Pathway Type	Pre-Masters in Computing Engineering and Built Environment
Pathway Areas	Computing, Technology, Engineering and Built Environment
Pathways/s	Computing, Technology, Engineering and Built environment Two Semester & One Semester
Course Code/s	PGCB, PGCE, PGCI
Pathway Provision	College: NQF Level/s: 6
Title	Pre-Master's Programme in Computing, Engineering and Built Environment
NQF (FHEQ)	Level 6
Credit Points	One (1) Semester =80 Two (2) Semester =120
Duration of Study	One (1) Semester Two (2) semesters
Weeks of Study	One (1) Semester =Thirteen (13) weeks Two (2) Semester =Twenty-Six (26) weeks
Mode of Study	Full-time
Mode of Delivery	Blended
Notional Hours	One (1) Semester =800 Two (2) Semester = 1200
Contact Hours	One (1) Semester = 208 Two (2) Semester = 338
Self-directed Study Hours	One (1) Semester = 580 Two (2) Semester =862
Delivery Model	Standard Delivery Module (IDM)
Teaching Institution	Birmingham City University International College
Awarding Institution	Birmingham City University
School	Computing Engineering Built Environment (CEBE)
Teaching Location (Campus)	City Centre Campus
1-semester intakes	September and May
2-semester intakes	September, January and May
Subject Benchmarks Statements	**QAA Quality Codes** - https://www.qaa.ac.uk/the-quality-code/subject-benchmark-statements

Articulation Programmes Awards by Pathway	Degree awards	NQF Award Level
Built Environment	MSc Construction Project Management	**7**
	MSc Real Estate Management	**7**
	MSc Project Management	**7**
	MSc. Building Information Modelling and Digital Construction	**7**
	MSc. Planning Built Environments	**7**
	MSc. Quantity Surveying	**7**
Computing	MSc Big Data Analytics	**7**
	MSc Digital Transformation	**7**
	MSc Cyber Security	**7**
	MSc Advanced Computer Networks	**7**
	MSc Advanced Computer Science	**7**
	MSc. Artificial Intelligence	**7**
	MSc. Computer Science	**7**
	MSc. Forensic Psychology	**7**
	MSc. User Experience Design	**7**
Engineering	MSc. Automotive Engineering	**7**
	MSc Mechanical Engineering	**7**

EDUCATIONAL AIMS

1. The Pre-Master's Programme is designed to prepare ~~I~~nternational students for postgraduate study and aims to enhance their academic, research and language skills.
2. The aims of this programme include:
3. Bridge the gap between students' previous study and postgraduate study by enhancing critical thinking and analytical skills
4. Equip students with the requisite skills to undertake postgraduate research work especially on referencing skills and independent learning
5. Improve students' language proficiency and confidence to participate in various academic endeavours
6. Empower problem solving, teambuilding and leadership skills to prepare students for future careers
7. Enhance digital literacy
8. Familiarise and support students to be resilient and adapt to the community

PROGRAMME LEARNING OUTCOMES

Upon successful completion of the programme, students will be able to:

A: Knowledge and Understanding

A1. Demonstrate an understanding of fundamental principles in computing and engineering including mathematics

A2. Evaluate the impact of emerging technologies such as artificial intelligence on different aspect of human society

A3. Demonstrate an understanding of the ethical and sustainability issues in computing and engineering

A4. Develop an awareness of standards and best practices in software development, design and project management

B: Cognitive and Intellectual Skills

B1. Enhanced computational skills to undertake technical tasks and proffer solution to real world scenarios

B2. Critically analyse data for research and evaluating case study purposes

B3. Apply theoretical knowledge with practical applications to project based learning and tasks.
B4. Synthesise information from various sources to present a well-reasoned argument

C: Transferable Skills

C1. Collaboratively work in a professional academic environment in a way that demonstrates leadership, and interpersonal skills
C3. Work independently to manage workload, learning and time management to meet deadlines
C4. Ability to use a range of media to produce academic outputs and effectively engage in the academic community.

Learning, Teaching and Assessment Strategy

The programme is designed to equip students with knowledge, skills and competences required to succeed at postgraduate study. The College will deliver the programme through interactive and in student cantered environment using a blended approach. The blended approach will use a combination of traditional classroom and virtual sessions as well as online materials on the VLE. The student centred approach will encourage independent learning, active engagement with digital tools and platforms thereby allowing students the flexibility that supports individual pace. Various teaching methods such as lectures, seminars, tutorials and workshops will be used to deliver the content. The lecture sessions will introduce key concepts in the programme and seminar sessions will allow for further exploration and application of knowledge. Students will also enjoy one-one support sessions especially with their research projects; experiential learning will include field trips and guest lectures.

Programme assessment strategy is designed to check for learning, facilitate reflections and assess the achievement of the learning outcomes. Formative assessments will involve quizzes, discussion forums, reflective journals peer and tutor feedbacks. This is aimed at supporting students and help the tutors to identify the learning needs in a teaching group. Summative assessments evaluate the achievement of the programme outcomes and adopts a range of assessment types such as written reports, presentations, projects, examinations, group projects and research tasks.

The strategy also involves clear guidance on assessment methods and processes through a deliberate promotion of assessment literacy. Assessment regulations are assessable and summative tasks are supported with clear information on the tasks and the criteria. Summative assessments are moderated by internal and externally for quality assurance. A subject specialist within the College moderates a ten percent sample of each assessment. Link tutors from Birmingham City University and appointed external examiners are invited to review these samples. All summative works follow the governance processes before final outcomes are published to the students.

Student Engagement strategy

Theme	Engagement strategy
Academic Engagement	Encourage peer learning, guest lectures and exposure to industry practice; tutorial support
Pastoral Support	Detailed orientation to event that will cover wellbeing and counselling support
Career and Employability	Insights on career paths, engagement with Graduate+ and encourage students to volunteer and promote student mentorship programme
Digital	Encourage entrepreneurial skills and innovation; use the VLE to share updates on events and facilitate community of practice
Smooth transition and social integration	Pair IFY students with current university students; promote involvement in university societies; encourage events that promote cultural diversity
Continuous Improvement	Incorporate student voice through regular feedback and active participation in governance processes.

Programme Structure

Stage(s) of Study

Course Structure

One Semester Rotation

1 Semester -PMP - EBE			
Semester 1	Interactive Learning Skills and Communication for Postgraduate Study (20 Credits)	Research Methods (40 Credits)	Management (20 Credits)

1 Semester -PMP - Computing & Technology			
Semester 1	Interactive Learning Skills and Communication for Postgraduate Study (20 Credits)	Research Methods (40 Credits)	Introduction to Machine Learning with A1 (20 Credits)

Two Semester Rotation

2 Semester PMP – Computing & Technology			
Semester 2	Critical Thinking for Postgraduate Study (20 Credits)	Research Methods II	Introduction to Machine Learning with A1 (20 Credits)
Semester 1	Interactive Learning Skills and Communication for Postgraduate Study (20 Credits)	Research Methods I (40 Credits)	ICT For Post Graduate Studies 20 Credits

2 Semester PMP – EBE			
Semester 2	Critical Thinking for Postgraduate Study (20 Credits)	Research Methods II	Management 20 Credits
Semester 1	Interactive Learning Skills and Communication for Postgraduate Study (20 Credits)	Research Methods I (40 Credits)	ICT For Post Graduate Studies 20 Credits

Curriculum

One Semester Rotation

Pre-Master's in Engineering & Built Environment						
Core Modules						
Contact Hrs/Week	***College Module Code***	***Module Name***	***Credit Points***	***Pass Mark %***	***Exam %***	***Coursework %***
Semester 1						
4	PG1000	Interactive Learning Skills and Communication for PG Study	20	60	30	70
8	PG1001	Research Methods for PG Study	40	50	-	100
4	PGB101	Management	20	50	60	40
Pre-Masters Stage 1: Engineering & Built Environment			**80 Credit Points**			

Pre-Master's in Computing & Technology						
Core Modules						
Contact Hrs/Week	***College Module Code***	***Module Name***	***Credit Points***	***Pass Mark %***	***Exam %***	***Coursework %***
Semester 1						
4	PG1000	Interactive Learning Skills and Communication for PG Study	20	60	30	70
8	PG1001	Research Methods for PG Study	40	50	-	100
4	PG1008	Introduction to Machine Learning with A1	20	50	-	100
Pre-Masters Stage 1: Computing & Technology			**80 Credit Points**			

Two Semester Rotation

Pre-Master's in Computing & Technology						
Core Modules						
Contact Hrs/Week	***College Module Code***	***Module Name***	***Credit Points***	***Pass Mark %***	***Exam %***	***Coursework %***
Semester 1						
4	PG1000	Interactive Learning Skills and Communication for PG Study	20	60	30	70
4	PG1001	Research Methods for PG Study I	40	50	-	100
4	PG1ICT	ICT Skills for Postgraduate Study	20	50	40	60
Semester 2						
4	PG1002	Critical Thinking for Postgraduate Study	20	50	100	-
4	PG1001	Research Methods for PG Study II	-	50	-	100
4	PG1008	Introduction to Machine Learning with A1	20	50	-	100
Pre-Masters Stage 1: Computing & Technology			**120 Credit Points**			

Pre-Master's in Engineering & Built Environment						
Core Modules						
Contact Hrs/Week	*College Module Code*	*Module Name*	*Credit Points*	*Pass Mark %*	*Exam %*	*Coursework %*
Semester 1						
4	PG1000	Interactive Learning Skills and Communication for PG Study	20	60	30	70
4	PG1001	Research Methods for PG Study I	40	50	-	100
4	PG1ICT	ICT Skills for Postgraduate Study	20	50	40	60
Semester 2						
4	PG1002	Critical Thinking for Postgraduate Study	20	50	100	-
4	PG1001	Research Methods for PG Study II	40	50	-	100
4	PGB101	Management	20	50	-	100
Pre-Masters Stage 1: Engineering & Built Environment			**120 Credit Points**			

Progression and Award Requirements

Each module offered on the programme has a minimum overall pass mark. Please refer to Module Guide (MD). The College's Policy and Regulation (CPR9) explains all our assessment regulations for further details on the assessment regulations and failing to progress. - https://bcuic.bcu.ac.uk/about/policies/

Final and intermediate awards

Students that successfully complete the programme with the minimum 120 credits in a two semester will be eligible to progress to their chosen BCU degree programme as per offer letter and CAS and receive a transcript.

Categories of Performance

A (High Distinction, 80 - 100%) – Distinctive level of knowledge, skill and understanding which demonstrates an authoritative grasp of the concepts and principles and ability to communicate them in relation to the assessment event without plagiarism or collusion. Indications of originality in application of ideas, graphical representations, personal insights reflecting depth and confidence of understanding of issues raised in the assessment event.

B (Distinction, 70 - 79%) – Level of competence demonstrating a coherent grasp of knowledge, skill and understanding of the assessment and ability to communicate them effectively. Displays originality in interpreting concepts and principles. The work uses graphs and tables to illustrate answers where relevant. Ideas and conclusions are expressed clearly. Many aspects of the candidate's application and result can be commended.

C (Merit, 60 - 69%) – Level of competence shows an acceptable knowledge, skill and understanding sufficient to indicate that the candidate is able to make further progress. The outcome shows satisfactorily understanding and performance of the requirements of the assessment tasks. Demonstrates clear expression of ideas, draws recognisable and relevant conclusions.

D (Pass, 50 - 59%) – Evidence of basic competence to meet requirements of the assessment task and event. Evidence of basic acquaintance with relevant source material. Limited attempt to organise and communicate the response. Some attempt to draw relevant conclusions.

F (Fail 40- 49%) – The candidate's application and result shows that the level of competence being sought has not yet been achieved. The assessed work shows a less than acceptable grasp of knowledge, skill and understanding of the requirements and communication of the assessment event and associated tasks.

Progression Criteria: minimum pass mark of 50% achieved for all modules listed.
NB: See individual Module Guides for details marks classification

BIRMINGHAM CITY University International College

PROGRAMME SPECIFICATION

Appendices

Appendix 1 - Assessment Map

Module Title	Individual Essay	Examination	Presentation	Research
Interactive Learning Skills and Communication for Postgraduate Study	60%	40%		
Critical Thinking for Postgraduate Study		100%		
Research Methods for Postgraduate Study				100%
Introduction to Machine Learning with A1				100%
ICT for PG Study		40%		60%
Management				100%

Appendix 2 - Constructive Alignment

Learning Outcomes	Teaching and Learning Methods	Assessment Methods and Strategies
A1. Demonstrate an understanding of fundamental principles in computing and engineering including mathematics A2. Evaluate the impact of emerging technologies such as artificial intelligence on different aspect of human society A3. Demonstrate an understanding of the ethical and sustainability issues in computing and engineering A4. Develop an awareness of standards and best practices in software development, design and project management	Acquisition of Intended LOs via a combination of small group lectures (listening, writing and reading); small group-based tutorial labs/coursework (oral, reading, listening and written presentation); and individual coursework (oral, and written presentation) and summative examination (reading and writing). Additional support is provided through the provision of small peer-led tutorial group work and of individual tutorial support; College module-specific subject specialists delivering modules; guest speakers (industry/topic specific); monitoring and appraisal by College academic management. The opportunity to interface regularly with noted platforms in College, Birmingham City University library and independent environments to develop an understanding of the implications of the use of different e-learning for research. Students are encouraged throughout the stage of study to undertake independent study both to supplement taught/learnt and to broaden their individual knowledge and understanding of the subject.	A combination of summative (closed-book) examinations and summative coursework along with written assignments, portfolios and in-course assessments/tests, computer-based coursework and tests, project reports and presentations All students are required to maintain an 85% attendance record. Formative assessment is a constant feature of the programme and is deployed in the form of peer discussions, debates and the creation of a classroom environment which challenges conventional wisdom and encourages critical engagement.