



Course Specification

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| Published Date: | 14-Feb-2018 |
| Produced By: | Debbie Collymore |
| Status: | Validated |

Core Information

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| Awarding Body / Institution: | University of Wolverhampton | | |
| School / Institute: | School of Mathematics and Computer Science | | |
| Course Code(s): | CS018K23UV | Sandwich | 4 Years |
| UCAS Code: | N106 | | |
| Course Title: | BSc (Hons) Business Intelligence with Sandwich Placement | | |
| Hierarchy of Awards: | Bachelor of Science with Honours Business Intelligence, having satisfactorily completed a sandwich placement Bachelor of Science Business Intelligence, having satisfactorily completed a sandwich placement Diploma of Higher Education Applied Computing Certificate of Higher Education Applied Computing University Statement of Credit University Statement of Credit | | |
| Language of Study: | English | | |
| Date of DAG approval: | 26/May/2017 | | |
| Last Review: | 2015/6 | | |
| Course Specification valid from: | 2015/6 | | |
| Course Specification valid to: | 2021/2 | | |

Academic Staff

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| Course Leader: | Dr Jun Li |
| Head of Department: | Dr Kevan Buckley |

Course Information

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| Location of Delivery: | University of Wolverhampton |
| Category of Partnership: | Not delivered in partnership |
| Teaching Institution: | University of Wolverhampton |
| Open / Closed Course: | This course is open to all suitably qualified candidates. |

Entry Requirements:

Entry requirements are subject to regular review. The entry requirements applicable to a particular academic year will be published on the University website (and externally as appropriate e.g. UCAS)

2017 Entry

- A Level minimum of AA or CCC.
- BTEC National Diploma grade MMM, BTEC National Certificate grade DD
- BTEC QCF Extended Diploma grade MMM, BTEC QCF Diploma grade DD
- Access to HE Diploma full award (Pass of 60 credits - of which a minimum of 45 credits must be at level 3 including 18 at Merit or Distinction).
- Applicants will normally be expected to hold GCSE English and Maths at grade C+/4 or equivalent
- If you've got other qualifications or relevant experience, please contact [The Gateway](#) for further advice before applying.
- International entry requirements and application guidance can be found [here](#)
- Successful completion of the [International Foundation Year in Science and Engineering](#) guarantees entry on to this course

Distinctive Features of the Course:

Cloud Computing has increased in popularity and level of integration with other technologies in recent years. Many businesses are therefore considering the opportunities presented by cloud computing. In order to fully understand the complexities of both the technical aspects of cloud computing and how to integrate it into business settings skills need to be developed in this cutting edge field.

BSc (Hons) Cloud Computing covers technical, legal and social aspects of cloud computing and security to ensure that graduates experience applying cloud computing solutions to real business problems. Computer security topics will enable graduates to gain an insight into networking and operating systems challenges to gain hands on experience in problem solving.

Through our up to data teaching laboratories students will gain experience and knowledge through both theoretical instruction and practice activities. New and emerging technologies will be used in order to detect and migrate against security attacks. Student will use virtualisation and a range of optimization and deployment tools to create cloud solutions. The security element of this degree will focus on using a range of operating systems and networking devices to determinate and mitigate against the security challenges that businesses encounter.

Educational Aims of the Course:

This course aims to develop your ability to analyse businesses and use this analysis to make data informed decisions in a systematic way.

The course will teach you advanced problem-solving skills, the computing, mathematics and statistical skills you need to undertake appropriate analysis. You will also develop your influencing and negotiating skills so you are able to communicate your analysis to a variety of audiences. These are skills which are highly sought after by many graduate employers. Business Intelligence analysts are warmly welcomed in industry, business

and commerce for their analytical ability and logical approach to unravelling complex issues.

Intakes:

September

Major Source of Funding:

HE FUNDING COUNCIL FOR ENGLAND (HEFCE)

Tuition Fees:

Tuition fees are reviewed on an annual basis. The fees applicable to a particular academic year will be published on the University website.

| Year | Status | Mode | Amount |
|-------------|---------------|----------------------|---------------|
| 2017/8 | H | Full Time / Sandwich | £9250.00 |
| 2017/8 | EU | Full Time / Sandwich | £9250.00 |
| 2017/8 | Overseas | Full Time / Sandwich | £11475.00 |
| 2018/9 | H | Full Time / Sandwich | £9250.00 |
| 2018/9 | EU | Full Time / Sandwich | £9250.00 |
| 2018/9 | Overseas | Full Time / Sandwich | £11700.00 |

PSRB:

None

Course Structure:

September (Sandwich)

Part time students study alongside full time students. However, they do not study more than 80 credits in each academic calendar year.

| Module | Title | Credits | Period | Type |
|--------|---|---------|--------|------|
| 4CS001 | Introductory Programming And Problem Solving | 20 | SEM1 | Core |
| 4CS015 | Fundamentals of Computing | 20 | SEM1 | Core |
| 4CI018 | Academic Skills and Team-based Learning | 20 | SEM1 | Core |
| 4CS014 | Team-based Learning Project | 20 | SEM2 | Core |
| 4MM015 | Mathematics and Cybersecurity | 20 | SEM2 | Core |
| 4CI017 | Business Intelligence Lifecycle and Knowledge Management | 20 | SEM2 | Core |
| 5CI021 | Data Mining | 20 | SEM1 | Core |
| 5CI022 | Databases | 20 | SEM1 | Core |
| 5CS030 | Cybersecurity Management | 20 | SEM1 | Core |
| 5CS024 | Collaborative Development | 20 | SEM2 | Core |
| 5MM014 | Introduction to Operational Research | 20 | SEM2 | Core |
| 5MM015 | Introduction to Statistics | 20 | SEM2 | Core |
| 5MM006 | Industrial Placement | 40 | YEAR | Core |
| 6CS019 | Project and Professionalism with Business Intelligence Artefact | 40 | YEAR | Core |
| 6CS005 | High Performance Computing | 20 | SEM1 | Core |
| 6MM017 | Statistical Methods | 20 | SEM1 | Core |
| 6CS012 | Artificial Intelligence and Machine Learning | 20 | SEM2 | Core |
| 6MM016 | Techniques in Operational Research | 20 | SEM2 | Core |

Learning, Teaching and Assessment

Academic Regulations Exemption:

None

Reference Points:

Quality Code - [Part A: Setting and Maintaining Academic Standards](#). Including :

[Qualifications Frameworks](#)

[Characteristics Statements](#)

[Credit Frameworks](#)

[Subject Benchmark Statements](#) - *Computing*

Quality Code - [Part B: Assuring and Enhancing Academic Quality](#)

[University Policies and Regulations](#)

Equality Act (2010).

Learning Outcomes:

CertHE Course Learning Outcome 1 (CHECLO1)

Demonstrate knowledge of the underlying concepts and principles associated with your area(s) of study, and an ability to evaluate and interpret these within the context of that area of study.

CertHE Course Learning Outcome 2 (CHECLO2)

Demonstrate an ability to present, evaluate and interpret qualitative and quantitative data, in order to develop lines of argument and make sound judgements in accordance with basic theories and concepts of your subject(s) of study.

CertHE Course Learning Outcome 3 (CHECLO3)

Evaluate the appropriateness of different approaches to solving problems related to your area(s) of study and/or work.

CertHE Course Learning Outcome 4 (CHECLO4)

Communicate the results of your study/work accurately and reliably, and with structured and coherent arguments.

CertHE Course Learning Outcome 5 (CHECLO5)

Demonstrate the qualities and transferable skills necessary for employment requiring the exercise of some personal responsibility.

DipHE Course Learning Outcome 1 (DHECLO1)

Demonstrate knowledge and critical understanding of the well-established principles of your area(s) of study, and of the way in which those principles have developed with an understanding of the limits of your knowledge, and how this influences analyses and interpretations based on that knowledge.

DipHE Course Learning Outcome 2 (DHECLO2)

Demonstrate the ability to apply underlying concepts and principles outside the context in which they were first studied, including, where appropriate, the application of those principles in an employment context.

DipHE Course Learning Outcome 3 (DHECLO3)

Demonstrate knowledge of the main methods of enquiry in the subject(s) relevant to the named award, and ability to evaluate critically the appropriateness of different approaches to solving problems in the field of study.

DipHE Course Learning Outcome 4 (DHECLO4)

Use a range of established techniques to initiate and undertake critical analysis of information, and to propose solutions to problems arising from that analysis.

DipHE Course Learning Outcome 5 (DHECLO5)

Effectively communicate information, arguments and analysis in a variety of forms to specialist and non-specialist audiences, and deploy key techniques of the discipline effectively.

DipHE Course Learning Outcome 6 (DHECLO6)

Demonstrate the qualities and transferable skills necessary for employment, requiring the exercise of personal responsibility and decision-making and undertake further training, developing existing skills and acquire new competences that will enable them to assume significant responsibility within organisations.

Ordinary Degree Course Learning Outcome 1 (ORDCLO1)

Demonstrate and apply an understanding, knowledge and experience of the principles of Business Intelligence.

Ordinary Degree Course Learning Outcome 2 (ORDCLO2)

Develop and apply knowledge and experience of a range of different applications and various technologies, techniques, tools and methods.

Ordinary Degree Course Learning Outcome 3 (ORDCLO3)

Demonstrate a knowledge of Big Data Analytics for analysing and mining data and developing decision models in a broad range of application areas.

Ordinary Degree Course Learning Outcome 4 (ORDCLO4)

Develop and demonstrate a range of transferrable skills in problem solving, communication, project management, working individually and in teams, self-management and the ability to gather, evaluate and reflect on information to support the decision making process.

Ordinary Degree Course Learning Outcome 5 (ORDCLO5)

Demonstrate a knowledge of a range of social, legal, ethical and professional skills and apply this knowledge in advanced studies or professional practice.

Honours Degree Course Learning Outcome 1 (DEGCLO1)

Demonstrate and apply a full understanding, knowledge and experience of the principles of Business Intelligence.

Honours Degree Course Learning Outcome 2 (DEGCLO2)

Develop and apply knowledge and experience of a range of different applications and various technologies, techniques, tools and methods.

Honours Degree Course Learning Outcome 3 (DEGCLO3)

Demonstrate a thorough knowledge of Big Data Analytics for analysing and mining data and developing decision models in a broad range of application areas.

Honours Degree Course Learning Outcome 4 (DEGCLO4)

Develop and demonstrate a range of transferrable skills in problem solving, communication, project management, working individually and in teams, self-management and the ability to gather, evaluate and reflect on information to support the decision making process.

Honours Degree Course Learning Outcome 5 (DEGCLO5)

Demonstrate a comprehensive knowledge of a range of social, legal, ethical and professional skills and apply

this knowledge in advanced studies or professional practice.

Overview of Assessment:

| Module | Title | Course Learning Outcomes |
|--------|---|--|
| 4CI015 | E-Commerce and Marketing | CHECLO1, CHECLO2, CHECLO3, CHECLO4, CHECLO5 |
| 4CI017 | Business Intelligence Lifecycle and Knowledge Management | CHECLO1, CHECLO2, CHECLO3, CHECLO4 |
| 4CS001 | Introductory Programming And Problem Solving | CHECLO1, CHECLO2, CHECLO3, CHECLO4 |
| 4CS014 | Team-based Learning Project | CHECLO1, CHECLO2, CHECLO3, CHECLO4, CHECLO5 |
| 4CS015 | Fundamentals of Computing | CHECLO1, CHECLO2, CHECLO3, CHECLO4 |
| 5CI021 | Data Mining | DHECLO1, DHECLO2, DHECLO3, DHECLO4, DHECLO5 |
| 5CI022 | Databases | DHECLO1, DHECLO2, DHECLO3, DHECLO4, DHECLO5 |
| 5CS024 | Collaborative Development | DHECLO1, DHECLO2, DHECLO3, DHECLO4, DHECLO5, DHECLO6 |
| 5CS030 | Cybersecurity Management | DHECLO1, DHECLO2, DHECLO3, DHECLO4, DHECLO5 |
| 5MM006 | Industrial Placement | DHECLO1, DHECLO2, DHECLO3, DHECLO4, DHECLO5, DHECLO6 |
| 5MM014 | Introduction to Operational Research | DHECLO1, DHECLO2, DHECLO3, DHECLO4, DHECLO5 |
| 5MM015 | Introduction to Statistics | DHECLO1, DHECLO2, DHECLO3, DHECLO4, DHECLO5 |
| 6CS005 | High Performance Computing | DEGCLO1, DEGCLO2, DEGCLO3, ORDCLO1, ORDCLO2, ORDCLO3 |
| 6CS012 | Artificial Intelligence and Machine Learning | DEGCLO1, DEGCLO2, DEGCLO3, ORDCLO1, ORDCLO2, ORDCLO3 |
| 6CS019 | Project and Professionalism with Business Intelligence Artefact | DEGCLO1, DEGCLO2, DEGCLO3, ORDCLO1, ORDCLO2, ORDCLO3 |
| 6MM016 | Techniques in Operational Research | DEGCLO1, DEGCLO2, DEGCLO3, DEGCLO4, DEGCLO5, ORDCLO1, ORDCLO2, ORDCLO3, ORDCLO4, ORDCLO5 |
| 6MM017 | Statistical Methods | DEGCLO1, DEGCLO2, ORDCLO1, ORDCLO2 |

Teaching, Learning and Assessment:

The learning activities on your course will develop distinctive graduate attributes that will make you stand out and enhance your employability.

These skills will be embedded into the curriculum throughout your course. Examples include:

Digitally Literacy: All Mathematics graduates will surely be users of advanced technologies. However, on your course you will develop your skills to encompass literacy more fully such as learning how to find information and how to take best advantage of digital resources and the Internet to make you effective in the Information Age.

Global Citizenship: On each level of your course you will learn about the social aspects of Mathematics, which will broaden your understanding of the way the world works and how communication and collaboration are evolving.

Knowledgeable and Enterprising: Throughout your course you will build up your professional and employability skills and learn to apply the knowledge you have acquired in an enterprising way. You will constantly nurture your own intellectual curiosity. The tools, methodologies and techniques that you will learn have been carefully selected to prepare you with the skills that employers demand and the opportunities for work based learning and placements will allow you to gain the vital experience that they often expect.

Formative assessments provide feedback and are not used in the grading process. Their purpose is to provide both tutors and students with a gauge of progress. Summative assessments are used in the grading process. Most summative assessments (with a notable exception of exams) also have a formative aspect to them in that tutors provide written feedback on the work. Students should use this feedback to improve their performance on future assessments. Feedback on an assessment on one module may help with assessments on other modules. Assessment methods are closely linked to the learning and teaching approaches used. Below are examples of the assessment methods that you may encounter.

Assignments – task based and report based assignments. Coursework frequently requires the writing of reports documenting the development of solutions. It is frequent practice to ask students to reflect on their learning experience as part of the coursework.

Case studies – based on realistic scenarios. Analysis, application and evaluation skills are developed via case studies as appropriate for the topic areas.

Practical exercises – tutorials and workshop sessions. These aid understanding and application of knowledge using a variety of IT tools within practical settings in workshops as well as assessing depth and breadth of understanding and application of subject knowledge. Practical exercises are the primary mechanisms for assessing analysis and evaluation. The tasks undertaken involve well-defined problems with varied level of complexity. Some practical exercise may involve interactive learning tools that are able to provide formative feedback.

Portfolios / e-portfolios – contain samples of work demonstrating what the student has accomplished. This is a good way to assess learning and development which is illustrated by multiple examples of work, opportunities for self-assessment and reflection charting over a period of time. Tasks set relate to outcomes being assessed thus documenting evidence of development towards mastering the identified outcomes and skills. Enhances the assessment process by demonstrating a range of skills and understandings of the subject area by the student. Some portfolios are sometimes called Learning Journals.

Formal presentations - you may be required to present your work to a group of tutors or to the rest of the class. This may be a demonstration of practical work or something you developed or built or may present the results of a study. These are an important way of assessing your communication skills.

Examinations and Time-Constrained Assessments (tests) - may follow a traditional format or on-line alternatives. They are used to ensure breadth of knowledge has been acquired. TCA and examinations, some of which are case study based, emphasise application of knowledge and skills.

Group Project Work - where group work is assessed, mechanisms are used to allow individual contributions to be reflected in the grading as appropriate e.g. peer assessment of individual group members, individual reflection on the process and the product.

Peer-group assessment – using student feedback, particularly in group assessments to identify each student's contribution to the work.

Individual Project Work - All courses require at least one module of individual project work where students work individually on a large task. This type of work is supported by either regular meetings with a named project supervisor or through seminars.

Work-based assessments – used to assess the student's work-based modules and enable feedback from work placement organisations. These are usually used for students who are industry-based and doing their course part-time or students doing a placement.

Assessments will also focus on skills such as team working, time-management and developing Continuing Professional Development (CPD) awareness, as well as discipline-specific skills related to the analysis, design, development, implementation, testing and evaluation of systems. Typical tasks include: production of technical documentation, reports for differing target audiences, presentations, demonstrations and viva, allowing assessment of the breadth and depth of knowledge, analysis and synthesis, communication, and evaluation within the subject area.

Student Support:

University provided support:

As well as providing general counselling support the University Counselling Service provides short courses on topics such as "Self Confidence", "Stress Management and Relaxation" and "Life Skills". They also provide study skills and academic support, providing short courses such as provide help in areas such as "Writing and Assignment Skills", "Exam Techniques", "Enhancing Professional Skills", "Personal Development Planning" and "Making Choices for the Future".

University Learning Centres provide general academic skills support to all students. You can make an appointment with a study skills advisor for advice on areas such as academic writing, assignment planning, exam preparation, and time management. In addition, there is a regular timetable of drop-in and bookable workshops covering information and digital literacy skills, including academic referencing. School of Computing and IT students are supported by a designated subject librarian who is available to support research and project work.

Course support:

At the start of each year of your course you will be assigned a Personal Tutor who will guide you through the induction process and provide support and academic counselling throughout the year on an appointment basis. They should be able to offer you advice and guidance to help you liaise with other staff and support facilities in the School and University. You should meet your Personal Tutor at least 3 times a year, which must include meetings that you are invited to at critical points in your course.

The Personal Tutor provides academic counselling and will be accessible throughout the week on a drop-in or appointment basis to discuss timetables, requests for extensions, requests for extenuating circumstances, general concerns about study and student life and general programme planning. The Personal Tutor will act as a first point of contact in relation to leave of absence (including returning after leave), withdrawal, transferring to another course (internal and external) and changes to mode of attendance. Your Course Leader will be available thereafter for meetings by appointment to discuss leave of absence, withdrawal, transferring to another course (internal and external), changes to mode of attendance, returning after leave of absence and direct entrants.

Subject support:

Tutorials, workshops, seminars and meetings - provide the primary opportunities for students to interact with staff on topics relating to modules. All modules provide at least one of these forms of face-to-face support.

Formative feedback - tutors provide personalised written feedback on most summative assessments. The mechanism for feedback from purely formative tasks varies between assessments, but will always be provided in some form. Online formative tasks often provide feedback straight away. On occasions tutors may provide generalised verbal feedback to the whole class on points relating to an assessment

Assessment and subject-based surgeries provide additional student support for subjects that students often need extra help with. They are often concentrated around the times when assessments take place. Revision sessions are provided for many modules that have exam-like tests and enable you to interact with tutors to review parts of the course. Mock exams and tests may provide opportunities to experience an examination environment before the final summative test and give you feedback on your understanding.

Employability in the Curriculum:

Throughout your course you will build up your professional and employability skills and learn to apply the knowledge you have acquired in an enterprising way. You will constantly nurture your own intellectual curiosity. The tools, methodologies and techniques that you will learn have been carefully selected to prepare you with the skills that employers demand and the opportunities for work based learning and placements will allow you to gain the vital experience that they often expect.



