**Programme Specification and Curriculum Map for Foundation Year**

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| **1. Programme title** | One of the following dependant on your enrolled programme:   * Computer Networks with Foundation Year (G460) * Computer Networks (mobile computing) with Foundation Year (G459) * Computer Networks (network programming) with Foundation Year (G429) * Network Management and Security with Foundation Year (G427) * Internet Application Development with Foundation Year (G452) * Information Technology with Foundation Year (G592) * Computer Science with Foundation Year (G459) * Computing, Graphics and Games with Foundation Year (G459) * Multimedia Computing with Foundation Year (G45X) * Interactive Systems Design with Foundation Year * Business Information Management with Foundation Year (G564) * Business Information Systems and Management with Foundation Year (GN5X) * Business Information Systems with Foundation Year (G564) * Forensic Computing with Foundation Year (G491) * Business Information Technology with Foundation Year (G592) * Information Technology and Business Information Systems with Foundation Year (GGX6) * Information Technology and Networking with Foundation Year (GG52) |
| **2. Awarding institution** | Middlesex University |
| **3. Teaching institution** | Middlesex University |
| **4. Programme accredited by** |  |
| **5. Final qualification** | BSc Honours Degree based on programme chosen at degree entry stage. Please note: students who successfully pass the foundation year, but choose not to progress to level 1 of a Middlesex University degree programme and leave the University at that point are eligible for the exit award of a Foundation Certificate in Computing. |
| **6. Academic year** | 2013/2014 |
| **7. Language of study** | English |
| **8. Mode of study** | Full Time or Part Time |

**9. Criteria for admission to the programme**

Entry requirements are in accordance with the university regulations. We accept students from a range of backgrounds. Most students educated in the UK will have studied “A “ Levels, or AVCE s to enter the foundation year programme applicants would be expected to have achieved at least one “A“ Level pass or GNVQ equivalent.

In addition all applicants should possess at least grade C in GCSE mathematics and English language, or equivalent. Mature applicants with relevant experience and equivalent qualifications are also welcome to apply.

International students who have not been taught in the English medium must show evidence of proven ability in English such as TOEFL grade 550 or IELTS grade 6.0.

The university provides pre-sessional English language courses throughout the year for candidates who do not meet the English requirements. For further information, visit the learning resources

web site at: [www.mdx.ac.uk/language](http://www.mdx.ac.uk/language)

University policies supporting students with disabilities apply, as described in the university regulations, 'information for students with disabilities'.

**10. Aims of the programme**

The Foundation Year aims to bring the students formal mathematical and analytical competencies to a level at which they can cope with the mathematical and computer science content of Level 1 of their chosen Undergraduate Degree programme. The Foundation Year will widen the students’ awareness of the range of disciplines in the field of computing science to facilitate their choice of degree and career paths. Students will develop their abilities to become autonomous learners and so be equipped for study at university. The Foundation Year fosters a problem solving approach to learning through the teaching philosophy.

**11. Programme outcomes**

**A. Computing-related cognitive abilities**

On completion of this programme, the successful student will be able to:

1. Comprehend the mathematical content of Level 1 of their chosen degree programme.
2. Explain the principles of multimedia techniques
3. Explain the principles of formal computer programming
4. Explain elements of web design and computer accessibility
5. Explain elements of computer networks and data communications
6. Explain elements of the use of Information Technology in business
7. Explain the elements of database techniques
8. Have an understanding of PC

hardware components and functions

***Teaching/learning methods***

Students learn cognitive materials through a combination of lectures, seminars, practical laboratories, and both individual and team work. The understanding of analysis, and the problem solving approach are further developed through discussions of case studies and exercises in the practical laboratories.

**Assessment Methods**

Students’ cognitive abilities are assessed by: tests and a variety of coursework elements both individual and group based.

**B. Computing-related practical abilities**

On completion of this programme the successful student will be able to:

1. Apply mathematics to the solution of problems

2. Build basic web-sites

3. Evaluate and critique website design for function and usability**;**

4. Write and document elementary programs

5. Set-up basic inter computer networks

6. Build basic database systems

***Teaching/learning methods***

Students learn practical skills through seminar activities and practical laboratory sessions.

**Assessment Method**

Students’ practical skills are assessed by: a variety of coursework elements ranging from sets of problem exercises to seminar presentations and laboratory exercises and reports and these activities are both individual and group based

**C. Additional transferable skills**

On completion of the programme the successful student will be able to:

1. Use libraries and other resources to search and retrieve data

2. Critically review reports and literature.

3. Formulate and present ideas and arguments in written and oral

modes

4. Present logical structured arguments

5. Deploy study skills as autonomous learners

6. Apply problem solving strategies

7. Work effectively both individually and as a member of a team; understand the importance of group team activities in the workplace environment.

***Teaching/learning methods***

Students skills are built up by a problem solving approach to a series case studies of computing based themes and the presentation of results.

***Assessment Method***

These skills are assessed in the students individual and group activities primarily in their reports and presentations on case studies. In both group and individual activities

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| **12. Programme structure (levels, modules, credits and progression requirements)** |
| **12. 1 Overall structure of the programme** |
| There are four 30 credit modules studied over a 24 week academic year. The course may be studied in two modes:  Study over one academic year full-time; studying all four modules in that academic year.  Study in part-time mode, over two academic years; studying two modules per academic year, of which CMT0010 must be studied in Year 1 of any part time study mode. |

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| **12.2 Levels and modules** | |
| Level 1 | |
| COMPULSORY1 | PROGRESSION REQUIREMENTS |
| Students must take all of the following:  CMT0010  Study skills and Mathematics.  CMT0014  Computer and Multimedia Technology  CCM0020  Introduction to Computer Networks and Hardware  BIS0010  Introduction to Computers in Business | Compulsory modules are those that must be taken, that is, the qualification cannot be awarded unless all modules have been successfully completed. Each of these modules makes a unique contribution  to the learning  objectives of the  programme. |

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| **12.3 Non-compensatable modules** | |
| **Module Code** | **Module Title** |
| CMT0010 | Study skills and Mathematics |
| CMT0014 | Computer and Multimedia Technology |
| CCM0020 | Introduction to Computer Networks and Hardware |
| BIS0010 | Introduction to Computers in Business |

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| **13. A programme diagram for the Foundation Year** |
| **Level 0**    **CMT0010**  Study Skills  And Mathematics  **CMT0014**  Computer and Multimedia Technology  **CCM0020**  Introduction  to Computing  Networks  And  Hardware  **BIS001**  Introduction  to Computers  in Business      **Compulsory**  **KEY:**  **Designated** |
| **Level 1, 2 & 3**  Modules of the appropriate  Undergraduate Degree programme |
| Students taking the programme in part-time mode study at a reduced rate, typically two modules at the appropriate level per academic years and should complete a given academic level before proceeding to the next. |

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| **14. Information about assessment regulations** |
|  Information on how the University formal assessment regulations work, including details of how award classifications are determined, can be found in the University Regulations at [www.mdx.ac.uk/regulations/.](http://www.mdx.ac.uk/regulations/)   Practical aspects of the programme are often assessed via coursework that may be carried out using specialist software and may include lab tests.   Theoretical material is assessed by coursework and examinations.   Grades are awarded on the standard University scale of 1–20, with Grade 1 being the highest. To pass a module all components, both coursework and examination, must be passed individually. Failure in any one of the components will result in the failure of the module.  For additional information on assessment and how learning outcomes are assessed please refer to the individual module narratives for this programme. |

**15. Placement opportunities, requirements and support**

All Undergraduate students have the opportunity to go on Industrial Placement. Industrial Placements are encouraged as this valuable experience enhances a student’s future career prospects. Additionally students normally achieve better results in their final year. In brief:

 The placement provides a years experience as an appropriately paid graduate trainee.

 Industrial placement is conditional on the successful completion of all modules at Level 1 and Level 2, therefore students need 240 credits before they are able to embark on an industrial placement.

 Obtaining a placement is co-ordinated through the Campus Placement Office.

 For Undergraduate programmes, students wishing to undertake a placement position must register for CMT3985.

 Each placement will be assigned to an industrial tutor who will visit the student on placement.

 On graduation the degree will be qualified with the term “…with approved industrial experience”.

The placement option is not available to direct-entry students in their final year.

**16. Future careers**

All programmes in the School of Engineering and Information Sciences – their curricula and learning outcomes – have been designed with an emphasis on currency and the relevance to future employment.

 The majority of graduates are employed in IT posts relevant to the subject.

 Over 20% of students pursue further postgraduate study or research.

The employer links with the School are encouraged in a number of ways e.g. by inviting practitioners from industry as guest speakers in lectures; through links with companies where students are employed as part of their Industrial placement and through alumni both in the UK and overseas

Campus Careers Offices can be found on each campus for advice, support and guidance – or go to [www.mdx.ac.uk/careers](http://www.mdx.ac.uk/careers)

**17. Particular Support for learning**

The School’s Teaching and Learning Strategy is compliant with those of the University, in seeking to develop learner autonomy and resource-based learning. In support of the students learning experience:

 All new students go through an induction programme and some have early diagnostic numeric and literacy testing before starting their programme.

 Learning Resources (LR) provide workshops for those students needing additional support in these areas.

 Students are allocated a personal email account, secure networked computer storage and dial-up facilities

 New students are provided with a CD containing the schools Subject Handbook at enrolment (electronic copies for all students can also be found at <http://www.mdx.ac.uk/24->

7/cs. If you require a hard copy of this Subject Handbook please request them from

Graham Davies [(G.X.Davies@mdx.ac.uk](mailto:(G.X.Davies@mdx.ac.uk) or 020 8411 6079)

 New and existing students are given module handbooks for each module they study. Soft copies of all module handbooks can be found on Oasis. Web-based learning materials are provided to further support learning

 Extensive library facilities are available on all campuses. WebCT pages are available as learning resources through the Oasis system

 Students can access advice and support on a wide range of issues from the Student Services Counter and the Student Information Desk. Student Advisers aligned to subject areas offer confidential one to one advice and guidance on programme planning and regulations

 Placements are supported by Campus Placement Offices and School academics; please refer to section 15 of this programme specification

 High quality specialist laboratories equipped with industry standard software and hardware where appropriate, for formal teaching as well as self-study

 Access to campus based teaching and learning support drop in sessions, arranged by the school to provide assistance and guidance

 School Academic Advisers for each subject offering personal academic advice and help if needed. Rotas for the operation of Academic Advice Rooms at each campus can be found at <http://www.mdx.ac.uk/24-7/cs/index.htm#tutor>

 Tutorial sessions for each module organised for groups of up to 20 students are provided for additional teaching support

 Formative feedback is given on completion of student coursework

 Past exam papers with solutions and marking schemes for all modules are available for students in module handbooks and at <http://www.mdx.ac.uk/24-7/cs/index.htm>

 Research activities of academic staff feed into the teaching programme, which can provide individual students with ad-hoc opportunities to work with academics on some aspect of research

Middlesex University encourages and supports students with disabilities. Some practical aspects of Computing Science programmes may present challenges to students with particular disabilities. You are encouraged to visit our campuses at any time to evaluate facilities and talk in confidence about your needs. If we know your individual needs we’ll be able to provide for them more easily. For further information contact the Disability Support Service (email: disability@mdx.ac.uk) or contact Natalie Costa on 020 8411 2514.

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| **JACS code (or other relevant coding system** | Dependent on programme chosen at degree entry stage. (see page 17).  Computing |
| **Relevant QAA subject benchmark group(s)** |

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|  | **20. Reference points** |
| The following reference points were used in designing the programme:   QAA computing subject benchmark statement   QAA framework for higher education qualifications in England, Wales and Northern Ireland   QAA/QAAS guidelines for programme specifications   QAA code of practice for the assurance of academic quality and standards in he   University’s regulations   Module narratives   British computer society (BCS) guidelines for exemption and accreditation   Middlesex University and School of Engineering and Information Sciences teaching learning and assessment policies and strategies   University policy on equal opportunities. | |

**21. Other information**

Middlesex University has formal links with 250 institutions world-wide, including student exchange agreements with more than 100 institutions. Currently a number of students both from the UK/EU and overseas take part in such exchanges. For further details please visit <http://www.europe.mdx.ac.uk/>or contact Elli Georgiadou, the School of Engineering and Information Sciences coordinator of European Affairs & International Exchanges (email: e.georgiadou@mdx.ac.uk).

This is a new programme which will be submitted for partial BCS exemption from the Certificate, Diploma and Diploma Project

Please note programme specifications provide a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve if s/he takes full advantage of the learning opportunities that are provided. More detailed information about the programme can be found in the programme handbook and the University Regulations.

Curriculum map for Foundation Year

This section shows the highest level at which programme outcomes are to be achieved by all graduates, and maps programme learning outcomes against the modules in which they are assessed.

Programme learning outcomes

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| --- | --- | --- | --- |
| **Knowledge and understanding** | | **Practical skills** | |
| A1 | Mathematics to a level sufficient to comprehend the mathematical content of Level 1 of their chosen Undergraduate  Degree programmes | C1 | Efficiently use libraries and other resources to search and retrieve data |
| A2 | Principles of multimedia techniques | C2 | Critically review reports and literature |
| A3 | Principles of formal computer programming | C3 | Formulate and present ideas and arguments in written and oral  modes |
| A4 | Elements of web design and computer accessibility | C4 | Present logical structured arguments |
| A5 | Elements of computer networks and data communications | C5 | Deploy study skills as autonomous learners |
| A6 | Elements of the use of information technology in business | C6 | Apply problem solving strategies |
| A7 | Elements of data base techniques | C7 | Work effectively both individually and as a member of a team;  understand the importance of group; team activities in the workplace environment. |
| A8 | PC hardware components and functions |  |  |
| **Cognitive skills** | |  | |
| B1 | Apply mathematics to the solution of problems |  |  |
| B2 | Build basic web sites |  |  |
| B3 | Analyse web sites for efficiency and accessibility |  |  |
| B4 | Write and document elementary programs |  |  |
| B5 | Set-up basic inter computer networks |  |  |
| B6 | Build basic multimedia systems |  |  |
| B7 | Build basic database systems |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Programme outcomes | | | | | | | | | | | | | | | | | | | | | | | | | |
| A1 | A2 | A3 | A4 | A5 | A6 | A7 | B1 | B2 | B3 | B4 | B5 | B6 | C1 | C2 | C3 | C4 | C5 | C6 | D1 | D2 | D3 | D4 | D5 | D6 | D7 |
| Highest level achieved by all graduates | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Module Title | Module Code by Level | Programme outcomes | | | | | | | | | | | | | | | | | | | | | |
| A1 | A2 | A3 | A4 | A5 | A6 | A7 | A8 | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1 | C2 | C3 | C4 | C5 | C6 | C7 |
| Introduction to Business Computing | BIS0010 |  |  |  |  |  | X | X |  | X |  |  |  |  |  | X | X | X | X | X | X | X | X |
| Introduction to Computer Networks and Hardware | CCM0020 |  |  |  | X | X |  |  |  |  |  |  |  | X |  |  | X | X | X | X | X | X | X |
| Study Skills and Mathematics. | CMT0010 | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X |
| Computer and Multimedia  Technology | CMT0014 |  | X | X |  |  |  |  | X |  | X | X | X |  | X |  | X | X | X | X | X | X | X |