UNIVERSITY OF LIVERPOOL

BSc (Hons)

Artificial Intelligence

UCAS code G702

Entry requirements	Study mode	Duration	
A level: AAA	Full-time	3 years	Apply by: **14 January 2026** Starts on: **28 September 2026**

About this course

Artificial Intelligence (AI) is transforming the way we live, work and interact with the world. Our specialist BSc programme is designed to maximise future employment opportunities and equip you with the knowledge and skills needed to thrive in this fast-evolving field. Gain a thorough grounding in computer science and an extensive knowledge of the AI theories, practices and skills that are shaping our future.

Introduction

Artificial Intelligence is one of the most important and cutting-edge sub-fields in Computer Science. It's transforming industries from technology, robotics and finance to healthcare, creative and third sectors.

Shaped by our world-leading research in data science, machine learning, robotics and AI+, on this programme you'll learn the key facts, principles, and concepts of computer science, while developing specialist expertise in AI theories, methods, and applications. You'll develop knowledge of modern languages, tools and practices used in the specification, design, implementation and evaluation of both traditional and AI related computer-based systems.

You'll also explore the professional, ethical and legal considerations that shape the responsible use of technology. Working individually and as part of a development team, you'll have the opportunity to design and construct both traditional and AI

related computer systems, while refining transferable skills such as information retrieval, project management, and independent learning.

Our goal is to develop highly-employable, innovative and responsible graduates. You'll graduate with a wide range of career opportunities and will be equipped with the skills, knowledge and experience to make real-world, positive impact.

What you'll learn

- Knowledge and basic understanding of the essential facts, concepts, principles and theories relating to Computer Science in general and AI in particular
- How to recognise and critically analyse criteria and specifications appropriate to problems to be solved by computer, and how to plan innovative and AI strategies for their solution
- An understanding of the appropriate theory, practices, languages and tools that may be deployed for the specification, design, implementation and evaluation of both traditional and AI related computer-based systems
- An understanding of the professional, moral and ethical issues involved in the exploitation of computer technology, and the associated professional, ethical and legal practices
- How to specify, design and construct simple traditional and AI related computer-based systems
- The ability to participate in a development team, with an awareness of the different roles within a team and different ways of organising teams
- Effective information retrieval skills
- The ability to manage your own learning and development, and time management and organisational skills
- An appreciation of Computer Science and AI related practice as an emerging and developing discipline.

Accreditation

This programme is pending accreditation by BCS, The Chartered Institute for IT, the leading professional body for those working in IT. It's continually updated to reflect new technologies and trends.

Back to top

Course content

Discover what you'll learn, what you'll study, and how you'll be taught and assessed.

Year one

Year One is all about building your foundational knowledge. You'll study either Introduction to Programming (COMP101) or Programming Language Paradigms (COMP105), depending on prior programming experience.

Modules

Compulsory modules	Credits
DESIGNING SYSTEMS FOR THE DIGITAL SOCIETY (COMP107)	15
FOUNDATIONS OF COMPUTER SCIENCE (COMP109)	15
INTRODUCTION TO ARTIFICIAL INTELLIGENCE (COMP111)	15
INTRODUCTION TO PROGRAMMING (COMP101)	15
PROGRAMMING LANGUAGE PARADIGMS (COMP105)	15
ANALYTIC TECHNIQUES FOR COMPUTER SCIENCE (COMP116)	15
COMPUTER SYSTEMS (COMP124)	15
DATA STRUCTURES AND ALGORITHMS (COMP108)	15
OBJECT-ORIENTED PROGRAMMING (COMP122)	15

Programme details and modules listed are illustrative only and subject to change.

Year two

In Year Two you have a list of optional modules to choose from.

You must select either Introduction to Data Science (COMP229) in Semester One and/or Principles of Computer Games Design and Implementation (COMP222) in Semester Two. Both modules may be selected.

Modules

Compulsory modules	Credits
ADVANCED ARTIFICIAL INTELLIGENCE (COMP219)	15
DATABASE DEVELOPMENT (COMP207)	15
SOFTWARE ENGINEERING I (COMP201)	15
GROUP SOFTWARE PROJECT (COMP208)	15
COMPLEXITY OF ALGORITHMS (COMP202)	15

Optional modules	Credits
INTRODUCTION TO DATA SCIENCE (COMP229)	15
INTRODUCTION TO THEORY OF COMPUTATION (COMP218)	15
COMPUTER NETWORKS (COMP211)	15
APP DEVELOPMENT (COMP228)	15
PLANNING YOUR CAREER (COMP221)	7.5

Optional modules	Credits
PROGRAMMING LANGUAGE PARADIGMS (COMP105)	15
PRINCIPLES OF COMPUTER GAMES DESIGN AND IMPLEMENTATION (COMP222)	15
BECOMING ENTREPRENEURIAL (ULMS254)	15
COMPUTER AIDED SOFTWARE DEVELOPMENT (COMP285)	7.5
COMPUTER-BASED TRADING IN FINANCIAL MARKETS (COMP226)	15
CYBER SECURITY (COMP232)	15
DISTRIBUTED SYSTEMS (COMP212)	15
PRINCIPLES OF C AND MEMORY MANAGEMENT (COMP281)	7.5
SCRIPTING LANGUAGES (COMP284)	7.5
SOFTWARE DEVELOPMENT TOOLS (COMP220)	15
THE C++ PROGRAMMING LANGUAGE (COMP282)	7.5

Programme details and modules listed are illustrative only and subject to change.

Year three

In Year Three you'll complete your Computer Science Project (COMP390) and choose from the list of optional modules.

If you wish to take Communicating Computer Science (COMP335), you'll undergo an interview with the module co-ordinator before being selected.

Cyberpsychology: Human-Computer Interaction (PSYC327) is an optional module managed by the Department of Psychology. This module has a capacity limit so

spaces will be allocated on a first come, first serve basis.

Modules

Compulsory modules	Credits
HONOURS YEAR COMPUTER SCIENCE PROJECT (COMP390)	30

Optional modules	Credits
QUANTUM COMPUTING AND SECURITY (COMP345)	15
AUTONOMOUS MOBILE ROBOTICS (COMP329)	15
BIG DATA ANALYTICS (COMP336)	15
BIOCOMPUTATION (COMP305)	15
COMPUTER VISION (COMP338)	15
EFFICIENT SEQUENTIAL ALGORITHMS (COMP309)	15
IMAGE PROCESSING (ELEC319)	7.5
INTRODUCTION TO COMPUTATIONAL GAME THEORY (COMP323)	15
KNOWLEDGE REPRESENTATION AND REASONING (COMP304)	15
OPTIMISATION (COMP331)	15
SOFTWARE ENGINEERING II (COMP319)	15
MUSIC INTELLIGENCE (COMP346)	15

Optional modules	Credits
ADVANCED TOPICS IN COMPUTER GAME DEVELOPMENT (COMP342)	15
CLOUD COMPUTING FOR E-COMMERCE (COMP315)	15
NETWORK MINING AND ANALYSIS (COMP324)	15
COMPUTATIONAL GAME THEORY AND MECHANISM DESIGN (COMP326)	15
COMPUTER FORENSICS (COMP343)	15
DATA MINING AND VISUALISATION (COMP337)	15
FORMAL METHODS (COMP313)	15
HIGH PERFORMANCE COMPUTING (COMP328)	15
MULTI-AGENT SYSTEMS (COMP310)	15
NEURAL NETWORKS (ELEC320)	7.5
ONTOLOGIES AND SEMANTIC WEB (COMP318)	15
ROBOT PERCEPTION AND MANIPULATION (COMP341)	15
COMMUNICATING COMPUTER SCIENCE (COMP335)	15

Programme details and modules listed are illustrative only and subject to change.

Teaching and assessment

How you'll learn

Teaching is a mix of formal lectures, small group tutorials and supervised laboratory-based practical sessions. Students also undertake individual and

group projects. Key problem solving skills and employability skills, like presentation and teamwork skills, are developed throughout the programme.

How you're assessed

The main modes of assessment are through a combination of coursework and examination, but depending on the modules taken you may encounter project work, presentations (individual or group), and specific tests/tasks focused on solidifying learning outcomes.

Liverpool Hallmarks

We have a distinctive approach to education, the Liverpool Curriculum Framework, which focuses on research-connected teaching, active learning, and authentic assessment to ensure our students graduate as digitally fluent and confident global citizens.

The Liverpool Curriculum framework sets out our distinctive approach to education. Our teaching staff support our students to develop academic knowledge, skills, and understanding alongside our **graduate attributes**:

- Digital fluency
- Confidence
- Global citizenship

Our curriculum is characterised by the three **Liverpool Hallmarks**:

- Research-connected teaching
- Active learning
- Authentic assessment

All this is underpinned by our core value of **inclusivity** and commitment to providing a curriculum that is accessible to all students.

Back to top

Careers and employability

There's a growing demand for AI professionals in most sectors. Graduating with an Artificial Intelligence BSc degree from Liverpool will equip you with the knowledge, skills and confidence to explore a vast range of job opportunities across the globe, or to pursue further education in this field.

The University of Liverpool is one of the most targeted universities by top employers, according to The Graduate Market 2024, High Fliers Research. This means our graduates are in demand for employment and sought after by top employers worldwide.

Graduates find works in roles in fields not limited to:

- Artificial Intelligence Engineer
- Data Analyst
- Senior Data Scientist
- Deep Learning Engineer
- Machine Learning Engineer
- Transcriptionist
- Cloud AI Engineer
- Logistic Engineer
- Cybersecurity Specialist
- Business Intelligence Developer
- Robotics Engineer
- AI Research Scientist
- Big Data Engineer
- Technology Risk Manager.

Recent employers of our graduates include:

- BAE Systems
- BT
- Guardian Media Group
- Royal Bank of Scotland
- Siemens
- Unilever.

Back to top

Fees and funding

Your tuition fees, funding your studies, and other costs to consider.

Tuition fees

UK fees (applies to Channel Islands, Isle of Man and Republic of Ireland)

Full-time place, per year - £9,790
Year in industry fee - £1,905
Year abroad fee - £1,385 (applies to year in China)

International fees

Full-time place, per year - £32,000
Year in industry fee - £1,905
Year abroad fee - £16,000 (applies to year in China)

The UK and international full-time fees shown are for the academic year 2026/27 (UK fees are subject to Parliamentary approval). UK year abroad and year in industry fees and international year in industry fees shown are for entry 2025, as 2026/27 fees have yet to be confirmed. Please be advised that tuition fees may increase each year for both UK and international students. For UK students, this will be subject to the government's regulated fee limits.

Tuition fees cover the cost of your teaching and assessment, operating facilities such as libraries, IT equipment, and access to academic and personal support. Learn more about paying for your studies.

Additional costs

We understand that budgeting for your time at university is important, and we want to make sure you understand any course-related costs that are not covered by your tuition fee. This could include buying a laptop, books, or stationery.

Find out more about the additional study costs that may apply to this course.

Back to top

Entry requirements

The qualifications and exam results you'll need to apply for this course.

A levels

AAA
including A level in Maths or Computer Science

Applicants with the Extended Project Qualification (EPQ) are eligible for a reduction in grade requirements. For this course, the offer is **AAB** with **A** in the EPQ including Mathematics or Computer Science.

T levels

T levels are not currently accepted.

GCSE

Further Education requirements, in addition to Level 3 GCSE qualifications, must be met. GCSE grade minimum 4/C in English and 4/C in Mathematics.

Subject requirements

A level Mathematics or Computer Science is required. For applicants from England: For science A levels that include the separately graded practical endorsement, a "Pass" is required.

BTEC Level 3 National Extended Certificate

Acceptable at grade Distinction* (any subject) alongside AA at A level. A Levels must include Mathematics or Computer Science.

BTEC Level 3 Diploma

BTEC Level 3 National Diploma: Acceptable at grade Distinction* Distinction (any subject) alongside A at A level (including Mathematics or Computer Science).

BTEC Level 3 National Extended Diploma

BTEC Level 3 National Extended Diploma: D*D*D* plus A level Maths or Computer Science. If A level Maths isn't taken, require GCSE Maths Grade A (7) or above.

International Baccalaureate

36 points overall and no score less than 4 and including 6 in HL Mathematics/Computer Science, or pass the IB Diploma with 6,6,6 in three Higher Level subjects (including HL Mathematics/Computer Science).

Irish Leaving Certificate

H1,H1,H2,H2,H2, H2 including H2 in Higher Maths or Computer Science. We also require a minimum of H6 in Higher English, or O3 in Ordinary English and Ordinary Maths (plus indicative Maths test).

Scottish Higher/Advanced Higher

Scottish Advanced Higher acceptable on the same basis as A levels

---

Welsh Baccalaureate Advanced

A in the Welsh Baccalaureate, plus AA at A level (including Mathematics or Computer Science).

Cambridge Pre-U Diploma

Principal subjects acceptable in lieu of A levels. D3 in Cambridge Pre U Principal Subject is accepted as equivalent to A-Level grade A M2 in Cambridge Pre U Principal Subject is accepted as equivalent to A-Level grade B Global Perspectives and Short Courses are not accepted.

Access

Considered if taking a relevant subject. Pass Access to HE Diploma in a relevant subject with 45 Level 3 credits, with 39 at Distinction (including 15 credits Mathematical or Computer Science credits) and 6 at Merit.

International qualifications

Select your country or region to view specific entry requirements.

Many countries have a different education system to that of the UK, meaning your qualifications may not meet our direct entry requirements. Although there is no direct Foundation Certificate route to this course, completing a Foundation Certificate, such as that offered by the University of Liverpool International College, can guarantee you a place on a number of similar courses which may interest you.

English language requirements

You'll need to demonstrate competence in the use of English language, unless you're from a majority English speaking country.

We accept a variety of international language tests and country-specific qualifications.

International applicants who do not meet the minimum required standard of English language can complete one of our Pre-Sessional English courses to achieve the required level.

IELTS

6.0 overall, with no component below 5.5

TOEFL iBT

78 overall, with minimum scores of listening 17, writing 17, reading 17 and speaking 19. TOEFL Home Edition not accepted.

Duolingo English Test

115 overall, with speaking, reading and writing not less than 105, and listening not below 100

Pearson PTE Academic

59 overall, with no component below 59

LanguageCert Academic

65 overall, with no skill below 60

Cambridge IGCSE First Language English 0500

Grade C overall, with a minimum of grade 2 in speaking and listening. Speaking and listening must be separately endorsed on the certificate.

Cambridge IGCSE First Language English 0990

Grade 4 overall, with Merit in speaking and listening

Cambridge IGCSE Second Language English 0510/0511

0510: Grade C overall, with a minimum of grade 2 in speaking. Speaking must be separately endorsed on the certificate. 0511: Grade C overall.

Cambridge IGCSE Second Language English 0993/0991

0993: Grade 5 overall, with a minimum of grade 2 in speaking. Speaking must be separately endorsed on the certificate. 0991: Grade 5 overall.

Cambridge ESOL Level 2/3 Advanced

169 overall, with no paper below 162

Pre-sessional English

Do you need to complete a Pre-sessional English course to meet the English language requirements for this course?

The length of Pre-sessional English course you'll need to take depends on your current level of English language ability.

Pre-sessional English in detail

If you don't meet our English language requirements, we can use your most recent IELTS score, or the equivalent score in selected other English language tests, to determine the length of Pre-sessional English course you require.

Use the table below to check the course length you're likely to require for your current English language ability and see whether the course is available on campus or online.

Your most recent IELTS score	Pre-sessional English course length	On campus or online
5.5 overall, with no component below 5.5	6 weeks	On campus
5.5 overall, with no component below 5.0	10 weeks	On campus and online options available
5.0 overall, with no component below 5.0	12 weeks	On campus and online options available
5.0 overall, with no component below 4.5	20 weeks	On campus
4.5 overall, with no component below 4.5	30 weeks	On campus
4.0 overall, with no component below 4.0	40 weeks	On campus

If you've completed an alternative English language test to IELTS, we may be able to use this to assess your English language ability and determine the Pre-sessional English course length you require.

Please see our guide to Pre-sessional English entry requirements for IELTS 6.0 overall, with no component below 5.5, for further details.

Alternative entry requirements

- If your qualification isn't listed here, or you're taking a combination of qualifications, contact us for advice
- Applications from mature students are welcome.

Back to top

Generated: 4 Dec 2025, 18:26