Programme Specification

UNIVERSITY OF WESTMINSTER

Course record information

Name and level of final award	• Bachelor of Science with Honours - Artificial Intelligence • Bachelor of Science with Honours - Artificial Intelligence with Industrial Experience • Bachelor of Science with Honours - Artificial Intelligence with International Experience The award is Bologna FQ-EHEA first cycle degree or diploma compatible
Name and level of intermediate awards	• Bachelor of Science (BSc) - Artificial Intelligence • Diploma of Higher Education (Dip HE) - Artificial Intelligence • Certificate of Higher Education (CertHE) - Artificial Intelligence
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)	QAA Subject Benchmark Statement - Computing March 2022
Professional statutory or regulatory body	British Computer Society (BCS) (Pending: Please see section on Professional body accreditation or other external references for further information)
Westminster course title, mode of attendance and standard length	• Artificial Intelligence, Full-time, September start - 3 years standard length with an optional year abroad or placement
Valid for cohorts	From 2026/7

Additional Course Information

Entry qualifications:

- **A Levels including at least one science A level (Maths, Physics, Chemistry and Biology)** – BBC (112 UCAS Tariff points)
- **T levels** – 112 UCAS Tariff points
- **International Baccalaureate** – ** UCAS Tariff points from all components of the Diploma Programme. International Baccalaureate Career-related Programme will be considered on a case-by-case basis
- **BTEC Extended Diploma** – DDM
- **BTEC Diploma** – DD
- **Access** – 112 UCAS Tariff points from the Access course

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

Artificial Intelligence is transforming nearly every aspect of modern life, from healthcare and finance to transportation and entertainment. As AI continues to evolve, there is an increasing demand for skilled professionals who can develop, implement, and manage intelligent systems.

The BSc Artificial Intelligence course is designed to meet this growing need by equipping you with the knowledge, skills, and experience necessary to thrive in this emerging field.

This course aims to develop confident, data-literate problem-solvers by providing a comprehensive foundation in AI and related disciplines within computer science. You will gain broad digital skills, including programming, prompt engineering, and data analysis, supported by a strong understanding of statistics, logic, and computational theory.

This programme aims to:

- Equip you, the student with a solid foundation in the core principles of artificial intelligence, such as machine learning, automated reasoning, and algorithmic design.
- Develop an in-depth understanding of the theoretical and practical aspects of AI technologies, including neural networks, natural language processing, computer vision, and generative algorithms, while examining their real-world applications and impact.
- Provide awareness of the socio-economic, ethical, and legal considerations surrounding AI, preparing students to navigate challenges related to bias, privacy, and responsible AI deployment.
- Encourage initiative and confidence in AI-enhanced problem-solving, using both analytical and practical skills gained throughout the course.
- Provide an environment where you will be able to collaborate, develop generic transferable employability skills including project management, risk management, teamwork, leadership, entrepreneurship and written and oral communication.
- Maintain a strong industry focus, incorporating real-world case studies, guest lectures, internships, and extracurricular activities to ensure graduates are work-ready.
- Support development of the wider skills and behaviours for professional communication, collaborative working and reflective practice that are respectful, accessible, and inclusive.
- Provide an engaging, enjoyable, and rewarding learning experience, forming a strong foundation for a successful career in AI-related fields such as data science, software development, cybersecurity, and research.

Communication and interpersonal skills are an integral part of the course, ensuring graduates can adapt to new technologies and work effectively in diverse and inclusive professional environments. Alongside technical expertise, you will develop key professional skills across the programme. Three dedicated modules support this development:

- Human-Centred and Ethical AI (Year 1): Introduces emerging technologies and their implications.
- Work-Based Learning Module Data Science Project Life Cycle (Year 2): Provides hands-on industry experience, bridging the gap between theory and practice.
- Final Year Project (Year 3): Encourages independent research and innovation, allowing students to tackle real-world challenges.

In other modules you will also be encouraged to work collaboratively, manage your time successfully, work in teams in different roles and present and defend work to peers and tutors. Above all, this course aims to inspire students from all backgrounds and genders to become AI-literate developers, capable of shaping the future of artificial intelligence in a responsible and impactful way.

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.

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 BSc Artificial Intelligence course has:

- Career development skills, embedded in all levels.
- Opportunities for placements and work-related learning activities.
- Staff membership which continues to widen and strengthen the University's links with employers in all sectors.
- A curriculum highly relevant to the current and future needs of industry.
- Career education and guidance activities that actively engage employers

The University and the course team consider that employability is an important attribute of any successful graduate. Throughout the course from Year 1 onwards you will be offered a multitude of help and support to enhance your employability, find and secure placement opportunities and plan your career through regular workshops and events organised by the Careers and Employability Service and the course team.

This will be achieved by enhancing your employability skills in developmental sessions where you will, for example, practice job interview skills and CV writing skills. Extra-curricular activities will be offered to encourage you to further engage with the employability services of the university.

The course will focus on the development of practical know-how and broader transferable employability-related skills such as critical thinking, leadership, teamwork, communication, presentation, and report writing to ensure that you are prepared and ready to enter the world of work when you graduate.

Specific skills and knowledge required for students wishing to become professionals working with artificial intelligence are developed in core modules. The optional modules in both Level 5 and 6 provide opportunities for further specialisation for specific careers connected to artificial intelligence such as games development, robotics, and data science.

Level 5 work-based learning module Data Science Project Life Cycle is incorporated in the course in the form of a medium-scale project that begins with structuring an industry-related problem and progresses through project documentation and deployment. This module will provide you with an opportunity to work within a small team on a project that is informed by typical industry projects. In addition, the project-based module will allow you to put theory into practice and improve on transferable employability skills such as costing, project management, risk management, quality management, leadership, communication, time-planning and teamwork.

Many of the modules use scenario-based assessment to prepare you for working in a professional environment by utilizing real-world examples such as developing code and software with artificial intelligence and using techniques from machine learning to inform business decision-making.

After completing the second year of your study you will have the opportunity to take a year in industry and gain work experience (work placement). This will increase your chances of employability after graduation and further develop broader skill sets such as time management often championed by employers.

Furthermore, you can choose to undertake an international experience year as part of your degree at one of our partner overseas institutions such as Institute of Informatics (IIT), Sri Lanka or Westminster International University in Tashkent (WIUT). You will study and reside in the country of a host institution during the year. The content of your study is agreed upon through a Learning Agreement between you, the home institution and the School of Computer Science and Engineering.

The technical and interpersonal skills you gain from your course shall prepare you for one of the many roles using artificial intelligence. Examples of such roles are shown below:

- Software engineers design, develop, and maintain robust software systems while increasingly integrating cutting-edge AI capabilities to drive innovation. They incorporate machine learning models, natural language processing, and computer vision components into applications to enhance functionality and user experience. These professionals build scalable architectures that can seamlessly embed AI-driven features—such as predictive analytics, personalization, and automated decision-making—into everyday business applications. They also leverage AI-powered development tools to optimize code quality, automate testing, and streamline continuous integration/continuous deployment processes, ensuring that both the traditional and intelligent parts of the system work harmoniously.

- Data scientists harness the power of data to drive informed business decisions. Data scientists collect, process, and analyse large datasets using advanced statistical techniques and machine learning algorithms to extract actionable insights. They develop predictive models and create compelling visualizations that translate complex data into understandable trends and patterns.
- MLOps engineers bridge the gap between machine learning model development and production deployment, ensuring that AI solutions are scalable and robust. MLOps engineers work alongside data scientists and software engineers to automate and streamline the deployment process of machine learning models. They manage the underlying infrastructure, monitor model performance in real time, and handle version control and CI/CD pipelines specifically tailored for AI workflows.
- AI governance specialists oversee the ethical and responsible implementation of artificial intelligence across the organization. They develop, implement, and monitor governance frameworks and policies to ensure AI initiatives align with legal, regulatory, and ethical standards. Working closely with software engineers, data scientists, and business stakeholders, AI Governance Specialists assess risks such as bias, privacy, and security vulnerabilities, and set guidelines to mitigate these challenges. Their role spans the entire AI lifecycle—from initial strategy and development through to deployment and ongoing monitoring—ensuring transparency, accountability, and continuous compliance with evolving industry regulations.

Alternatively, you may wish to carry on to further study at Masters or Doctorate level. We offer many Master courses in data science, computer science, software engineering, and related areas. As a graduate of this course, you shall be capable and prepared for continuing your education at postgraduate level. We can offer you advice on this once you have completed your studies.

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:

- L4.01 Apply the underlying concepts associated with the logical, statistical, and computational foundations of artificial intelligence. (KU SS)
- L4.02 Apply core mathematical techniques to solve algorithmic problems in the context of artificial intelligence. (KU SS)
- L4.03 Apply computational tools to solve well-defined small-scale problems involving or concerning artificial intelligence. (KU SS)
- L4.04 Analyse logical and statistical information using appropriate tools and techniques from mathematics and statistics. (PPP KTS)
- L4.05 Demonstrate the ability to conceptualise, construct, and manage basic datasets, applying appropriate methodologies and tools. (PPP KTS)
- L4.06 Capture user requirements and devise AI-enhanced solutions to address them. (PPP KTS)
- L4.07 Describe the ethical and societal implications of artificial intelligence in connection to economic growth, reduced inequalities, and responsible production. (GA KTS)
- L4.08 Present structured arguments to effectively communicate the results of work undertaken. (GA KTS)
- L4.09 Work effectively as a team member, adhering to professional codes of conduct, while engaging in a dynamic, diverse, and inclusive (EDI) digital ecosystem. (GA PPP KTS)

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

- L5.01 Compare and contrast artificial intelligence strategies and their utility in appropriate application domains. (KU)
- L5.02 Implement the main machine learning paradigms in the context of appropriate application domains. (PPP

SS)

- L5.03 Plan and execute a medium-scale project involving data preparation and analysis. (SS)
- L5.04 Solve real-world problems using established methods for data preparation and algorithms from artificial intelligence. (PPP SS)
- L5.05 Use a range of established techniques to design, implement, and manage intelligent digital systems. (SS)
- L5.06 Communicate data- and AI- driven models and insights to support high-quality decision-making. (KU GA SS)
- L5.07 Identify organisational problems and adopt a holistic approach to their solution whilst mitigating failure risks. (GA PPP)
- L5.08 Demonstrate professional responsibility and ethical awareness in the development of quality AI-enhanced solutions within the context of economic growth, reduced inequalities, and responsible production. (GA PPP KTS)

Additional Year course learning outcomes: upon completion of Additional Year you will be able to:

- IEY.1 Enable personal development by devising a programme of international study that complements the content of the home degree programme and/or develops other interests. (GA PPP KTS)
- IEY.2 Appreciate the challenges and opportunities of studying/ working in an international context. (GA PPP KTS)
- IEY.3 Demonstrate an understanding of, and respect for, the cultural norms and differences of the host country at a societal level as part of an inclusive, global outlook. (GA PPP KTS)
- IPY.1 Experience commercial application of engineering knowhow and identify the factors affecting products and services in IT industry. (KU GA PPP KTS)
- IPY.2 Demonstrate the acquisition of a range of professional, practical, and key-transferrable skills relevant to the fields of computing. (KU GA PPP KTS)
- IPY.3 Take personal responsibility for directing your own learning and future career making the best use of the opportunities, experiences and people that were available to you during your placement year. (GA PPP KTS)
- IPY.4 Draw upon the diverse approaches, perspectives, knowledge and experience of a diverse workforce, treating all individuals with respect and recognising their contribution to the host organisation. (KU GA PPP KTS)

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

- L6.01 Critically analyse advanced AI methods, including generative algorithms, natural language processing and computer vision. (KU SS)
- L6.02 Design and implement AI systems using specialist frameworks and programming. (KU SS)
- L6.03 Frame appropriate research questions, and design innovative solutions, in the context of complex problems connected to artificial intelligence. (KU SS)
- L6.04 Critically analyse complex challenges that involve uncertainty and risk in the context of artificial intelligence. (GA PPP)
- L6.05 Propose ethical AI-driven solutions while assessing implications for economic growth, reduced inequalities, and responsible production. (GA PPP)
- L6.06 Facilitate automated decision-making by using AI algorithms to extract insights from and discover patterns in large-scale systems. (PPP SS)
- L6.07 Communicate AI-driven insights, solutions, and findings to both specialist and non-specialist audiences. (GA PPP)
- L6.08 Conduct independent research in artificial intelligence to produce a well-structured report demonstrating originality and depth of understanding. (GA PPP)

How will you learn?

Learning methods

The BSc Artificial Intelligence course uses a variety of teaching and assessment methods, to ensure that every student on the course is empowered to fulfil their full potential and achieve the best outcome they possibly can.

A principal aim of the course is to equip you for professional life, or higher study, relevant to the subject area. To this end

the course is organised into a collection of learning opportunities (modules) at various levels which are directly related to the aims and learning outcomes of the course. These modules are the building blocks of your course. Each module consists of learning activities which are delivered over a number of weeks. These learning activities are designed to help you achieve the knowledge and skills related to your subject area of artificial intelligence.

A fundamental principle underlying the learning process and teaching methods used on this course is “learning through practice”. That is, to learn and understand the specialist skills and techniques required, students need to acquire skills through doing. This approach applies to both practical skills, which you will learn through project work, as well as to analytical skills, which you will learn by applying taught principles to problem-solving tasks.

Much of the learning is achieved through active participation in taught interactive practical sessions. At the end of these sessions feedback will be given. For example, laboratories typically form formative assessment components where you will be given support to complete the tasks described. At the end of these formative sessions, you will be given written, verbal, qualitative feedback, or a mixture of these to help you understand how well you have performed the task and how to improve it. These formative sessions are used as part of a teaching delivery framework aimed at developing your confidence and abilities to undertake the final summative assessment components for a given module. In general lecturers will provide written and/or verbal feedback on students’ work throughout the course and feedback may be given individually or to the class collectively.

In order to develop general and transferable skills you will undertake a number of different activities such as group work that will help develop team working, collaborative and interpersonal skills and time management, You will be required to present and defend your work which will allow you to critically reflect on your learning and also allow you to develop your ability to concisely and clearly present your work.

How is Equality, Diversity, and Inclusivity (EDI) addressed in your course

The principles of Equality, Diversity and Inclusivity lay at the heart of the BSc Artificial Intelligence course. The course design ensures that you will have a learning experience that is flexible, respects diversity, encourages active participation and considers students' varying needs. For example, the course will encourage and enable you to tailor your learning according to your career, cultural identity and individual aspirations by allowing you to choose a final year project specialisation within the broad area of artificial intelligence, express your own unique evidenced based views of various societal and ethical issues, develop your own practical solutions to a given problem set and select option modules that will enable you to specialise or gain greater confidence in various application areas. Through this myriad of opportunities and choices the course will equip you with the technical and employability skills required to work in a changing and diverse world. Above all you should be reassured that the course team aims to eliminate all arbitrary barriers to your learning and to work with you to achieve your best outcome. The learning methods employed by the BSc Artificial Intelligence course are underpinned by three key principles. These are:

- Provision of a learning environment, both physical and digital, that is equitable, diverse and inclusive which allows you to learn flexibly with materials that will be available to you in a number of learning context and at any time such as mobile and home environments;
- Provision of a supportive and safe learning environment, based on mutual trust and respect, where students are empowered to act as partners in their transformative learning experiences;
- Provision of a forward-looking course curriculum that is work-place relevant, current and authentic.

Practically, you will see this working in the following ways, for example:

- Teaching materials are, where possible, designed to be inclusive for all.
- Where possible, the assignment of students to groups will be done in such a way as to ensure there is a mix of abilities, gender and cultures within the group.
- The active development of mutual trust and respect between students and between staff and students;
- The celebration and encouragement of diversity through the core delivery of the course and extra-curricular activities;
- Emphasis on skill-based learning using a learn-by-practice approach; use of current and industry standard tools chains and methodologies; industry supported projects such as the WBL project;
- The teaching of broader concerns, concepts and skills such as the environment and project management that values inclusivity and diversity;
- A curriculum that is current, global in outlook and targeted at application areas that are address real-world challenges.

Teaching methods

We tailor our teaching methods to both the diversity of the subject matter as well as the diversity of our students' to ensure that we maximise the effectiveness of our teaching. We aim to make our students ready for employment by exposing them to tools and techniques relevant to and practiced by industry.

The range of teaching methods you will experience will include:

- Lectures, practical classes, and workshop sessions
- Projects (small groups, large groups and individual)
- Laboratories and computer-aided formative assessments including online quizzes
- Problem sheets, investigations, and design problems
- Individual supervision
- Online learning material

Lectures are used to support your learning. Within the lecture sessions you will be introduced to fundamentals, concepts and development methodologies and strategies. Lectures also have the advantage of showing you how different topics and facts interrelate with each other. Within lectures there will be interactive and participatory work to help monitor and encourage active engagement.

Practical classes are used to provide a firm grounding in the theory, methods and tools used for a given module. Within theses practical classes you will be encouraged to collaborate and/or work in groups. Typically, these sessions will help you develop skills and understanding of how to apply knowledge covered in lectures to solve real problems. For example, you may be given a task to use artificial intelligence for a particular problem. During the practical classes the tutors will monitor your progress and provide feedback and guidance on your work.

Practical workshops maybe led by or informed by industry experts (alongside academic staff), these maybe onsite or online. In these sessions you will work alone or in groups, undertaking industry focused work or will be guided on how to complete a given milestone for a more long-term element of work such as a group project.

Laboratories are effectively a practical classes session. In these laboratory sessions you will be using software tools to carry out practical tasks to solve real-world problems. Whilst in these sessions you will be actively encouraged to observe laboratory ethics and best practices for handling data. In some instances, virtual or simulation tools maybe used within a laboratory to enable greater accessibility and flexibility by allowing work to be completed remotely as required.

To further support remote learning some modules will employ the use of online quizzes to test your understanding and provide automatic feedback. The key purpose of such online quizzes is to allow you to practice knowledge at home and to provide you with an understanding of how successful your learning has been. It also allows tutors to diagnostically verify your understanding and tailor teaching in order to address any gaps. Through this feedback you can identify where to focus your learning effort.

Throughout the course, authentic assessment is used to help you practice skills required by industry. This includes investigative research-based problems and more practical project led problems. Within the course you will be asked to produce solutions and artefacts based on requirements for a typical real-world scenarios and products.

The final year project module is designed to unify and integrate skills and knowledge gained in the taught learning modules. The final project module provides the opportunity to put into practice and extend what has been learnt to solve a broader more complex and significant engineering problem. To support you in successfully completing the project, you will be allocated a supervisor who is a member of academic staff.

To increase accessibility of the learning material and ensure that a diverse range of learners can participate on the course each module will provide the following online support: access to teaching materials, online reading lists, discussion boards, virtual study rooms for students to collaborate and where applicable, space for individual and group online meeting. Individual support for each module will be available from the modules teaching staff.

At key stages in your academic studies, the decisions you will need to make such as choice of option modules and choice of individual project will be guided when required by your personal tutor. Students will also be academically supported by module leaders and the course leader during their studies.

The teaching methods described above are more effective when coupled with independent study time where you take more control of your own learning. To help enable you to maximise the benefits of self-study we introduce, explain to you, and develop your understanding of concepts and skill sets required for continual professional development (CPD). This is achieved using group-based activities, a framework of taught content, extracurricular events and assessment styles that encourage the planning and reporting of material that is self-learnt.

Assessment methods

Assessments and feedback are an integral part of the learning process and enable you to gauge your progress in relation to learning outcomes, reflect on what you have learnt, identify areas in which you are strong and areas in which you need to improve and help you make informed decisions on the pace and focus of your own independent learning. The guiding principles of assessment design and its associated feedback within the BSc Artificial Intelligence course are Purpose, Progression and Personalisation.

Purpose:

- assessment is authentic, meaning that it provides the chance to apply knowledge and competencies required within industry to solve real-world problems;
- the assessment method(s) used are clearly relevant to the module's learning outcomes;
- consideration is given to the amount of effort and time required to complete the task(s) and to maintain a balanced assessment load.

Progression:

- the choice of assessment method(s) employed provides an opportunity for new learning and contributes to the learning process;
- assessments are clearly related to the overall pattern of the course, they are developmental and not unnecessarily repetitive;
- less familiar types of assessments are prepared for using formative work such as practice laboratories.

Personalisation:

- you are able to make the assessment your own through design and implementation choices;
- timely feedback is given for all assessments;
- guidance on how you can improve your performance in the future is given, either individually or as part of a group.

As well as ensuring that students have met the learning outcomes per module, assessment will, where possible and appropriate, be:

- demonstrative (helping students to learn – evaluation of current knowledge);
- rigorous (for correct and efficient solutions);
- challenging (requiring deep understanding and analytical ability);
- workplace relevant (tasks directly relating to industry and skills valued by employers);

On the BSc Artificial Intelligence course all assessments and feedback mechanisms are designed to form part of the learning experience and will take a variety of forms. The complexity and style of assessment for example will range from small tasks that might be completed within a practical session to more complex and larger tasks which might be completed over an entire semester within a group. Some assessments are designed to be completed individually whereas other assessments may require students to work as part of a team, emulating as closely as possible the environment students will face in a professional setting.

Each module has both formative and summative assessment types. Formative assessment does not contribute to your overall grades. Formative assessment helps you establish where you are in your learning journey, what you have learnt so far, and where you may have to improve. Formative assessment can be used diagnostically by tutors to enable them to dynamically target their teaching to address any gaps in knowledge. Formative assessment can take a form of test, quizzes, reflective sessions, group activities. All summative assessments that contribute to final grades will be assessed against clear assessment criteria stated in module descriptors. These assessment criteria are directly linked to the modules learning outcomes, and they will be used to evaluate the submitted work and to produce written feedback. BSc Artificial Intelligence course provides inclusive, engaging and authentic assessment and feedback strategies to help provide equal opportunities, cater for different learning styles and to best support the student to successfully complete the course.

Examples of Summative assessments used in the course	
Practical Coursework / Practical based portfolio	You will be expected to complete lab tasks following lab guidelines and either answer specific questions about the labs (Coursework) or analyse your results based on a given scenario (Portfolio).

Group Presentation with/without Group Coursework	You will be working in a group, typically of 3 to 4 members, investigating a specific problem, or research a specific topic. You will be expected to give a presentation to demonstrate your group work. This is usually followed by a brief discussion and questions and answers with your peers and instructor. Generally, you will need to discuss in detail what the group has achieved, and how, and also how the work and the team member responsibilities were distributed.
ICT/Exam (exam conditions)	You will be expected to sit an in-class test/exam under timed conditions. Typically, these in-class tests/exams can be a closed-book or open-book where you will have access to certain materials. This type of assessment is used to assess your understanding of the fundamentals, theory, and paradigms. Tests/exams help ensure you can demonstrate that you have developed a deep understanding of the subject which enables you to cope with complex problems that require deep insight in order to provide secure and optimal solutions. This time-constrained assessment is authentic in that it verifies that you will have sufficient depth and coverage of knowledge in order to successfully solve typical time-critical artificial intelligence problems. It also helps you prepare for other professional exams and training.
Lab-based practical	You will be expected to complete a specific lab task in the lab. This will be in most cases a timed activity where you are given instructions and a set of tasks to complete.
Coursework Case study	You will be required to work on a scenario that illustrates a specific problem. You will have to study this problem and assess it and take decisions or make recommendations. This will require research and analysis and potentially implementation in order for you to produce an assessment and recommendation. This type of assessment is used to assess your understanding of topics related to your module and how you can apply your knowledge to a given scenario.
Research essay	You will be expected to conduct in-depth research on a specific topic. This involves examining various resources, concepts and ideas about the topic you are researching.
Oral Assessment and/or Individual Presentation	You will be expected to present in a form of either a presentation or discussion on a given topic. This could also be a part of your dissertation where you will be expected to sit a viva voce assessment to defend your work.
Artefact	You will be expected to produce a product such as code implementation or a document containing a set of recommendation and guidelines that demonstrate your ability to innovate to provide solutions to a given problem.
Report	You will be expected to produce a document that outlines activities you have undertaken. This can be either for lab work that you have completed, a work experience and work placement that you undertook or your reflective comments about a specific topic.
Dissertation	This will probably be the biggest document you will have to produce for your entire studies. You will be expected to produce an extended piece of written work, that contains substantial evidence of research, investigations, and possibly implementation, all related to a specific problem you have chosen. Dissertations are the result of your independent work, carried out under the guidance of a supervisor.

Graduate Attribute	Evident in Course Outcomes
Critical and creative thinker	IPY.1, IPY.3, L4.01, L4.02, L4.03, L4.04, L4.05, L4.06, L5.01, L5.02, L5.03, L5.04, L5.05, L5.07, L6.01, L6.03, L6.06, L6.08
Literate and effective communicator	IEY.1, L4.01, L4.05, L4.06, L4.08, L5.01, L5.06, L6.01, L6.07, L6.08
Entrepreneurial	IPY.1, IPY.2, IPY.3, L4.07, L5.03, L5.04, L5.07, L5.08, L6.02, L6.04, L6.05, L6.06
Global in outlook and engaged in communities	IEY.1, IEY.2, IEY.3, IPY.4, L4.07, L4.09, L5.08, L6.01, L6.02, L6.03, L6.04, L6.05
Socially, ethically and environmentally aware	IEY.2, IEY.3, IPY.4, L4.07, L4.09, L5.01, L5.02, L5.03, L5.04, L5.06, L5.07, L5.08, L6.02, L6.03, L6.04, L6.05, L6.06

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
4COSC017W	Applications of AI and Prompt Engineering	Core	20	10
4BUIS015W	Database Technologies	Core	20	10
4COSC018W	Foundations of AI	Core	20	10
4COSC019W	Human Centred AI and Ethics	Core	20	10
4COSC016W	Mathematics for AI	Core	20	10
4COSC001W	Software Development I	Core	20	10

Level 5

Module Code	Module Title	Status	UK credit	ECTS
5COSC037W	Applied Deep Learning	Core	20	10
5DATA004W	Data Science Project Lifecycle	Core	20	10
5COSC038W	Game Theory and Reinforcement Learning	Core	20	10
5DATA002W	Machine Learning and Data Mining	Core	20	10
5ELEN018W	Robotic Principles	Core	20	10
5DATA005W	Data Engineering	Option	20	10
5DATA006W	Data Visualisation and Communication	Option	20	10
5CCGD011W	Game Engine Architecture	Option	20	10
		Elective	20	10

Additional Year

Module Code	Module Title	Status	UK credit	ECTS
5COSC028W	Computer Science and Engineering Industrial Placement	Option	120	60
5COSC027W	Computer Science and Engineering International Year	Option	120	60

Level 6

Module Code	Module Title	Status	UK credit	ECTS
6COSC031W	Advanced Topics in Deep Learning	Core	20	10
6COSC032W	AI Final Year Project	Core	40	20
6COSC033W	Applications of Large Language Models	Core	20	10
6COSC034W	Secure Scalable AI and Cloud Computing	Core	20	10
6ELEN018W	Applied Robotics	Option	20	10
6DATA006W	Big Data Analytics	Option	20	10
6BUIS024W	Business Innovation with Artificial Intelligence	Option	20	10
6CCGD007W	Game AI	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 has been designed with reference to:

- QAA Subject Benchmark for Computing Engineering Council
- Accreditation of Higher Education Programmes (AHEP), fourth edition
- QAA Guidelines for Preparing Programme Specifications
- SEEC Credit Level Descriptors for Further and Higher Education

The British Computer Society (BCS) professional accreditation ensures independent validation that the course meets high standards set by the profession. It also benchmarks the course against those of other institutions both nationally and internationally and supports the continued improvement of the course, highlighting areas of best practice across institutions. For you as a student being on an accredited course provides a pathway to professional registrations such as Chartered IT Professional (CITP), Chartered or Incorporated Engineer (CEng/IEng) and Registered IT Technician (RITTech).

BSc Artificial Intelligence is intended to fulfil the educational requirements of BCS for the CITP and partial CEng. Due to the 5-year accreditation timeline the course will be considered for the accreditation in 2027. The accreditation will be backdated to include the first intake from September 2026. On successful completion of this process your course will become accredited in 2027.

Course management

BSc Artificial Intelligences course is under the School of Computer Science and Engineering and the management structure supporting the course is as follows:

- the Course Leader is responsible for day to day running and overall management of the course and development of the curriculum.
- the Head of School holds academic responsibility for the course and other courses within the School.
- the 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. Students1 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.