UNIVERSITÀ DI TRENTO

DEPARTMENT OF

INFORMATION ENGINEERING AND COMPUTER SCIENCE



Engineer the Future of Artificial Intelligence

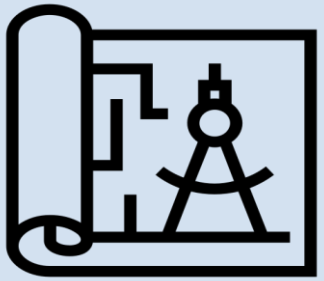
Master (LM) in Artificial Intelligence Systems

Responsabile CdS: Marco Roveri marco.roveri@unitn.it

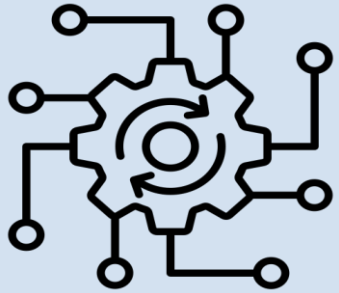
AY/AA 2026/2027

Become a leader in Complex AI Systems

As a graduate, you will be equipped to **move beyond theory** and become an **architect of intelligent solutions**.



Design & Manage Innovation: Plan, develop, and manage complex, innovative AI systems, processes, and services from concept to completion.



Solve Interdisciplinary Challenges: Apply deep theoretical and scientific knowledge from engineering, mathematics, and computer science to solve novel problems.



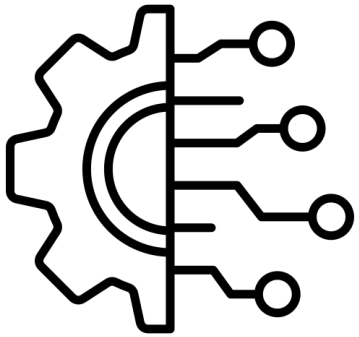
Master a Holistic Skillset: Integrate technical mastery with essential knowledge of business organization, professional ethics, and the legal frameworks governing AI.



Understand Societal Impact: Identify the connections between ethical principles and legal rules, understanding the profound impact of your design choices on the world.

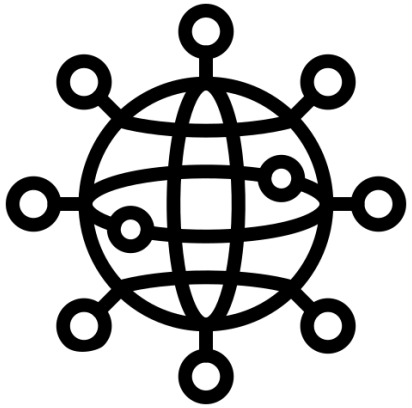
UNIVERSITÀ DI TRENTO | Dipartimento di Ingegneria e Scienza dell'Informazione

Your Journey, Amplified by a World-Class Ecosystem



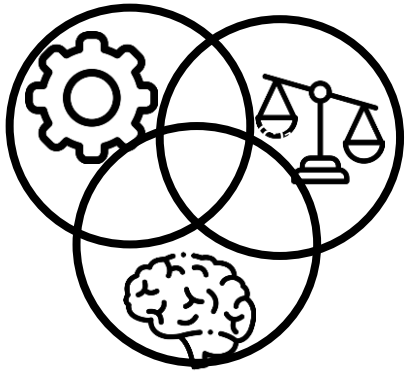
Deep Industry Integration

Our *connections with industry* are very close, from large international companies to innovative SMEs. Gain real-world experience and build your professional network from day one.



Radical Internationalization

A *strong drive toward internationalization* distinguishes our program. We offer unique opportunities to earn a Double Degree through the prestigious EIT Digital Master Schools.



Interdisciplinary Excellence

Learn from experts across multiple departments, including Information Engineering & Computer Science (DISI), Industrial Engineering (DII), the Faculty of Law (JUS), and the Center for Mind/Brain Sciences (CIMEC).

The Architecture of the AIS Master's Degree

120 CFU Total Program

Mandatory Core
(42 CFU)

The essential foundation for every AI systems expert.

In-Depth Study*
(18 CFU)

A block of advanced courses to sharpen your technical expertise.

Specialization*
(18 CFU)

Your chosen path to become a specialist in a high-demand area.

Free Choice
(12 CFU)

The flexibility to pursue your unique interests.

Internship & Thesis
(30 CFU)

The capstone of your journey- applying your knowledge to solve a real-world problem

Year 1

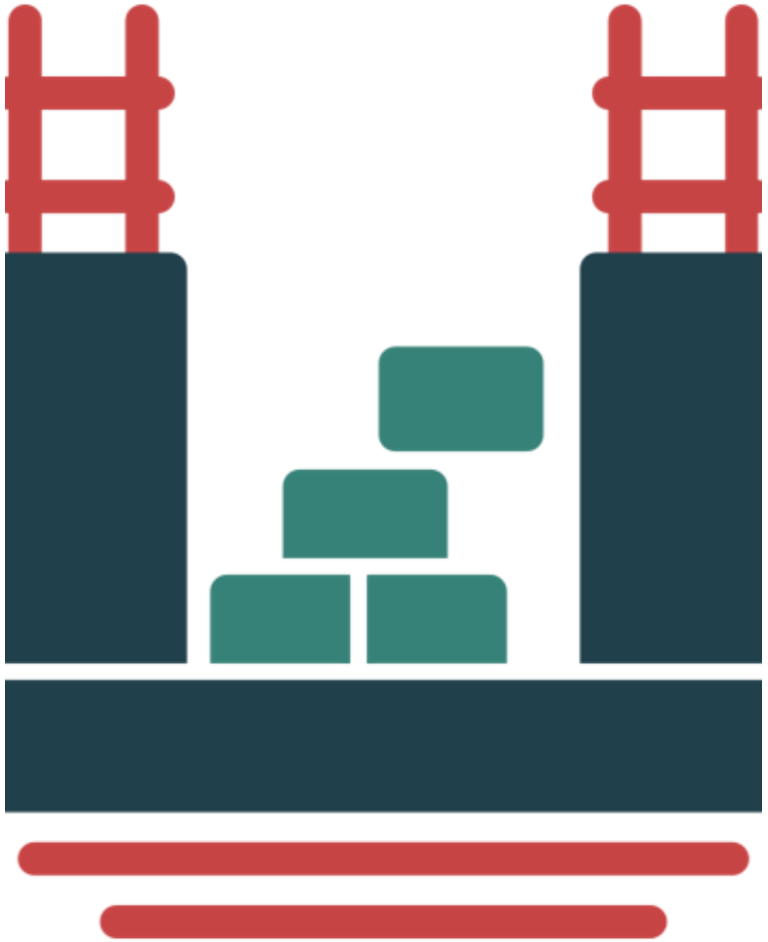
Year 2

**** Neuro-cognitive Architecture has a slightly different structure***

Build you Foundational Core (42CFU)

Every student begins by mastering the fundamental pillars of modern Artificial Intelligence.

- Foundations of Artificial Intelligence (12 CFU) - DISI
- Machine Learning (12 CFU) - DISI
- Natural Language Understanding (6 CFU) - DISI
- Deep Learning Lab (6 CFU) - DISI
- One among
  - AI & Ethics (6 CFU) – JUS
  - Signal, Image & Video (6CFU) – DISI
  - MDP and Reinforcement Learning (6CFU) - Math



Sharpen Your Technical Expertise (18 CFU)

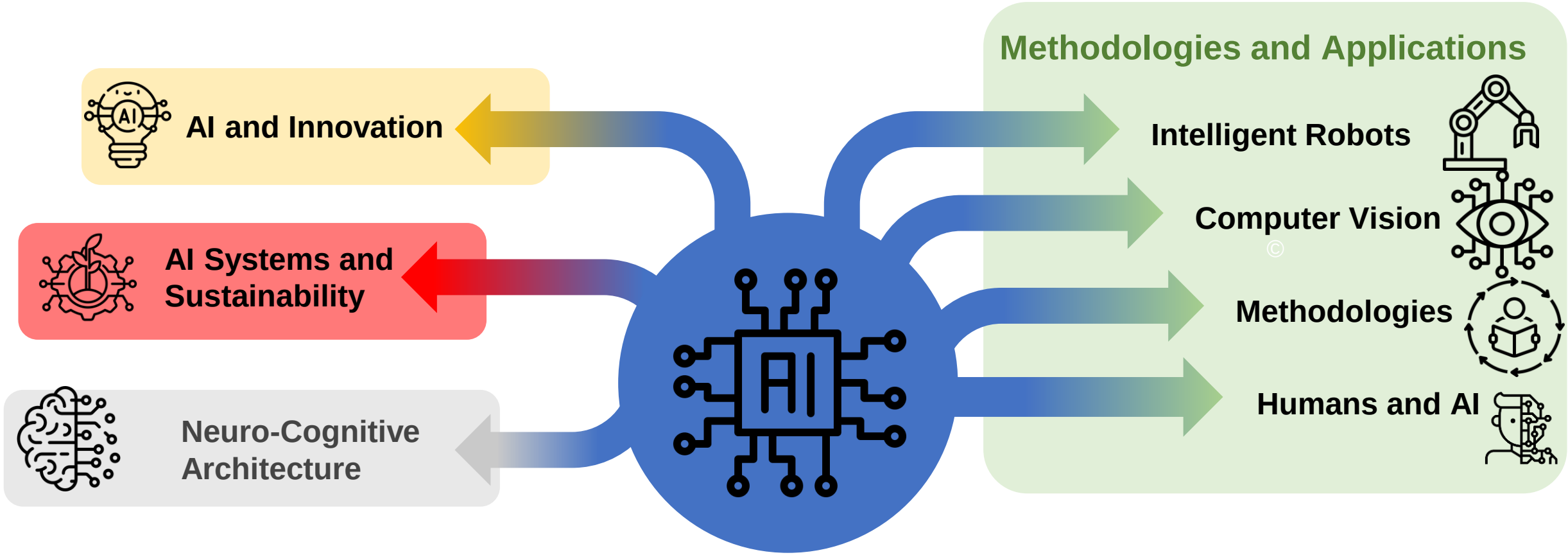
Select three courses from this advanced module to build a deeper understanding of key AI methodologies and technologies.

- Automated Planning Theory and Practice (6 CFU) – DISI
- Automated Reasoning (6 CFU) – DISI
- Bio-Inspired AI (6 CFU) – DISI
- Human-Machine Dialogue (6 CFU) – DISI
- Introduction to Robotics (6 CFU) – DII
- Autonomous Software Agents (6 CFU) – DISI
- Artificial and Biological Neural systems (6 CFU) – CIMEC



Chart your Course

Choose one of our **specialized tracks** to align your education with your **ultimate career goals**. Each track is a **curated set of courses** designed to give you a **competitive edge** in a **specific AI domain**.



UNIVERSITÀ DI TRENTO | Dipartimento di Ingegneria e Scienza dell'Informazione

Specialize in Core AI and Autonomous Systems (18CFU)

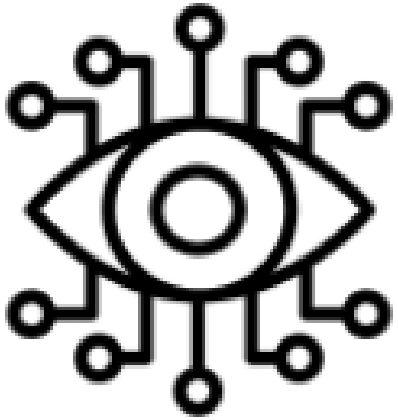


Intelligent Robots

Distributed Rob. Perception – DII

Optimisation and Learning for Robot Control – DII

Robot Planning and its Applications – DISI



Computer Vision

Computer Vision – DISI

Advanced Comp. Vision – DISI

Trends and Applications in Comp. Vision – DISI

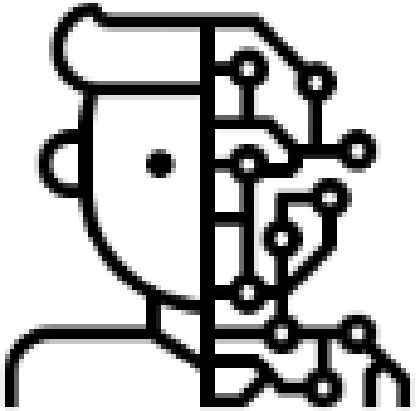


Methdologies

Advanced Topics in Machine Learning and Optimisation – DISI

Foundation Model – DISI

One more course taken from In-Depth



Humans and AI

Foundation Models – DISI

Knowledge Graphs – DISI

One course course among

Studies on human behaviour – DISI

Artificial General Intelligence – DISI

Advanced HCI – DISI

UNIVERSITÀ DI TRENTO | Dipartimento di Ingegneria e Scienza dell'Informazione

Specialize in Applied AI and Innovation (18CFU)

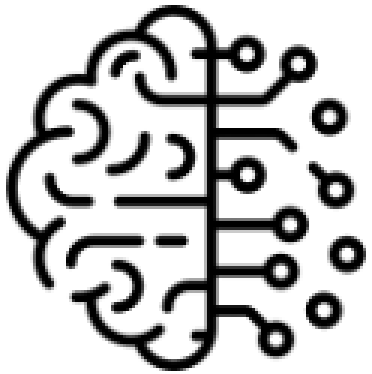


AI Systems & Sustainability

Software development for collaborative robots – DISI

AI for food and quality control – DISI

Sensing and Radar Technologies – DISI



Neuro Cognitive Architectures

Specialization Module: 36 CFU

In-Depth Module: Reduced to 6 CFU

Foundations of Cognitive Psychology and Neuroscience – CIMEC

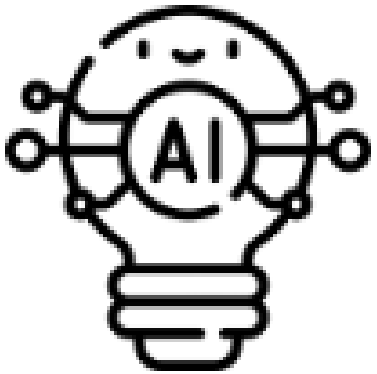
Foundation Models – DISI

Semantics and Cognition – DISI

Introduction to Human Language – CIMEC

Language and Social Cognition – CIMEC

One course from the In-Depth



AI and Innovation

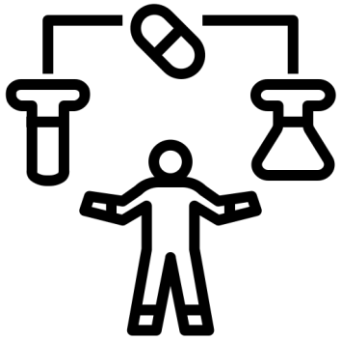
Business Dev. Labs – DISI

AI and Innovation – DISI

Innovation and Entrepreneurship basics – DISI

Your Research and Thesis (42CFU)

Free Choice (12CFU)



Tailor your degree to **your precise interests**.
Choose **any course** offered by our department (DISI), or justify a selection from another department to create a truly unique profile. This is your **chance to explore**.

Internship and Thesis (30CFU)

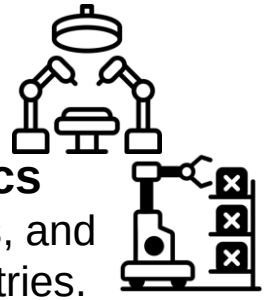


The **culmination** of your master's journey.
Undertake a **significant research project** or **an internship** with one of **our industry partners**. You will **design, execute, and deliver** a project that demonstrates your **mastery** and contributes **new knowledge** to the field.

UNIVERSITÀ DI TRENTO
Dipartimento di Ingegneria e Scienza dell'Informazione

Launch your Career at the Forefront of Technology

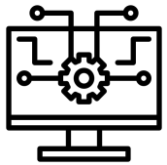
Our graduates are prepared for **high-impact** roles in **corporate sectors**, **research centers**, and **development labs**.



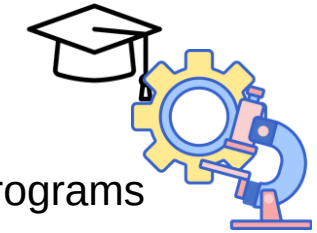
Automation & Robotics
In manufacturing, logistics, and process automation industries.



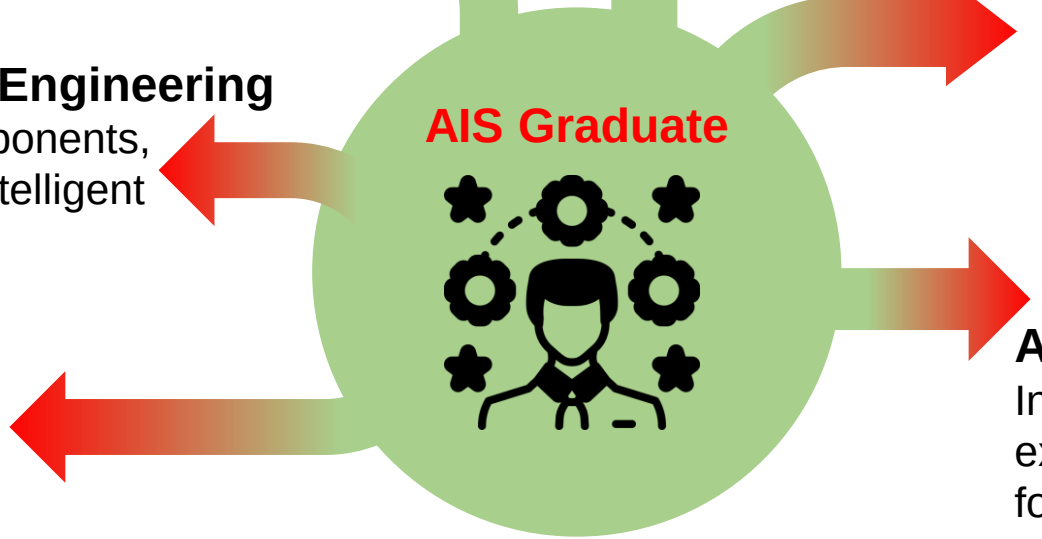
Data & Information Systems
For companies specializing in the acquisition, processing, and analysis of signals, images, and video.



Software & AI System Engineering
In firms developing AI components, embedded systems, and intelligent platforms.



R&D
In public and private research centers or advancing to PhD Programs



....



AI for Business & Services
In diverse sectors requiring expertise in AI-based systems for organization, production, and marketing.

100% of graduates are **employed**





within **one year of graduation**.

Source: University of Trento Graduate Employment Data.

UNIVERSITÀ DI TRENTO | Dipartimento di Ingegneria e Scienza dell'Informazione

Begin Your Journey



Admission Requirements

A Bachelor's Degree with a foundation in Computer Science Engineering (at least 12 CFU).

Upper-intermediate (B2 Level) English proficiency.



Visit the Official Program Webpage

https://corsi.unitn.it/en/artificial-intelligence-systems

Useful Links

EIT Digital & Manufacturing Information

https://28digital.eu/eu-collaborations/emai4eu



Enrollment Information

EU Citizens: No limited enrollment.

Non-EU Citizens: Limited enrollment, with 5 grants available.

