



MSc in Computer Science - Artificial Intelligence

ONLINE • PART-TIME • NFQ LEVEL 9

Unleash your unstoppable potential, with Technology Ireland ICT Skillnet



Technology is ever-changing. No matter what stage you are at in business or your career, there is always more to learn.

At Technology Ireland ICT Skillnet, our vision is to create **progressive futures**, helping organisations to **transform at scale** and individuals to **develop a competitive edge**, through the **power of learning**.

For almost two decades, Ireland's leading technology companies have trusted us to build the critical skills needed to thrive in a rapidly evolving market.

Let us connect you to the infinite possibilities shaping the world of tomorrow.

Supercharged skills

Each of our programmes are designed, developed, and validated by specialists from academia and industry, working together, with a constant focus on:

1 **Creating opportunity and momentum** for experienced professionals and those starting out or transitioning career.

2 Delivering learning solutions in a way that **balances work and study**.

3 Providing practical skills, along with the theoretical, allowing businesses to **navigate new frontiers in the world of tech**.



6,000+

companies supported



14,000+

learners upskilled



30+

professional programmes



Online, blended, and
in-company training supports



Government-subsidised
programme fees, up to 100%

MSc in Computer Science - Artificial Intelligence

Accelerate innovation through AI

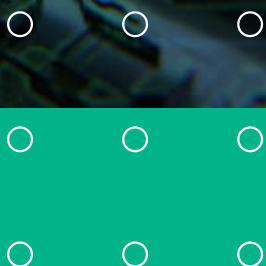
Artificial Intelligence (AI) has been at the forefront of computer science research for over 50 years. A confluence of recent breakthroughs in both hardware capability and insights into algorithm design have made the early promise of intelligent machines a reality.



AI is now set to be the key source of transformation, disruption and competitive advantage in today's fast changing economy, with deep AI skills soon to be required in almost every industry across the globe. Business leaders are looking for expert specialists to guide them into an unknown future.

This innovative 2 year online and part-time MSc in Computer Science – Artificial Intelligence, delivered in partnership with the School of Computer Science at University of Galway, will propel your expertise to new heights, elevate your career prospects, and give you the confidence to make a significant impact by harnessing the real value of AI.

Take the next step in your AI journey with Technology Ireland ICT Skillnet and equip yourself with the tools and techniques essential for mastering AI's complexities.





At a glance

Start Date

September 2027

Award

Level 9 NFQ (90 ECTS)

Delivery

Online

Duration

2 years part-time

Fees

Please enquire for 2027 course fees

Programme Partner

School of Computer Science
at University of Galway



Programme structure

This is a distinctive programme taught by an internationally renowned, interdisciplinary team of experts in the field of AI, several of whom are researchers at the Insight Centre for Data Analytics at University of Galway.

The programme is taught over 2 years and is delivered completely online using state-of-the-art technologies and techniques to support the virtual classroom.

Lectures are all online and asynchronous, allowing you to learn on your own schedule. Some modules may use synchronous live-streams or online drop-in sessions, but they are optional and will be recorded for those who cannot attend.

Students are required to attend campus for examinations at the end of each semester.

This is an intensive and technically rigorous programme. The estimated workload is 20 hours per week during the teaching semesters (September–December and January–April). Each semester is 12 weeks plus a study week and exam period.



AI could contribute up to \$15.7 trillion to the global economy in 2030, more than the current output of China and India combined.





Who is this programme for

This master's is targeted at people currently working in industry who wish to significantly deepen their computing skills through a specialisation in Artificial Intelligence.

Ideal candidates for the course are:

- **Information technology specialists** looking to specialise in AI applications
- **Software engineers and data analysts/architects** interested in expanding their skill set
- **Computer scientists** transitioning into the field of artificial intelligence
- **Technology consultants** eager to broaden their expertise in AI development
- **Graduates in related fields** who are looking to progress into an advanced AI role

Semester and module breakdown

The MSc in Computer Science – Artificial Intelligence is a 90-ECTS course with 3 main elements:

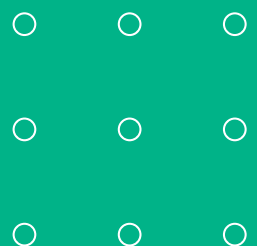
- **Core foundational modules (30 ECTS)**
- **Optional advanced modules (30 ECTS / individual modules subject to availability)**
- **A substantial capstone project (30 ECTS)**

Year 1 – Semester 1

- **Principles of Machine Learning (5 ECTS / Core)**
- **Programming and Tools for Artificial Intelligence (5 ECTS / Core)**
- **Statistics for Artificial Intelligence (5 ECTS / Optional)**

Year 1 – Semester 2

- **Research Skills in Artificial Intelligence (5 ECTS / Core)**
- **Data Visualisation (5 ECTS / Core)**
- **Tools and Techniques for Large Scale Data Analytics (5 ECTS / Optional)**



Year 2 – Semester 1

- **Artificial Intelligence and Ethics** (5 ECTS / Core)
- **Introduction to Natural Language Processing** (5 ECTS / Core)
- **Information Retrieval** (5 ECTS / Optional)

Year 2 – Semester 2

- **Deep Learning** (5 ECTS / Optional)
- **High Performance Computing and Parallel Programming** (5 ECTS / Optional)
- **Agents, Multi-Agent Systems and Reinforcement Learning** (5 ECTS / Optional)
- **Knowledge Representation** (5 ECTS / Optional)

Capstone Project (30 ECTS)

From Year 1 – Semester 2 onwards, students will work on industry-focused projects and submit them in August of Year 2. Projects may have a research or applied focus.



Outcomes for you

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-
-
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This innovative online MSc in Artificial Intelligence will equip the student with state-of-the-art knowledge and practical skills that are increasingly sought after in industry today.

Upon completion of this course, you will have an advanced understanding of how to:

Develop a strong foundation in theoretical and practical aspects of artificial intelligence.

Understand and apply advanced machine learning algorithms and techniques for data analysis and pattern recognition.

Undertake independent research projects and contribute to the advancement of AI knowledge and technology.

Critically evaluate and implement cutting-edge AI technologies in various domains.

Solve complex problems in AI with newly acquired skills in natural language processing, computer vision, and deep learning.

Understand the ethical implications and societal impacts of AI technologies and develop responsible AI solutions.



Award

Participants will receive a parchment for the Master of Science in Computer Science – Artificial Intelligence (Online) upon successful completion of the programme.



Assessment

End-of-semester exams are traditional on-campus written exams. Semester 1 exams take place in December, and Semester 2 exams take place in April/May.

Academic eligibility



Candidates must have a strong 2.2 level 8 computer science degree or a strong 2.2 level 8 science / engineering degree that provides extensive training in computing.

Applicants who do not meet the formal entry requirements may still be considered through a combination of academic qualifications and relevant work experience as detailed in the Applicant's CV and application. A formal Recognition of Prior Learning application is not required.

Funding eligibility

The fees for this programme are part-funded by Technology Ireland ICT Skillnet. Please enquire for 2027 subsidised course fees.

Applicants must be employed by, or operating as, an eligible business engaged in economic activity in the Republic of Ireland. This includes private companies, sole traders, commercial social enterprises and eligible commercial semi-state organisations. Additional eligibility verification may be required for certain organisation types to avail of grant-aided fees.

Applicants who do not meet our funding criteria may in some cases be able to apply and pay the full fee per year, if there are available places.

Please speak with our programme team to learn more about the availability of funding.

info@ictskillnet.ie



I found this master's very interesting. The modules have a wide scope in AI and introduced me to a wide variety of topics related to AI, like statistics, different techniques to handle large scale data, an excellent Python module, as well as the different topics on machine learning. All the modules had practical assignments and the majority of them were very enjoyable and challenging. This degree really opened my eyes to a lot of aspects related to AI and enabled me to dig deeper in the field that I was most interested in.

**Mary Raymond, Lead Software Engineer,
Valeo Vision systems**

Programme delivered in partnership with:



OLLSCOIL NA GAILLIMHE
UNIVERSITY OF GALWAY

This programme is delivered with the School of Computer Science, University of Galway. University of Galway is an award-winning university in the heart of Galway city.

Ranked among the top 2% of universities in the world, courses include business, law, medicine, arts, science, engineering, and more, all built on a thriving campus centred around a strong community.

University of Galway has grown massively in size and reputation over the past 175 years, with a student population today of over 18,000.



Ready to grow your career in Artificial Intelligence?

Our team is ready to answer any questions you might have regarding this programme. Send an email to info@ictskillnet.ie or use the enquiry form on our programme page and one of our programme leads will be delighted to assist you.

Successful applicants will be required to complete registration details both for Technology Ireland ICT Skillnet and for University of Galway. Programme participants will become registered students of University of Galway.

Start your learning journey today with Technology Ireland ICT Skillnet by clicking on the Learn More button.

Learn More

Embrace the future with confidence,
with Technology Ireland ICT Skillnet
as your training partner.



Programme pillars

Our wide range of programme channels allows you to access training in the latest technologies driving business development.



Artificial
Intelligence



Cloud



Cybersecurity



Data
Analytics



Innovation &
Transformation



Leadership



Quantum



Software
Architecture



Software
Development

Industry approved

With the support of our Industry Steering Group, made up of some of Ireland's most progressive companies, you can be assured that our programmes will provide you with the most relevant and cutting-edge skills that industry demands.



Certification you can trust

Through our strategic partnerships with some of Ireland's most influential higher education institutions, we offer a range of certificate, diploma, and masters programmes, with awards accredited on the National Framework of Qualifications.



Join 14,000+ learners who have transformed their careers with us. **Explore our range of courses >**

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UNLEASH YOUR
UNSTOPPABLE POTENTIAL



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Riadas na hÉireann
Government of Ireland



**Co-funded by
the European Union**