Foundations of Programming and Software Engineering - CSC-30089
Demonstrate a critical approach to knowledge acquisition commensurate with postgraduate level study.	All modules
Deliver a realistic solution to a Computer Science problem or research topic	All modules
Understand the various mathematical concepts like algebra, calculus, and probability, and apply the knowledge to various real-world applications	Mathematics for Computational Sciences - CSC-30087
Understand the benefits and characteristics of database models and database management systems (DBMS)	Introduction to Database Systems - CSC-30121
Communication skills to address effectively technical and non-technical audiences	All Modules

Key or Transferable Skills (graduate attributes)	
Learning Outcome	**Module in which this is delivered**
Ability to set goals and identify resources for learning.	All Modules
An ability to recognize and respond to opportunities for innovation	All Modules
Communicate effectively in writing.	All Modules
Communicate effectively orally.	All Modules
Reflect on their own skills and progress.	All Modules
Demonstrate skills in problem-solving.	All Modules
Manage time effectively.	All Modules

8. Final and intermediate awards

Credits required for each level of academic award are as follows:

Graduate Certificate	45 credits	You will require at least 45 credits

9. How is the Programme Assessed?

The wide variety of assessment methods used on this programme reflects the broad range of knowledge and skills that are developed. Teaching staff pay particular attention to specifying clear assessment criteria and providing timely, regular, and constructive feedback that helps to clarify things you did not understand and helps you to improve your performance. The following list is representative of the variety of assessment methods used on your programme:

- **Open-book examinations**: These assess students' knowledge and understanding of computer science topics. Students are permitted to consult their notes and, where specified by the module leader, other teaching materials. Such examinations typically include compulsory questions and may also offer optional questions.
- **Coursework**: This normally consists of regular short assignments designed to assess students' knowledge and understanding of course material in greater depth than class tests. Coursework may

include computer-based tasks, individual reports or essays, and group projects.
- **Online tasks / MCQs**: MCQs (Multiple Choice Questions) present a question followed by a set of possible answers, from which students must select the correct option or options. These tasks are usually completed online.
- **Short reports**: These require students to produce a written account of small-group studies and discussions focused on specific topics, demonstrating critical reflection and understanding**.**

Marks are awarded for summative assessments designed to assess your achievement of learning outcomes. You will also be assessed formatively to enable you to monitor your own progress and to assist staff in identifying and addressing any specific learning needs. Feedback, including guidance on how you can improve the quality of your work, is also provided on all summative assessments within three working weeks of submission, unless there are compelling circumstances that make this impossible, and more informally in the course of tutorial and seminar discussions.

10. Accreditation

This programme does not have accreditation from an external body.

11. University Regulations

The University Regulations form the framework for learning, teaching and assessment and other aspects of the student experience. Further information about the University Regulations can be found at: http://www.keele.ac.uk/student-agreement/

If this programme has any exemptions, variations or additions to the University Regulations these will be detailed in an Annex at the end of this document titled 'Programme-specific regulations'.

12. What are the typical admission requirements for the Programme?

See the relevant programme page on the British International College website for the admission requirements relevant to this programme:

Entry requirements:

Applicants must meet one of the following criteria:

- A **4-year Bachelor's degree** in Computing, Science, Mathematics, or Engineering with a minimum of 60% or a CGPA of 2.4, OR
- A **3-year Bachelor's degree** in Computing, Science, Mathematics, or Engineering with a minimum of 65% or a CGPA of 2.8, OR
- Demonstrated **relevant professional qualifications** or equivalent **work experience**, OR
- A Bachelor's degree from any field (including Science, Non-Science, Management, or other streams), provided the applicant can demonstrate the necessary aptitude and readiness for the programme.

URL: https://www.thebritishcollege.edu.np/programme/master-in-data-science-in-nepal

Recognition of Prior Learning (RPL) is considered on a case-by-case basis and those interested should contact the Programme Director. The University's guidelines on this can be found here: https://www.keele.ac.uk/qa/programmesandmodules/recognitionofpriorlearning/

13. How are students supported on the programme?

Support for student learning on the programme is provided in the following ways:

- All students have an Academic Mentor assigned from the BIC Associate Tutors. Students will see their Academic Mentor on a regular basis throughout the semester, and they will also be available at specific times during their working week, as necessary. There is also a dedicated BIC Programme Leader. There is also support from a team of administrators based at BIC who will provide you with support regarding the programme and its delivery. In addition, you can access academic and pastoral support from the BIC Student Services Department as well as Keele Student Services and the Student Experience and Support Team for the Keele Faculty of Natural Sciences.
- BIC Associate Tutors are responsible for providing learning support on the individual modules. They also give feedback on all summative and formative assessments, from individual feedback on coursework to more general feedback on examinations.
- The members of academic staff in the BIC Computer Science Department operate an open-door policy whereby lecturers and tutors are happy to see and advise students at any reasonable time or by mutually convenient appointment.

14. Learning Resources

All modules will be delivered through a combination of face-to-face and virtual contact. Most of the taught sessions will be in small classrooms with directed learning activities to be completed at other times. Some study will be undertaken in computer laboratories or practical laboratories under supervision from staff. Support materials, programme regulations and module handbooks will be available electronically on the Keele Learning Environment (Blackboard). All students will be registered with the Keele University library and have digital access to reading lists whilst based in BIC, as well as physical learning resources at BIC, including computing and printing facilities. All students have access to additional study skills support through the Student Learning section of Keele's Student Services.

15. Additional Costs

As to be expected there will be additional costs for inter-library loans and potential overdue library fines, print and graduation. We do not anticipate any further costs for this programme.

16. Quality management and enhancement

The quality and standards of learning in this programme are subject to a continuous process of monitoring, review and enhancement.

- The School Education Committee is responsible for reviewing and monitoring quality management and enhancement procedures and activities across the School.
- Individual modules and the programme and its delivery through the partnership with Keele University and British International College are reviewed and enhanced every year in the annual programme review and annual partnership review which takes place at the end of the academic year.
- The programme is run in accordance with the University's Quality Assurance procedures and are subject to periodic reviews under the Revalidation process.
- The partnership between Keele University and British International College is subject to Keele's Educational Partnerships Code of Practice, which sets out how Keele works with its partners and manages the quality and standards of its provision and that of the student experience.

Student evaluation of, and feedback on, the quality of learning on every module takes place every year using a variety of different methods:

- The results of student evaluations of all modules are reported to Associate Tutors at British International College and module leaders at Keele University, and reviewed by the partnership's joint committees.
- Findings related to the programme from regular surveys of the student experience conducted by British International College are subjected to careful analysis and a planned response at programme level.
- Feedback received from representatives of students of the programme is considered and acted on at regular meetings of the Student Staff Voice Committee.

The University appoints senior members of academic staff from other universities to act as external examiners on all programmes. They are responsible for:

- Approving examination questions
- Confirming all marks which contribute to a student's degree
- Reviewing and giving advice on the structure and content of the programme and assessment procedures

Information about current external examiner(s) can be found here:
http://www.keele.ac.uk/qa/externalexaminers/currentexternalexaminers/

17. The principles of programme design

The programme described in this document has been drawn up with reference to, and in accordance with the guidance set out in, the following documents:

a. UK Quality Code for Higher Education, Quality Assurance Agency for Higher Education: http://www.qaa.ac.uk/quality-code
b. Keele University Regulations and Guidance for Students and Staff: http://www.keele.ac.uk/regulations

Version History

This document

Date Approved: 11 June 2026

Previous documents

Version No	Year	Owner	Date Approved	Summary of and rationale for changes