

CRT—Artificial Intelligence

Structured Doctoral Pathway 2020-21

Overview

The SFI Centre for Research Training in Artificial Intelligence was established in March 2019 with funding of over €14 million from Science Foundation Ireland and an additional €3.3 million from industry and the academic partners. It is Ireland's national centre for PhD-level training in AI and will train more than 120 PhDs across four cohorts, with an intake of 30 students per annum for the next four years. The centre brings together five of Ireland's seven universities and a team of almost 60 supervisors across the country.

This centre aims to create an internationally connected and globally recognised centre of excellence for the training of postgraduate students and the up-skilling of industry-based staff in key technical topics in artificial intelligence. The initiative will provide training in areas related to ethics in artificial intelligence and data analytics, as well as challenges in fairness and transparency of advanced data-driven applications. The proposed Centre for Research Training (CRT) brings together supervisors working across the full spectrum of AI techniques from knowledge representation and reasoning, machine learning, data mining, computer vision, natural language processing, optimisation and decision-making, robotics, and autonomy. The centre will focus strongly on the development of AI solutions in domains such as smart buildings, mobility and transportation, autonomous vehicles, public service delivery, manufacturing, enterprise, cybersecurity, climate change and environment, agriculture, marine, food production, and natural resources.

This centre is a joint initiative between University College Cork, Dublin City University, National University of Ireland Galway, Trinity College Dublin, and the University of Limerick. We offer fully-funded PhD scholarships inclusive of fees, a monthly stipend, and a budget for travel and training. The centre will produce 120 PhD graduates in the field of artificial intelligence in a world-class cohort-based model, working closely with industry and international academic partners. Every student taking part in the programme will spend a number of internships with industry partners or at international partner laboratories.

Module Choices within the CRT in AI

Students are expected to take the following Core module; CA639 Artificial Intelligence Methods (10 ECTS). In addition, PhD students will take an additional 20 credits which have been deemed suitable and in line with their professional development plan and should be agreed with their Supervisor.

Induction and non- accredited training

All students are required to attend the orientation and induction sessions organised by GSO during year one. GSO communicates details of their training schedule to each student at the beginning of each semester. First year students are also required to complete and successfully pass the Online Research Integrity Training Module during year one of their studies.

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**Core
Module
Year 1
10 Credits**

**Optional
Modules
20 Credits**

Core Modules (Mandatory)— 10 Credits

- Artificial Intelligence Methods—CA639—(10 ECTS)

- Students should choose an additional 20 credits from the Pathway Document of either the [School of Computing Pathway Document](#) or [School of Mechanical & Manufacturing Engineering Pathway Document](#) or [School of Electronic Engineering Pathway Document](#)
- All module choices will require approval from your supervisor