BSc (Hons) Business Computing & Data Analytics

Programme Specification

1. Programme title	BSc (Hons) Business Computing & Data Analytics BSc (Hons) Business Computing & Data Analytics with Foundation Year (not available in ACBT, DBI and MRU)
2. Awarding institution	Middlesex University
3a. Teaching institution	Middlesex University (HEN / DBI / MRU), Australian College of Business & Technology (ACBT), Sri Lanka – Colombo, Kandy and Galle
3b. Language of study	English
4a. Valid intake dates	September, January (ACBT only), April (MRU only)
4b. Mode of study	FT / PT / TKSW (TKSW HEN only)
4c. Delivery method	☒ On-campus/Blended ☐ Distance Education
5. Professional/Statutory/Regulatory body	
6. Apprenticeship Standard	
7. Final qualification(s) available	BSc (Hons) Business Computing & Data Analytics BSc (Hons) Business Computing & Data Analytics with Foundation Year (Not available for DBI, MRU and ACBT) BSc Business Computing & Data Analytics Diploma in HE Business Computing & Data Analytics Certificate in HE Business Computing & Data Analytics
8. Academic year effective from	2024/25

9. Criteria for admission to the programme

Students should have the equivalent of 96 UCAS Tariff points to gain entry to level 4. All candidates should possess at least grade 4 in GCSE Maths and English language, or equivalent. Please refer to the programme specification for the Foundation Year for criteria for admission to the BSc Business Computing and Data Analytics with Foundation Year programme

Middlesex University has a flexible and personalised approach to admissions and we accept applications from students with a wide range of qualifications and a combination of qualifications. Please check our general entry requirements page (available at https://www.mdx.ac.uk/study/undergraduate/entry-requirements-for-undergraduates) to see how these points can be achieved from our acceptable level 3 qualifications and the combinations, which are welcomed by Middlesex University, including GCSE requirements.

If you have achieved a qualification such as a foundation degree or HND, or have gained credit at another university, you may be able to enter the programme in year two (level 5) or three (level 6). For further information please visit our Transfer students page (available at https://www.mdx.ac.uk/study/undergraduate/how-to-apply-for-undergraduate-courses). For direct entry to levels 5 and 6 students are required to pass the equivalent of 120 credits specified in the programme at levels 4 and 5, respectively. Applicants will be expected to demonstrate the programme learning outcomes have been met at these levels.

Applications from mature candidates without formal qualifications are welcomed, provided they can demonstrate appropriate levels of relevant ability and experience. Recognition of Prior Learning (RPL) is permitted. Mature applicants with relevant work experience are welcome to apply for direct entry at levels 3, 4 and 5. These applicants are required to submit a portfolio of work experience to show evidence of achieving relevant learning outcomes, and these will vary depending on both the programme and level the student is applying for. Evidence should comprise the applicant's own work and may include documents they have written, procedures they have designed, proposals they have drafted, electronic resources, photographs, video etc. or information gathered from others about you such as statements from employers, certificates of in-house courses completed.

Individual applicants may wish to claim certain number of credits against their learning that may have taken place outside education or through training that is not assessed as part of an education system. Typically, these applicants would possess knowledge and skills that may have been acquired at the workplace through practice but may not be supported by formal qualifications. Applicants may also hold academic, vocational or professional qualifications that may be aligned to certain modules of the programme at an appropriate level. Typically, such qualifications are supported by evidence in the form of certification. Each of these cases is considered individually with the scope to assess whether applicants should be allowed in the programme with specific credit that would count towards the end qualification, to an appropriate point of the programme. As each case is treated individually, applicants should seek support from the programme team towards their application with Recognition of Prior Experiential Learning or Recognition of Prior Certificated Learning.

International students who have not been taught in the English medium must show evidence of proven ability in English such as IELTS grade 6.0. For students studying the programme at ACBT only, a Sri Lanka GCE 'O' level English, grade C or above or a Sri Lanka 'A' level English, grade A-C will be accepted as meeting the English language entry requirements.

The University provides pre-sessional English language courses throughout the year for candidates who do not meet the English requirements. University policies supporting students with disabilities apply, as described in the University Regulations. For further information, visit the learning resources web site at: http://unihub.mdx.ac.uk/support.

University policies supporting students with disabilities apply, as described in the University Regulations, 'Information for students with disabilities'.

Further guidance may be obtained from the Programme Leader or Director of Programmes (DoP).

10. Aims of the programme

The programme aims to provide students with an understanding of the advantages of aligning information systems with different organisational and business goals, and with various strategic and operational activities. Students will learn how to use a range of technical skills and methods, both for managing data, and for developing information systems, in response to different business problems and to different needs. The programme aims to instil an ethos of independent learning and continuous professional development amongst its graduates. Graduates of the programme will be equipped with the professional and employability skills that will enable them to pursue a successful future career in this field.

The programme's aims are underpinned by the following key principles of Information Systems; the importance of information in all modern organisations and the strategic value of information systems within a global business context; the pivotal role of information and communication technologies in information systems, and the key role of people in designing, managing and using these systems. At the core of the programme, Data Analytics is the process of collecting, storing, organising and analysing large sets of data to discover patterns and other useful information.

11. Programme outcomes*

A. Knowledge and understanding

On completion of this programme the successful student will have knowledge and understanding of:

1. How information systems functionality is aligned to business stakeholders' requirements
2. Information system features against certain success criteria aligned to different business contexts
3. The role of digital technologies in the implementation and management of information systems for businesses
4. The impact of social, professional, legal and ethical issues associated with the use of business computing applications
5. Different structures, features and functions of information systems deployed in different business contexts
6. Decision-making support provided by data analytics applications and business intelligence systems
7. The use of information system methods in business computing

8. Applying problem-solving methods in theoretical, practical and research issues in business
9. Selecting appropriate data collection methods for different business computing projects
10. Performing a synthesis of information sets necessary for data analytics and business intelligence from various data sources

Teaching/learning methods

Students gain knowledge and understanding through

- Concept Discussion Workshop (CDW) illustrating theories, concepts and principles through case studies, examples and scenarios
- Brief video recordings covering key concepts
- Supervised practical, laboratory work
- Supervised seminars and tutorials
- Guided individual and group research
- Coursework assignments
- Open-ended practical assignments
- Project work
- Online discussion boards
- Directed reading
- Supervised laboratories and practical exercises
- Critical thinking and problem-solving activities
- Directed reading and seminar discussions
- Experimentation
- Modelling
- Individual and group coursework assignments
- Student presentations
- Essays

Assessment methods

Students' knowledge and understanding is assessed by

- Informal individual and group work during supervised seminars, tutorials and labs
- Essays
- Reports
- Presentations
- Online quizzes
- Documentation
- Individual and group coursework assignments
- Lab exercises
- Lab tests
- Modelling of systems
- Assessing case studies
- Appropriate use of Case tools for analysis and design
- Peer assessment and review

B. Skills

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

1. Apply data analytics and knowledge extraction techniques on a wide range of business domains
2. Use a variety of data representation modelling techniques and information retrieval methods
3. Produce information system designs for different business domains using appropriate tools and methods
4. Perform a feasibility study and risk assessment of information system implementation with emphasis on organisational requirements and project management techniques
5. Conduct a requirements analysis for information systems designed to support an organisation's business operations
6. Select appropriate business modelling methods and supporting monitoring tools
7. Demonstrate command of those employability skills required for design, development and deployment of information systems
8. Engage in communication with different business computing stakeholders for a range of data analytics scenarios
9. Engage in group formation, team building, problem solving and decision-making when engaging in multi-disciplinary business computing projects
10. Adapt to the volatile professional and personal development requirements of the business computing sector with emphasis on independent learning

Graduate competence mapping

The MDX graduate competencies are mapped to the programme's (Programme Outcome) skills as follows:

1. Leadership and Influence
   - B3, B4, B5, B6, B7, B8, B9, B10
2. Entrepreneurship
   - B4, B5, B6, B7, B8, B9, B10
3. Communication, Empathy and Inclusion
   - B4, B5, B7, B8, B9, B10
4. Curiosity and Learning
   - B1, B3, B4, B6, B7, B8, B10
5. Collaborative innovation
   - B2, B3, B4, B5, B6, B7, B8, B9, B10
6. Resilience and adaptability
   - B1, B2, B3, B5, B6, B7, B10
7. Technological agility
   - B1, B2, B3, B4, B5, B6, B7
8. Problem solving and delivery
   - B1, B2, B3, B4, B5, B6, B7, B8, B9, B10

Teaching/learning methods

Students learn cognitive skills through

- Supervised practical work
- Critical thinking and problem-solving activities
- Practical application of concepts, principles and models to specific case studies and scenarios

- Directed reading and seminar discussions
- Supervised Seminars
- Experimentation
- Modelling
- Use of Case tools for analysis and design
- Individual and group coursework assignments
- Students presentations
- Essays
- Supervised tutorials and seminars
- Directed and independent research
- Coursework assignments
- Concept Discussion Workshop (CDW)
- Individual and group project work
- Formative and summative assessment, and feedback on assignments
- Online discussion boards
- Directed reading
- Workshop and seminars conducted by Library and Learning Support staff

Assessment methods

Students' skills are assessed by

- Coursework and project work
- Practical laboratory tests
- Online quizzes
- Modelling of systems
- Assessing Case Studies
- Group Assignments
- Documentation
- Essays
- Use of Case tools for analysis and design
- Peer assessment and review
- Guided research
- Group assignments
- Individual and group presentations
- Lab and Seminar Activities
- Reports
- Project milestones

12. Programme structure (levels, modules, credits and progression requirements)

12.1 Structure of the programme

During the curriculum design of the programme, the aim was to identify certain modules where specific programme learning outcomes are assessed. In addition, a number of programme pillars have been identified offering horizontal frameworks of standard practice, where students' learning becomes the result of synthesis from a range of activities taking place in different modules. The following areas are covered in most, if not all modules of the programme:

1. Ethical framework (covering ethical issues)
2. Professional good practice framework (covering professional issues)
3. Individual/Corporate Social Responsibility framework (covering social issues)
4. Employability initiatives (focusing on student prospects)
5. Entrepreneurship/Innovation initiatives (focusing on start-up/venture ideas)
6. Personal Development Plan (focusing on personal/professional development)
7. Business awareness (assessing impact of IS on organisations)
8. People awareness (assessing impact of IS on humans)
9. Technology awareness (assessing impact of IS on new technologies)
10. Learning Experience Reflection Exercise (offering continuous feed-forward for key areas including (i) teaching delivery, (ii) learning opportunities, (iii) assessment and feedback, (iv) academic support, (v) organisation and management, (vi) learning resources, (vii) learning community and (viii) student voice

Based on the above key areas, the students benefit from the following across most of the programme modules:

- Students may customise, and at times personalise learning experiences and assessment using case studies selected by the students in consultation with academics aligned with certain career requirements and professional areas of choice (co-leadership)
- Students are able to reflect on how the use of certain digital technologies equips them towards career threshold skillsets required in the sector (digital literacy)
- Students can also liaise with MDX Works (or relevant campus careers office) following the recommendation of the DoP, programme and module leaders to ensure skills gained in various modules are properly represented in student CVs and profiles such as LinkedIn (employability)
- Frequent discussions with members of the Industrial Advisory Board enable academics to review and adjust tools and techniques used, as well as teaching practice, so they are aligned to industry standards and employer expectations (employer engagement)
- The programme equips students with a wide range of transferable soft skills, which have been developed and applied on real case studies, equipping them for a smooth transition to the workplace (graduate competencies)
- Teaching examples are drawn from scenarios involving diverse user requirements, and a wide range of inclusive business scenarios, a practice that is also followed with various assessments such as reflective portfolios, reports and presentations where students are able to comprehend how their programme prioritises equity amongst all participating students (inclusive curriculum)
- The vast experience of certain module leaders in international projects, has ensured that the programme include practices that have become good practice models for several institutions across three continents, while certain methods and approaches have been borrowed and contextualised from international partners (internationalisation)
- Most modules enable the students to apply practical skills taught in Concept Discussion Workshops (CDW), on various tasks as part of their formative and summative assessment, while teaching is designed to meet the different learner needs (e.g., visual, versus aural and kinaesthetic) as well as enabling students to reflect on how their own role, work ethic and personality impact on the way they approach teamwork (practice-led learning)

- The programme is aligned to the following United Nations Sustainable Development Goals (SDGs):
    - SDG 4 – Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (sustainable development) (e.g., students learn how to appreciate the impact of digital technologies in offering equitable career opportunities and the benefit of Continuous Professional Development)
    - SDG 5 – Achieve gender equality and empower all women and girls (e.g., female students are supported through initiatives such as female entrepreneurship and support for women in IT)
    - SDG 8 – Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all (e.g., students are able to assess employment options and how to better align their skill development towards sustainable roles in industry)
    - SDG 9 – Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation (e.g., students are given the opportunity to test own ideas on technological and social entrepreneurship through application of innovative digital technologies)
    - SDG 12 – Ensure sustainable consumption and production patterns (e.g., students reflect on the application of cyclic economy in the use of ICT products and services)
    - SDG 13 – Take urgent action to combat climate change and its impacts (e.g., students learn how digital technologies can improve efficient use of resources and reduce waste)
- The programme modules include the latest developments in research from module leaders and academic staff who are active in publishing in international journals and present at highly esteemed conferences (research-informed teaching)

Programme Structure – September Start
Year One (Level 4)

- Semester 1 - CST1310 Foundations of Information Systems (30 credits) [Compulsory], CST1320 Intro to Business and Organisations (30 credits) [Compulsory]
- Semester 2 - CST1340 Information in Organisations (30 credits) [Compulsory], CST1330 IT Applications (30 credits) [Compulsory]

Year Two (Level 5)

- Semester 1 - CST2321 Stats & Mach. Learn. for Bus. Data Analytics (30 credits) [Compulsory], CST2330 Data Analysis for Enterprise Modelling (30 credits) [Compulsory]
- Semester 2 - CST2310 IS Analysis and Design (30 credits) [Compulsory], CST2340 Database Systems: Design & Implement (30 credits) [Compulsory]

Year Three (Level 6)

- CST3500 Industrial Placement Year (120 credits) [Optional]

Note: Placement year is only available to students on thick sandwich mode

Year Three (Level 6)

- Semester 1 - CST3310 Strategic Inf. Systems (Ent. Proj.) Managem. (30 credits) [Compulsory], CST3340 Business Intelligence (30 credits) [Compulsory]
- Semester 2 - CST3390 UG Individual Project. (30 credits) [Compulsory], CST3350 Tech. Innov. Man. & Entrepr. (TIME) (30 credits) [Optional], CST3380 Interaction Design & User Experience (30 credits) [Optional]

Note: Optional modules will only be offered if at least 15 students have registered

Students starting in January and April may experience a different order of the running of modules.

Programme Structure – Part Time

Year One (Level 4)

- Semester 1 - CST1310 Foundations of Information Systems (30 credits) [Compulsory]
- Semester 2 - CST1340 Information in Organisations (30 credits)

Year Two (Level 4)

- Semester 1 - CST1320 Intro to Business and Organisations (30 credits) [Compulsory]
- Semester 2 - CST1330 IT Applications (30 credits) [Compulsory]

Year 3 (Level 5)

- Semester 1 - CST2321 Stats & Mach. Learn. for Bus. Data Analytics (30 credits) [Compulsory]
- Semester 2 - CST2310 IS Analysis and Design (30 credits) [Compulsory]

Year 4 (Level 5)

- Semester 1 - CST2330 Data Analysis for Enterprise Modelling (30 credits) [Compulsory]
- Semester 2 - CST2340 Database Systems: Design & Implement (30 credits) [Compulsory]

Year 5 (Level 6)

- Semester 1 - CST3310 Strategic Inf. Systems (Ent. Proj.) Managem. (30 credits) [Compulsory]
- Semester 2 - CST3390 UG Individual Project. (30 credits) [Compulsory]

Note: Optional modules will only be offered if at least 15 students have registered

Year 6 (Level 6)

- Semester 1 - CST3340 Business Intelligence (30 credits) [Compulsory]
- Semester 2 - CST3350 Tech. Innov. Man. & Entrepr. (TIME) (30 credits) [Optional], CST3380 Interaction Design & User Experience (30 credits) [Optional]

Note: Optional modules will only be offered if at least 15 students have registered

12.2 Levels and modules

Please refer to the programme specification for the Foundation Year for the modules to be taken during the foundation year of the BSc Business Computing and Data Analytics with Foundation Year programme (not available for MRU)

Level 4

Compulsory

Students must take all of the following:

- CST1310 – Foundations of Information Systems
- CST1320 – Introduction to Business and Organisations
- CST1330 – Information Technology Applications
- CST1340 – Information in Organisations

Optional

N/A

Progression requirements

Students must pass at least 90 credits to progress to Level 5.

To achieve Honours, failed credit will need to be repeated.

Level 5

Compulsory

Students must take all of the following:

- CST2310 – IS Analysis and Design
- CST2321 – Statistics and Machine Learning for Business Data Analytics
- CST2330 – Data Analysis for Enterprise Modelling
- CST2340 – Database Systems: Design and Implementation

Optional

N/A

Progression requirements

Students must have passed at least 210 credits to progress to Level 6.

To achieve Honours, failed credit will need to be repeated.

Level 6

Compulsory

Students must take all of the following:

- CST3390 – UG Individual Project
- CST3310 – Strategic Information Systems (Enterprise Project) Management
- CST3340 – Business Intelligence

Optional*

Students must also choose from the following:

- CST3350 – Technology Innovation Management & Entrepreneurship (TIME)
- CST3380 – Interaction Design and User Experience

Progression requirements

N/A

*Optional modules will only be offered if at least 15 students have registered.

12.3 Non-compensatable modules	
Module level	**Module code**
6	CST3390

13. Information about assessment regulations

Information on the University's formal assessment regulations, including details of how award classifications are determined, can be found in the University Regulations available online at Policies | Middlesex University (mdx.ac.uk)

Additional information on assessment and how learning outcomes are assessed will be provided in the individual module narratives.

14. Placement opportunities, requirements and support (if applicable)

All Undergraduate students have the opportunity to undertake an Industrial Placement. Industrial Placements are highly encouraged by the Faculty and the University. Placements give students valuable experience, which enhances their future career prospects. Students who undertake a placement year normally achieve better results in their final year. Please note the following:

- The placement provides a year's experience as an appropriately paid graduate trainee.
- Industrial placement is conditional on the successful completion of all modules at Levels 4 and 5. Students need 240 credits before they are able to embark on an industrial placement.
- Obtaining a placement is co-ordinated through the Employability and Careers Centre, and by a dedicated team of placement officers for the Faculty of Science and Technology.
- For undergraduate programmes, students wishing to undertake a placement position must register for the placement module.
- Each placement will be assigned to an industrial tutor who will visit the student during their placement.
- On graduation the degree will be qualified with the term "having followed an approved sandwich programme".

Students who complete the placement on TKSW mode will receive an additional qualification referred to as Diploma of Industrial Studies.

Note: The placement option is not available to direct-entry students in their final year nor to students at DBI or ACBT.

15. Future careers / progression

All programmes in the Faculty of Science and Technology – their curricula and learning outcomes – have been designed with an emphasis on currency and relevance to future employment. Professional development and employability skills are embedded into teaching, learning and assessment at all levels of the programme.

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

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

Employer links with the Faculty are encouraged in the following ways:

- By inviting practitioners from industry as guest speakers.
- Through links with companies where students are employed as part of their Industrial placement.
- Through links with alumni, both in the UK and overseas.

Graduates are likely to follow career paths in roles such as business intelligence expert, data and information analyst, ICT project manager, business consultant and ICT consultant.

16. Particular support for learning

The Faculty's Teaching and Learning Strategy is aligned with that of the University as a whole in seeking to develop learner autonomy and resource-based learning. In particular, support of the students' learning experience, the following is provided:

- All new students go through an induction programme, and some have early diagnostic numeric and literacy testing before starting their programme.
- Workshops and one to one support is available for those students needing additional support in academic writing, presentation skills and numeracy. Such seminars, and workshops are embedded into specific modules across all levels of the programme.
- Students are allocated a personal email account, and secure networked computer storage for student's University-related files and documents.
- Soft copies of all module handbooks are provided on the university's Virtual Learning Environment (VLE). Extensive web-based learning materials are provided to support learning in all modules.
- Extensive library facilities are available on and off campus, with e-resources accessible through the VLE. Virtual learning is provided via the MyLearning pages. Seminars and workshops by Library and Learning Support staff are embedded into specific modules across all levels of the programme.
- Students can access advice and support on a wide range of issues from the online support services, and specific advice and support from the Faculty's Progression and Support Team (or equivalent campus support service).

- As part of our holistic support framework, our program provides academic advising designed to support students throughout their academic endeavours. In the later stages of their studies, for example, we offer targeted support for final year projects and research in a range of disciplines to ensure that students receive individualised support to succeed academically.
- High-quality specialist laboratories, equipped with industry standard software and hardware, are provided for formal teaching as well as student self-study.
- 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 aspects of their research.

Middlesex University encourages and supports students with disabilities. Some practical aspects of Faculty of Science and Technology programmes may present challenges to students with particular disabilities. Students are encouraged to visit our campuses at any time to evaluate facilities and talk in confidence about their needs. If we know the individual needs of students, we will be able to provide support for them more easily. For further information contact the Support Service.

17. HECos code(s)	100360, 100361, 100362, 100371

18. Relevant QAA subject benchmark(s)	Computing

19. Reference points

The following reference points were used in designing this programme:

- QAA Computing subject benchmark statements, Computing (March, 2022) (https://www.qaa.ac.uk/quality-code/subject-benchmark-statements/computing)
- QAA Quality Code for Higher Education (May, 2018) (https://www.qaa.ac.uk/quality-code)
- British Computer Society (BCS) guidelines on course accreditation (April, 2022) (https://www.bcs.org/media/1209/accreditation-guidelines.pdf)
- Certifications for IT Professionals (https://www.bcs.org/qualifications-and-certifications/certifications-for-professionals/)
- Skills Framework for the Information Age (SFIA) (https://sfia-online.org/en)
- Association for Computing Machinery (ACM) and Association for Information Systems (AIS) Curriculum Guidelines for Undergraduate Degree Programs in Information Systems (2010) (https://www.acm.org/binaries/content/assets/education/curricula-recommendations/is-2010-acm-final.pdf)
- Association for Computing Machinery (ACM) overview report on Computing Curricula, (December, 2020) (https://www.acm.org/education/curricula-recommendations)
- Association for Computing Machinery (ACM) and Association for Information Systems (AIS) Global Competency Model for Graduate Degree Programs in Information Systems (May, 2017) (https://www.acm.org/binaries/content/assets/education/msis2016.pdf)
- Descriptors defining levels in the European Qualifications Framework (EQF) that is now known as Europass(https://europa.eu/europass/en)

- European e-Competence Framework that is now known as IT Professionalism Europe (https://itprofessionalism.org/)
- Middlesex University Regulations (2022/23) (https://www.mdx.ac.uk/__data/assets/pdf_file/0020/665120/Final-Regulations-2022-23-V1.pdf)
- Middlesex University Learning and Quality Enhancement Handbook (section 3) (https://www.mdx.ac.uk/about-us/policies/academic-quality/handbook)
- Middlesex University Policies (https://www.mdx.ac.uk/about-us/policies)
- DigiCompEdu Framework (https://joint-research-centre.ec.europa.eu/digcompedu/digcompedu-framework_en)

20. Other information

N/A

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 rest of your programme handbook and the university regulations.

21. Curriculum map for BSc (Hons) Business Computing & Data Analytics

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

Knowledge and understanding	
A1	How information systems functionality is aligned to business stakeholders' requirements
A2	Information system features against certain success criteria aligned to different business contexts
A3	The role of digital technologies in the implementation and management of information systems for businesses
A4	The impact of social, professional, legal and ethical issues associated with the use of business computing applications
A5	Different structures, features and functions of information systems deployed in different business contexts
A6	Decision-making support provided by data analytics applications and business intelligence systems
A7	The use of information system methods in business computing
A8	Applying problem-solving methods in theoretical, practical and research issues in business
A9	Selecting appropriate data collection methods for different business computing projects
A10	Performing a synthesis of information sets necessary for data analytics and business intelligence from various data sources
Skills	
B1	Apply data analytics and knowledge extraction techniques on a wide range of business domains
B2	Use a variety of data representation modelling techniques and information retrieval methods
B3	Produce information system designs for different business domains using appropriate tools and methods
B4	Perform a feasibility study and risk assessment of information system implementation with emphasis on organisational requirements and project management techniques
B5	Conduct a requirements analysis for information systems designed to support an organisation's business operations
B6	Select appropriate business modelling methods and supporting monitoring tools
B7	Demonstrate command of those employability skills required for design, development and deployment of information systems
B8	Engage in communication with different business computing stakeholders for a range of data analytics scenarios
B9	Engage in group formation, team building, problem solving and decision-making when engaging in multi-disciplinary business computing projects
B10	Adapt to the volatile professional and personal development requirements of the business computing sector with emphasis on independent learning

Programme outcomes																			
A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
Highest level achieved by all graduates																			
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

Module Title	Module Code by Level	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
Foundations of Information Systems	CST1310	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Introduction to Business and Organisations	CST1320	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Information Technology Applications	CST1330	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Information in Organisations	CST1340				X	X	X		X	X	X	X	X					X			X
Information Systems Analysis and Design	CST2310			X				X	X		X	X	X	X	X			X		X	X
Statistics and Machine Learning for Business Data Analytics	CST2321	X			X	X		X	X	X	X				X	X		X	X	X	X
Data Analysis for Enterprise Modelling	CST2330		X	X			X		X			X	X	X		X	X	X	X		
Database Systems: Design and Implementation	CST2340			X				X	X		X	X	X	X	X			X		X	X
Supervised Industrial Placement	CST3500	X	X		X					X							X	X		X	X
UG Individual Project	CST3390	X	X	X	X	X	X			X	X	X	X			X	X	X	X	X	X
Strategic Information Systems (Enterprise Project) Management	CST3310	X	X					X	X		X			X	X		X			X	X
Business Intelligence	CST3340	X	X					X	X			X	X								X
Technology Innovation Management & Entrepreneurship (TIME)	CST3350	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Interaction Design and User Experience	CST3380	X			X		X		X			X		X					X		X