INTELLIGENT SYSTEMS (IR) MSc
INTELLIGENT SYSTEMS AND ROBOTICS (ISR) MSc

OVERVIEW

The Intelligent Systems programmes at DMU will provide you with knowledge of the various models of computational intelligence and skills in the associated computational techniques. By studying in the field of Intelligent Systems and Robotics at DMU you will develop sound theoretical knowledge and an insight into their theoretical basis and the ability to apply these techniques to a wide variety of problems.

Our internationally recognised Centre of Computational Intelligence (CCI) inputs into the course allowing you to understand the current research issues related to artificial intelligence.

Artificial Intelligence is a growing industry worldwide, employment opportunities exist in areas such as games development, control systems, software engineering, internet businesses, financial services, mobile communications, programming, and software engineering.

The two courses follow a very similar structure, with one module difference allowing you to specialise further in the Data Mining or Robotics aspects of the course depending on your career aspirations.
MODULES

First semester
- Research Methods
- Artificial Intelligence Programming
- Mobile Robots
- Fuzzy Logic

Second semester
- Artificial Neural Networks
- Computational Intelligence Optimisation (CIO)
- Applied Computational Intelligence
- Data Mining, Techniques and Applications (Intelligence Systems only)
- Intelligent Mobile Robots (Intelligent Systems and Robotics only)

Third semester
- Individual Project

TEACHING AND ASSESSMENT

You will benefit from our research expertise modules which include work based on research by our CCI and focus on the use of fuzzy logic, artificial neural networks, evolutionary computing, mobile robotics and biomedical informatics; providing theoretically sound solutions to real-world decision making and prediction problems.

The course is divided in semesters of 15 weeks – the normal pattern will be around 10–12 lessons per module, each lesson providing approximately one week's work.

If you choose to study via distance learning, you would normally take either one module per semester for four years, or two modules per semester for two years, plus a further year for the project. Distance learning material is delivered primarily through our virtual learning environment. Teaching is normally delivered through lectures, seminars, tutorials, workshops, discussions and e-learning packages.

You will have access to our Advanced Mobile Robotics and Intelligent Agents Laboratory. The laboratory contains a variety of mobile robots ranging from the Lego Mindstorms and Pioneers to the Wheelbarrow robot for bomb disposal.

Robots within the CCI include the PeopleBot, a sophisticated high-end robot built to perform a robot-human communications role in an industrial setting; two Pioneer 3 all-terrain robots, which give the capacity to research robotic performance under a wide range of conditions, and The Animatron, a robot that represents a basic neck-head structure.

EMPLOYABILITY

We offer a great opportunity to boost your career prospects through an optional one-year placement in industry as part of your postgraduate studies. Upon graduating you will typically follow a variety of global careers within robotics programming and research, games development, control systems, software engineering, internet businesses, financial services, mobile communications, programming, and software engineering. Opportunities also exist for further academic study toward a PhD and a career in research.

KEY INFORMATION

Duration: September start: One year full-time and a minimum of two years part-time and distance learning. January start: 18 months full-time and a minimum of two years part-time and distance learning (please contact us for further information).

Optional one year placement available.

Entry requirements: You should have the equivalent of a British Honours degree (2:2 minimum) in a relevant subject.

Entry requirements: If English is not your first language, an IELTS score of 6.0 or equivalent.

Tuition fees: Please visit dmuc.ac.uk/pgfees for information.

For a full range of core and optional modules please visit: dmu.ac.uk/intelligent

dmu.ac.uk/isr