

Course record information

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|---|--|
| Name and level of final award | <ul style="list-style-type: none"> • Bachelor of Science with Honours - Data Science and Analytics • Bachelor of Science with Honours - BSc Data Science and Analytics with industrial experience <p>The award is Bologna FQ-EHEA first cycle degree or diploma compatible</p> |
| Name and level of intermediate awards | <ul style="list-style-type: none"> • Diploma of Higher Education (Dip HE) - Data Science and Analytics • Diploma of Higher Education (Dip HE) - Data Science and Analytics with Industrial Experience • Certificate of Higher Education (CertHE) - Data Science and Analytics |
| Awarding body/institution | University of Westminster |
| Teaching institution | University of Westminster |
| Status of awarding body/institution | Recognised Body |
| Location of delivery | Primary: Central London |
| Language of delivery and assessment | English |
| QAA subject benchmarking group(s) | <ul style="list-style-type: none"> • Computing : https://www.qaa.ac.uk/docs/qaa/subject-benchmark-statements/subject-benchmark-statement-computing.pdf?sfvrsn=ef2c881_10 • Mathematics, Statistics and Operational Research: https://www.qaa.ac.uk/docs/qaa/subject-benchmark-statements/subject-benchmark-statement-mathematics-statistics-and-operational-research.pdf?sfvrsn=e8f3c881_4 |
| Professional statutory or regulatory body | British Computer Society (BCS) Pending approval |
| Westminster course title, mode of attendance and standard length | <ul style="list-style-type: none"> • BSc Data Science and Analytics FT, Full-time, September start - 3 years standard length with an optional year placement |
| Valid for cohorts | From 2020/1 Valid for L4 2020/21. |

Admissions requirements

There are standard minimum entry requirements for all undergraduate courses. Students are advised to check the standard requirements for the most up-to-date information. For most courses a decision will be made on the basis of your application form alone. However, for some courses the selection process may include an interview to demonstrate your strengths in addition to any formal entry requirements. More information can be found here: <https://www.westminster.ac.uk/study/undergraduate/how-to-apply>

Recognition of Prior Learning

Applicants with prior certificated or experiential learning at the same level of the qualification for which they wish to apply are advised to visit the following page for further information:

<https://www.westminster.ac.uk/current-students/guides-and-policies/student-matters/recognition-of-prior-learning>

Aims of the programme

The *BSc Data Science and Analytics* course has been designed to:

- Provide students with knowledge of the fundamental principles and technologies that underpin the disciplines of mathematics, statistics and computing with an emphasis on the skills and theories required in data science and analytics.
- Initiate students into the selection and application of cutting-edge mathematics, statistics and computer science techniques and tools to collect, store, prepare, analyse and visualise data.
- Comprehend and analyse organisations' operations and environment and related issues.
- Provide a motivating and inclusive environment with the opportunity to develop themselves intellectually and socially and to encourage students to develop as independent and self-critical problem solvers.
- Prepare students with professional attitudes with awareness of ethical, legal, and social issues, interpersonal and entrepreneurial skills required in industry.
- Prepare students for continued study at an advanced level in either formal postgraduate study or as continued professional development.

Overall this course aims to equip students with a combination of analytical, technical and presentation skills needed to convert data into valuable insights in an appropriate format to support decision making. These skills are much needed in a continuously changing global environment where huge and fast-growing amount of data are generated through the use of Social network and Internet of Things, processed and analysed through increasingly sophisticated computer capabilities and algorithmic models, and stored using sophisticated technologies such as Cloud Computing. These skills are needed by both businesses and governments. Businesses have been collecting data on their customers, partners and the market in which they operate to support evidence-based decision making. Similarly governments rely on data to improve their policies and deliver better services.

Employment and further study opportunities

University of Westminster graduates will be able to demonstrate the following five Graduate Attributes:

- Critical and creative thinkers
- Literate and effective communicator
- Entrepreneurial
- Global in outlook and engaged in communities
- Social, ethically and environmentally aware

University of Westminster courses capitalise on the benefits that London as a global city and as a major creative, intellectual and technology hub has to offer for the learning environment and experience of our students.

The course offers a short-term work-based learning experience by providing you with an opportunity to work on a real-life problem which is normally set by an external organisation as a small-scale project.

This project forms a part of the assessment in a designated module called 5DATA002W Machine Learning and Data Mining. This module provides the structure for your learning and receiving support from the module team. You will work on the project on your own and/or as part of a small team within and outside the class. During this time, you may also get a

chance to interact with the organisation that has set the project. The quality of the work that you produce for the project get assessed as part of the module's assessment.

This experience will allow you to put theory into practice by applying your knowledge and skills gained from various modules to address a real-life situation, usually within the context of a business-related problem. Furthermore, this experience will help you develop subject-specific technical skills as well as certain employability skills such as leadership, organisation and commercial awareness.

In addition, this course gives you with the opportunity to take a year in industry (work placement) after completing the second year of your study and gain work experience, increasing your chances of employability after graduation. You will be offered help and support to find and secure placement opportunities through various workshops and events organised by the Career Development Centre and the course team. Typically, you will be assigned into roles involving tasks related to data science and analytics.

The *BSc Data Science and Analytics* aims to create graduates who have a strong focus on solving real-world problems, have adaptability and maturity, and have a strong foundation of knowledge and the technical capability to be able to immediately contribute to their workplace environment. Graduates of the *BSc Data Science and Analytics* course will have been taught and have utilised industrial techniques and tools and will be versed in analytical and technical aspects of data processing, analysis and visualisation. Graduates shall be independent thinkers, prepared for lifelong learning and be able to analyse, critically reflect, and confidently and effectively communicate. They shall be able to meet the required professional and ethical standards expected in the workplace. Graduates shall also be capable of and prepared for broadening their knowledge by undertaking Masters level study on related subjects. We provide such opportunity to our graduates within the School of Computer Science and Engineering.

Attributes are developed throughout all levels of the course to help graduates compete effectively in a global changing environment. The table below maps the attributes to the core course modules for levels 4 to 6.

Upon completion of the course students will be expected to seek a data scientist, data engineer or data analyst role in any type of organisation, whether it is in industry, research or government, to bring their analytical skills to the benefit of a variety of problems, e.g. healthcare, retail industry, etc. Data scientist roles were found to be the most difficult to fill due to difficulties finding potential candidates with the required levels of skills, knowledge and experience. This BSc course aims at filling the gap by integrating analytics and computer science and ensuring the right balance between them enabling graduates to use their technical skills to manage, analyse and visualise data.

In brief, our graduates will be distinctive in being:

- Critical and creative thinkers: investigating various datasets to identify research questions and formulate hypotheses, using appropriately analytics techniques to support problem solving, designing experiments to discover knowledge that contribute to decision making.
- Literate and effective communicator: communicating analysis ideas and results in written and verbal forms and through effective use of data visualisation methods and presentation tools.
- Entrepreneurial: Having fundamental knowledge of the organisation operations and issues, tackling problems resiliently and confidently both independently and in groups, reflecting and learning from own performance.
- Global in outlook and engaged in communities: engaging in Data Science and Analytics networking events, participating in competitions.
- Socially, ethically and environmentally aware: adhering to ethical code, making responsible use of data driven technologies, avoiding biased data collection and presentation.

Upon completion of the course students will be expected to seek a data scientist, data engineer or data analyst role in any type of organisation, whether it is in industry, research or government, to bring their analytical skills to the benefit of a variety of problems, e.g. healthcare, retail industry, etc. Data scientist roles were found to be the most difficult to fill due to difficulties finding potential candidates with the required levels of skills, knowledge and experience. This BSc course aims at filling the gap by integrating analytics and computer science and ensuring the right balance between them enabling graduates to use their technical skills to manage, analyse and visualise data. (See course outcome section)

What will you be expected to achieve?

Learning outcomes are statements on what successful students have achieved as the result of learning. These are threshold statements of achievement the learning outcomes broadly fall into four categories:

- The overall knowledge and understanding you will gain from your course (KU)
- Graduate attributes are characteristics that you will have developed during the duration of your course (GA)

- Professional and personal practice learning outcomes are specific skills that you will be expected to have gained on successful completion of the course (PPP)
- Key transferable skills that you will be expected to have gained on successful completion of the course. (KTS)

Level 4 course learning outcomes: upon completion of Level 4 you will be able to:

- L4.1 Demonstrate knowledge of the underlying concepts and principles associated with mathematical and statistical modelling and programming (Modules Applied Mathematics and Statistical Modelling and Analysis) (KU)
- L4.2 Relate the understanding of basic algorithmic, statistical and mathematical techniques to the analysis of well-defined small scale problems and the design of their solutions (Modules Applied Mathematics and Statistical modelling and analysis) (KU)
- L4.3 Demonstrate ability to prepare, analyse and visualise data using appropriate mathematical and statistical techniques and tools (Module Statistical Modelling and Analysis) (PPP)
- L4.4 Describe, create and manipulate simple data collections to store organisational data and business rules, recognising limitations of their underlying representation (Module Database Design and Implementation) (PPP)
- L4.5 Methodically capture user requirements and devise an appropriate basic information system specification that meets them (Module Requirements Modelling) (KTS)
- L4.6 Apply programming principles and constructs to implement solutions to small scale problems (Module Software Development 1 and 2) (PPP)
- L4.7 Show awareness of the ethical issues involved in data life cycle (Module Statistical Modelling and Analysis + Database Design and Implementation) (KTS)
- L4.8 Communicate clearly and effectively using structured and coherent arguments, results of their work undertaken through a guided process of selection of sources, in written and/or oral form (Modules Applied Mathematics, Statistical Modelling, Database Design and Implementation, Requirements Modelling and Software Development 1) (KTS)
- L4.9 Work effectively as a team member to achieve objectives using appropriate resources and tools efficiently (Modules Statistical Modelling and Analysis, Database Design and Implementation and Requirements Modelling) (KTS)

Level 5 course learning outcomes: upon completion of Level 5 you will be able to:

- L5.1 Demonstrate knowledge and critical understanding of the principles and concepts of operations strategy and management in an organisational context (Module Service Operations Management) (KU)
- L5.2 Comprehend organisational problems, abstract the essentials of problems and formulate them analytically and in symbolic form, so as to facilitate their analysis and solution, and grasp how analytical processes may be applied to them (Modules Service Operations Management and Business Analytics) (KTS)
- L5.3 Demonstrate knowledge of the main algorithmic and analytic methods, and ability to evaluate critically the appropriateness of different approaches to solving problems (Modules Business Analytics and Machine Learning and Data Mining) (KU)
- L5.4 Demonstrate competency in applying algorithmic and analytical approaches to solve medium scale problems, and appraise the effect of assumptions on analytical modelling and output analysis (Modules Service Operations Management, Business Analytics and Machine Learning and Data Mining) (PPP)
- L5.5 Explore new or existing data to identify patterns and relationships through the application of appropriate algorithms and tools (Business Analytics and Machine Learning and data Mining) (PPP)
- L5.6 Use a range of established techniques to demonstrate how information is modelled, persistently stored, manipulated and retrieved, as data, to serve scalable solutions to medium-scale business problems (Module Database Systems) (KTS)
- L5.7 Effectively communicate models and analysis with accuracy and clarity to support high quality decision making (Module Service Operations Management, Business Analytics and Machine Learning and Data Mining) (KTS)
- L5.8 Critically evaluate professional, legal and/or ethical issues, and demonstrate professional responsibility in the development of quality data science solutions in a global context (Modules Service Operations Management, Database Systems and Machine Learning and Data Mining) (KTS)

Level 6 course learning outcomes: upon completion of Level 6 you will be able to:

- L6.1 Demonstrate a systematic understanding of a range of advanced modelling and visualisation methods and techniques, their conditions and limitations, and of the need to validate and revise models (Modules Advanced Analytics, Data Visualisation and Dashboarding, Final Year Project) (KU)
- L6.2 Demonstrate critical understanding and assessment of models to analyse a problem, to frame appropriate questions to achieve a solution, to develop a comprehensive solution or to design a range of scenarios resulting from modifications to it (Advanced Analytics and Final Year Project) (KU)
- L6.3 Transfer knowledge from one context to another, assess complex problems logically, approach them analytically leading to the formulation of solutions, and interpret related results in the original contexts of the problems (Modules Advanced Analytics and Final Year Project) (KTS)
- L6.4 Appropriately analyse large scale data systems to discover trends and hidden relationships and inform/automate decision making (Modules Advanced Analytics and Data Visualisation) (PPP)
- L6.5 Apply appropriate specialist software and/or programming as an aid to an analytical study for critically evaluating and/or visualising the outcomes to support conclusions and/or recommendations, or for acquiring any further information (Modules Advanced Analytics and Data Visualisation) (PPP)
- L6.6 Be effective in professional and interpersonal communication of information, problems, models and solutions to both specialist and non-specialist audiences (Modules Data Visualisation and Final Year Project) (KTS)
- L6.7 Demonstrate complete handling of the full life-cycle of a data science and analytics project underpinned by an entrepreneurial approach and a focus on the needs of real clients and the wider society within a professional, legal and ethical framework (Final Year Project) (KTS)
- L6.8 Apply appropriate research methodologies in carrying out independent research in data science and analytics and produce a report demonstrating evidence of critical thinking (Final Year Project). (KTS)

How will you learn?

Learning methods

Your course is a collection of learning opportunities. Using these opportunities will help you mature in attitude and competence, preparing you for your future career and life in general. Learning in your course is a partnership: expert University staff will guide you through the necessary core knowledge of your subject and help you develop an understanding, while you, increasingly, take the leading role in pursuing the learning that meets your specific needs.

Your course is organised into a number of modules at each level. These are the building blocks of your course. Each module consists of a number of learning activities over a number of weeks designed to help you achieve the knowledge and skills related to a particular area within your subject.

The principal aim of your course is to equip you for professional life, or higher study, relevant to your current programme of study.

To prepare you for this, the learning in your course will not take place only in the class. Your learning will use four methods, each supporting the others:

- *Lectures* will give you access to expertise and present you with the knowledge you need in your subject.
- *Practical tutorial or laboratory sessions* will allow you to understand, apply and strengthen your skills under the guidance of a tutor.
- *Independent study time* will let you take more control of your own learning and give you the framework that will help you to keep on learning without supervision.
- *Personal development* will allow you to complement your knowledge with the specific specialised skills that meet your individual needs.

Whenever possible online resources will be provided through the university virtual learning environment to support you in your learning.

Teaching methods

In your first year of study (Level 4) you will make the full transition into Higher Education. You will develop the key core skills for statistics, mathematics and programming. To help this transition your course has additional classes and support sessions at this level that you will need to fully engage with so you can prepare for the advanced study that follows.

Your second year of study (Level 5) will help you develop some autonomy. At this level you will develop detailed knowledge in analytics, data mining and machine learning, service operations management, and database systems. You will also be able to deal with more specialist areas such as object-oriented programming and project management methodologies by yourself and in teams, reflecting on your own strengths and identifying areas to specialise in. Real-life project briefs or case studies, normally provided by an organisation, will give you the opportunity to engage with employers and use your knowledge and skills to solve a real-life or a business-related problem. Following that level, you may choose to have a year in industry (a work placement year) to practice and enhance your learning from course by strengthening your understanding of industry needs through direct application of your evolving skills.

Your final year of study (Level 6) introduces advanced analytical techniques and cutting-edge solutions using relevant industry tools. You will have learned to work autonomously with your lecturers increasingly being there to support you and challenge your thinking. This is the level that completes your preparation for going into industry and further study, with an ability to handle the complexity of large-scale systems and environments and with full control of your further development needs.

Assessment methods

As your learning continues it is important to stop every now and then and take stock of how much you learn so that you know where you are and how much more you still need to cover.

In your course, assessment and feedback are the key elements in measuring learning. Assessment in your course has two functions: **formative assessment** is assessment that lets you see where you are in your learning and what you have learned so far, while **summative assessment** measures how much you have learned in a way that contributes to your overall grades.

You will undertake a **wide variety of assessment tasks** as you progress through your degree course. Their nature will vary according to your level and the nature of the task. You will write *essays and research reports*, and learn to write in a style suitable to a piece of academic work, and to make proper use of references and bibliographies.

Other forms of assessment will include *practical exercises* ranging from small tasks that might be completed in a tutorial, to something more complex like designing and writing a larger computer program. For example, *part-written practical reports* and *Lab-controlled assessments* will be used to test your ability to analyse and interpret data, and/or build and reflect on real-world cases during computer lab sessions.

There will be some formal *examinations* (usually at the end of each term). Some of the work will be completed individually through *closed-book exams* or *in-class tests*, and sometimes you will work with other students as part of a team, emulating as close as possible the environment you will face in your later life in industry. *Group coursework* and *team projects*, which are essential for data science related careers, will help you to develop practical skills alongside the more specific skills that are being assessed. For example, you will be working as part of a team on a typical industry case study and will be assessed on your ability to appreciate the importance of business operations and their interaction. Each group member will be in charge of specific task(s), and all together will have to collaborate and exchange relevant information to satisfy the organisation objectives. Such a group work will be a simulation of a real life working environment with shared goals but individual accountability and codes of conduct.

Other methods of assessments used to evaluate various graduate skills may include portfolios where you will be designing and presenting an artefact such as infographics and dashboard. All assessments that contribute to your final grades will be assessed against set criteria, following rigorous quality mechanisms that ensure our academic judgement remains fair and consistent with the wider educational sector.

Typically, assessment tasks will become longer, and more self-managed, as you get into the second year and the final year of your course and they will have less detail in guidance and more room for you to innovate through your own decisions informed by your own research in your specialist areas. To support you through this transition, links to publicly accessible datasets such as UK Data archive and Kaggle Datasets, and free analytical tools such as R and Weka will be made available through the course's Blackboard site. These will be regularly updated and can be used by the students for personal development and/or their final year projects.

Assessment is designed to be a learning experience in itself and will help you make that transition from small practical exercises to more complex piece of work towards the substantial, year-long, project of your final year.

To help you see how different areas connect with each other you will have in some cases tasks that assess the outcomes from different modules in one complex piece of work. These are called **synoptic assessments**. Examples of synoptic assessment for your course include the individual project at Level 6 and a hackathon for Levels 5 and 6 students organised in collaboration with a different industry partner every year. These partners may be alumni and/or collaborators of the School of computer science and Engineering research groups.

Overall guidance through the personal tutoring system will help you continuously reflect on where you are of your learning so you can make informed decisions on the pace and focus of your own independent learning.

Throughout your learning you will get feedback. **Feedback** will help you reflect on what you have learned so you can identify the areas in which you are strong and the areas in which you need to learn more. Feedback will be given to you in response to assessment, in response to questions in lectures, seminars and tutorials, and in guidance you get during supervision. But feedback will also come from your interactions with other students and with industry. This is possible if you choose to undertake an industrial placement year and/or through participation in national and international competitions in the field of data science and analytics (e.g. Kaggle competitions, O.R. & Analytics Student Team Competition, Tableau's Student Viz.). To promote learning and encourage autonomy, students' achievements are celebrated. You are also invited to participate in Data Science and Analytics networking events, such as Data Science Festival, Analytics Network and meetup groups. All feedback will be useful to help you guide your learning so that you develop the rights skills faster.

| Graduate Attribute | Evident in Course Outcomes |
|---|--|
| Critical and creative thinker | L4.1, L4.2, L4.3, L4.4, L4.6, L5.3, L5.4, L5.5, L5.6, L6.1, L6.2, L6.4, L6.5 |
| Literate and effective communicator | L4.8, L5.7, L6.6, L6.8 |
| Entrepreneurial | L4.5, L4.9, L5.1, L5.2, L6.3, L6.7 |
| Global in outlook and engaged in communities | L4.9, L5.8, L6.3, L6.7 |
| Socially, ethically and environmentally aware | L4.7, L5.8 |

Course Structure

This section shows the core and option modules available as part of the course and their credit value. Full-time Undergraduate students study 120 credits per year. Course structures can be subject to change each academic year following feedback from a variety of sources.

Modules are described as:

- **Core** modules are compulsory and must be undertaken by all students on the course.
- **Option** modules give you a choice of modules and are normally related to your subject area.
- **Electives**: are modules from across the either the whole University or your College. Such modules allow you to broaden your academic experience. For example, where electives are indicated you may choose to commence the study of a foreign language alongside your course modules (and take this through to the final year), thereby adding further value to your degree.
- Additional information may also be included above each level for example where you must choose one of two specific modules.

Modules

Level 4

| Module Code | Module Title | Status | UK credit | ECTS |
|-------------|--|--------|-----------|------|
| 4ELEN010W | Applied Mathematics | Core | 20 | 10 |
| 4BUIS015W | Database Design and Implementation | Core | 20 | 10 |
| 4BUIS003W | Modelling User and System Requirements | Core | 20 | 10 |
| 4COSC001W | Software Development I | Core | 20 | 10 |
| 4COSC005W | Software Development II | Core | 20 | 10 |
| 4DATA001W | Statistical Modelling and Analysis | Core | 20 | 10 |

Level 5

| Module Code | Module Title | Status | UK credit | ECTS |
|-------------|--|--------|-----------|------|
| 5BUIS019W | Business Analytics | Core | 20 | 10 |
| 5COSC020W | Database Systems | Core | 20 | 10 |
| 5DATA002W | Machine Learning and Data Mining | Core | 20 | 10 |
| 5DATA003W | Service Operations Management | Core | 20 | 10 |
| 5BUIS021W | Agile Project Management and Professional Experience | Option | 20 | 10 |
| 5SENG003W | Algorithms: Theory, Design and Implementation | Option | 20 | 10 |
| 5BUIS020W | Information Technology Security | Option | 20 | 10 |

| Module Code | Module Title | Status | UK credit | ECTS |
|-------------|-----------------------------|----------|-----------|------|
| 5COSC019W | Object Oriented Programming | Option | 20 | 10 |
| 5COSC024W | Server-Side Web Development | Option | 20 | 10 |
| | | Elective | 20 | 10 |

Additional Year

Students who undertake the 4 year course must pass module 6COSC018W to achieve the award "with Industrial Experience".

| Module Code | Module Title | Status | UK credit | ECTS |
|-------------|----------------------|--------|-----------|------|
| 6COSC018W | Industrial Placement | Core | 120 | 60 |

Level 6

| Module Code | Module Title | Status | UK credit | ECTS |
|-------------|---|----------|-----------|------|
| 6DATA005W | Advanced Analytics | Core | 20 | 10 |
| 6DATA007W | Data Science and Analytics Final Project | Core | 40 | 20 |
| 6DATA004W | Data Visualisation and Dashboarding | Core | 20 | 10 |
| 6COSC020W | Applied AI | Option | 20 | 10 |
| 6DATA006W | Big Data Analytics | Option | 20 | 10 |
| 6BUIS017W | Customer Relationship and Change Management (CRM & CM) with Business Intelligence | Option | 20 | 10 |
| 6MARK017W | Digital Marketing, Social Media and Web Analytics | Option | 20 | 10 |
| 6BUIS018W | Information Driven Entrepreneurship and Enterprise | Option | 20 | 10 |
| | | Elective | 20 | 10 |

Please note: Not all option modules will necessarily be offered in any one year. In addition, timetabling and limited spaces may mean you cannot register for your first choice of option modules.

Professional body accreditation or other external references

The course is intended to fulfil the educational requirements of the British Computer Society (BCS) to fulfil the educational requirements registration as a Chartered IT Professional (CITP) and partial Chartered Engineer (CEng). Accreditation from Professional Body is being sought but pending. Students can apply for the free Operations Research Society student membership. Benefits include allocation of a mentor, access to O.R. journals and publications and meeting employers at our annual Careers Open Day.

Course management

The BSc (Honours) Data Science and Analytics course is under the School of Computer Science and Engineering and the management structure supporting the course is as follows:

- Salma Chahed, the Course Leader is responsible for day to day running and overall management of the course and development of the curriculum;
- Philip Trwoga, Head of School holds academic responsibility for the course and other courses within the School;
- Jonathan Stockdale, Pro Vice-Chancellor and Head of the College of Design, Creative and Digital Industries, holds overall responsibility for the course, and for the other courses run by the College.

Academic regulations

The current Handbook of Academic Regulations is available at westminster.ac.uk/academic-regulations.

Course specific regulations apply to some courses.

Academic Support

Upon arrival, an induction programme will introduce you to the staff responsible for the course, the campus on which you will be studying, the Library and IT facilities, additional support available and to your Campus Registry. You will be provided with the Course Handbook, which provides detailed information about the course. Each course has a course leader or Director of Studies. All students enrolled on a full-time course and part time students registered for more than 60 credits a year have a personal tutor, who provides advice and guidance on academic matters. The University uses a Virtual Learning Environment called Blackboard where students access their course materials, and can communicate and collaborate with staff and other students. Further information on Blackboard can be found at <https://www.westminster.ac.uk/current-students/studies/your-student-journey/when-you-arrive/blackboard>

The Academic Learning Development Centre supports students in developing the skills required for higher education. As well as online resources in Blackboard, students have the opportunity to attend Study Skills workshops and one to one appointments. Further information on the Academic Learning Development Centre can be found at westminster.ac.uk/academic-learning-development.

Learning support includes four libraries, each holding a collection of resources related to the subjects taught at that site. Students can search the entire library collection online through the Library Search service to find and reserve printed books, and access electronic resources (databases, e-journals, e-books). Students can choose to study in the libraries, which have areas for silent and group study, desktop computers, laptops for loan, photocopying and printing services. They can also choose from several computer rooms at each campus where desktop computers are available with the general and specialist software that supports the courses taught in their College. Students can also securely connect their own laptops and mobile devices to the University wireless network.

Support Services

The University of Westminster Student and Academic Services department provide advice and guidance on accommodation, financial and legal matters, personal counselling, health and disability issues, careers, specialist advice for international students and the chaplaincy providing multi-faith guidance. Further information on the advice available to students can be found at <https://www.westminster.ac.uk/student-advice>.

The University of Westminster Students' Union also provides a range of facilities to support students during their time at the University. Further information on UWSU can be found at <https://www.westminster.ac.uk/students-union>

How do we ensure the quality of our courses and continuous improvement?

The course was initially approved by a University Validation Panel. University Panels normally include internal peers from the University, academic(s) from another university, a representative from industry and a Student Advisor.

The course is also monitored each year by the College to ensure it is running effectively and that issues which might affect the student experience have been appropriately addressed. Staff will consider evidence about the course, including the evidence of student surveys, student progression and achievement and reports from external examiners, in order to evaluate the effectiveness of the course and make changes where necessary.

A Course revalidation takes place periodically to ensure that the curriculum is up-to-date and that the skills gained on the course continue to be relevant to employers. Students meet with revalidation panels to provide feedback on their experiences. Student feedback from previous years is also part of the evidence used to assess how the course has been running.

How do we act on student feedback?

Student feedback is important to the University and student views are taken seriously. Student feedback is gathered in a variety of ways.

- Through student engagement activities at Course/Module level, students have the opportunity to express their voice in the running of their course. Course representatives are elected to expressly represent the views of their peers. The University and the Students' Union work together to provide a full induction to the role of the course representatives.

- There are also School Representatives appointed jointly by the University and the Students' Union who meet with senior School staff to discuss wider issues affecting student experience across the School. Student representatives are also represented on key College and University committees.;
- All students are invited to complete a questionnaire before the end of each module. The feedback from this will inform the module leader on the effectiveness of the module and highlight areas that could be enhanced.
- Final year Undergraduate students will be asked to complete the National Student Survey which helps to inform the national university league tables.

This programme specification provides a concise summary of the main features of the course and the learning outcomes that a student might reasonably be expected to achieve and demonstrate, if they take full advantage of the learning opportunities that are provided. This specification is supplemented by the Course Handbook, Module proforma and Module Handbooks provided to students. Copyright in this document belongs to the University of Westminster. All rights are reserved. This document is for personal use only and may not be reproduced or used for any other purpose, either in whole or in part, without the prior written consent of the University of Westminster. All copies of this document must incorporate this Copyright Notice – 2021©