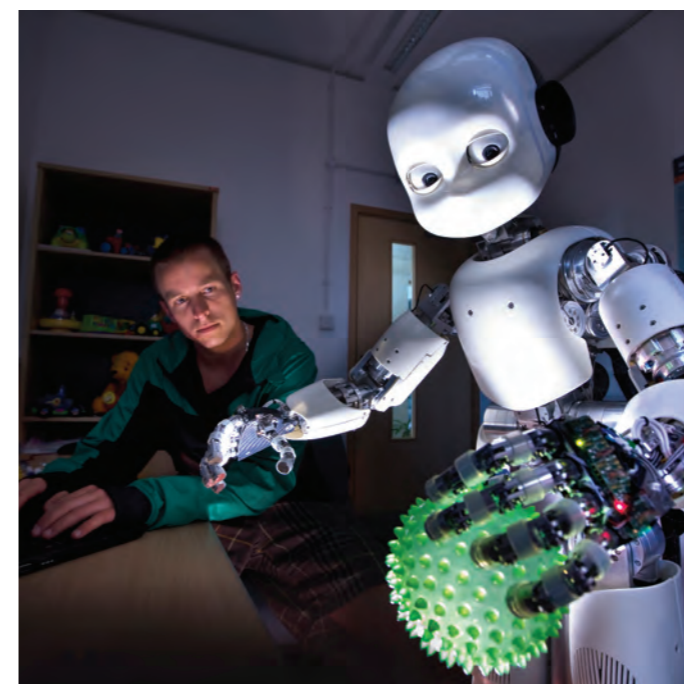
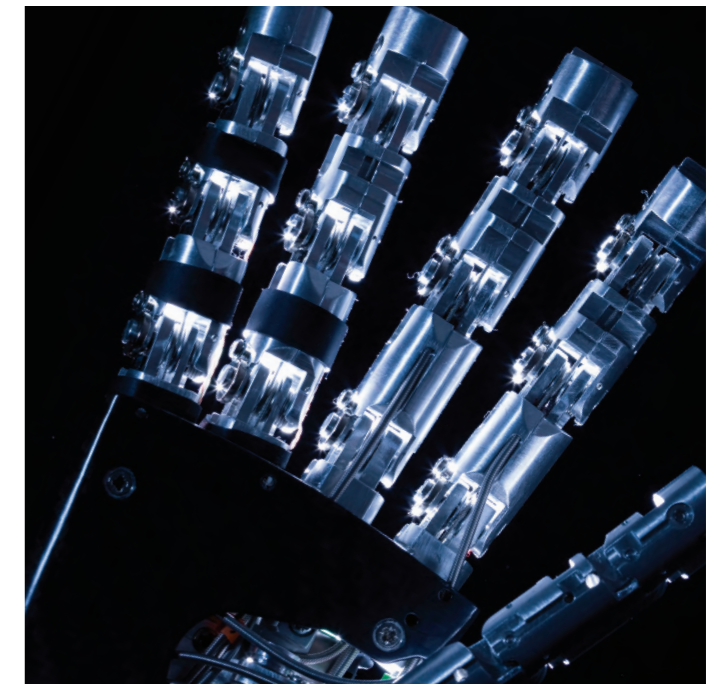


THINKING OF A CAREER IN **ROBOTICS?**

- Opportunities for taking part in robot competitions.
- Employment potential in a wide range of areas.
- Stands out from other robotics programmes, in the UK and abroad, by providing a deeper theoretical and practical knowledge in interactive and intelligent robotics.
- Seminar series with speakers from industry and academia.
- Strong links with research.



FACULTY OF SCIENCE AND TECHNOLOGY MSc/MRes Robotics

Duration: one year full time

For further information contact:
Postgraduate Admissions
Faculty of Science and Technology
University of Plymouth
Drake Circus
Plymouth
PL4 8AA
United Kingdom

Tel: +44 (0)1752 584 584
Email: science.technology@plymouth.ac.uk

The University is committed to providing information in accessible formats. If you require this publication in an alternative format, please contact:

Faculty of Science and Technology
Tel: +44 (0)1752 584 584
Email: science.technology@plymouth.ac.uk

The University of Plymouth is committed to the promotion of equality and diversity. Our policies are available on our website.

www.plymouth.ac.uk

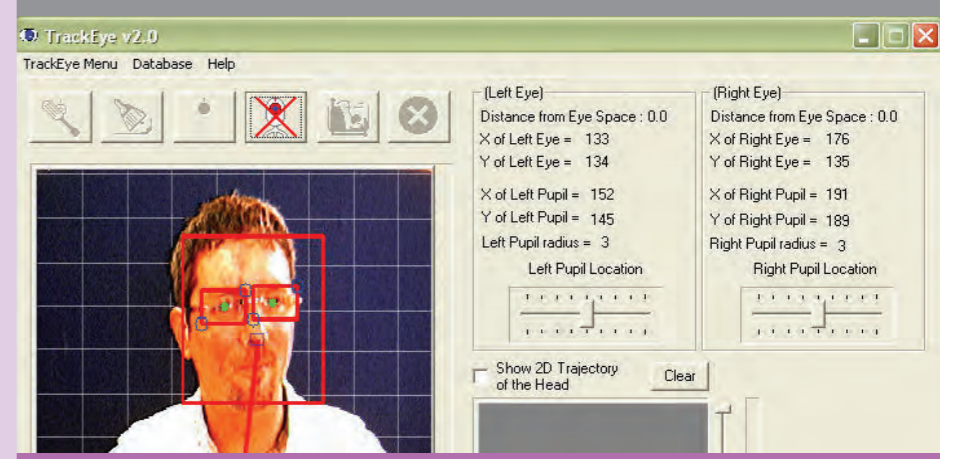
The descriptions in this brochure are correct at the time of printing, but the structure and content of our courses are regularly reviewed to reflect current developments. Admissions requirements may be subject to change. For the latest information, and for further details please visit our website www.plymouth.ac.uk.



RESEARCH

Teaching is underpinned by our major research and industrial strengths, including: the Centre for Robotic and Neural Systems (CRNS) and Marine and Industrial Dynamic Analysis (MIDAS) Research Groups.

Research at the Centre for Robotic and Neural Systems has been recently rated as of world leading standards in the evaluation of UK academia (RAE 2008). Overall, 100% of the research was judged as being of international repute, with 25% of work recognised as world leading value. This puts Plymouth among the top 15 UK universities for computer science and informatics research which includes robotics.



ENTRY REQUIREMENTS

A minimum of a lower second class degree (2:2) for MSc and a minimum of a upper second class (2:1) for the MRes in a technical subject. For overseas students IELTS 6.5 or equivalent is required. Students with advanced standing who can evidence an academic ability to a similar level may also be considered.

“MSc Robotics at the University Plymouth boosted my confidence and gave me a nice exposure to the field of robotics. The multidisciplinary nature of the course equipped me with many valuable skills in the field. The course enabled me to get full PhD funding at Bristol Robotics Laboratory. Thank you Plymouth.”

Said G Khan

INTRODUCTION TO ROBOTICS

This masters programme is designed to provide advanced theoretical and practical knowledge crucial for the development of the service robotics market. It covers theory and practice of control and design, interfacing between real-world devices, autonomous processing and evaluation of

acquired information, interaction with the user and intelligent decision making. Students will have access to a robotics club and research seminars exploring the future of robotics, and will work with an innovative project inspired by the latest developments in technology and society.

WHY STUDY THIS COURSE?

- Focus on intelligent and interactive robotics.
- Seminar series with speakers from industry and academia.
- Strong links with highly rated research.
- Opportunities for taking part in robot competitions.

PROGRAMME LEADER AND TEAM

Programme Leader: Guido Bugmann - specialises in service robotics, neural systems and spoken interfaces.

The team:

- Phil Culverhouse - vision
- Tony Belpaeme - interactive systems
- Angelo Cangelosi - language evolution
- Sanjay Sharma - control
- Robert Hawley - artificial intelligence
- Nigel Barlow - programming
- Liz Stuart - data visualisations
- Dmitriy Makhnovskiy - sensors



THE UNIVERSITY OF PLYMOUTH

The University of Plymouth is the UK's top green university.* This achievement has earned it government awards of more than £18.5 million for nine National Teaching Fellowships and four Centres for Excellence in Teaching and Learning (CETLs) – more than any other UK university has achieved.

The University of Plymouth has a reputation for friendliness, with a track record for widening participation. We are one of the UK's largest universities, with over 30,000 students including around 3,000 from over 100 countries. We regard international students as an important and

integral part of our community. Our International Student Advisory Service (ISAS) provides expert advice on everything from visas to English language support, and social and cultural events. It also runs the Orientation Programme for all international students. For further information visit: www.plymouth.ac.uk/internationalstudents.

The cost of living in Plymouth is lower than in other parts of England. For more detailed information see our website.

*People and Planet Green League June 2010



TOPICS COVERED

- Robotics and control
- Programming for distributed and embedded systems
- Interactive intelligent systems workshop
- Sensors and actuators
- Artificial vision systems
- Natural language interface
- Autonomy and intelligence

OPTIONAL PLACEMENT YEAR

This masters programme in robotics can also be conducted over two years, with an integral work placement (WP) year.

PROGRAMME STRUCTURE

Service robotics is a rapidly growing area of robotics. Its development requires design skills in the area of artificial perception, intelligent behaviour and user-robot interaction. At the same time, a good understanding is required of issues and methods in classical robotics and control.

This masters programme provides students with a broad understanding of the latest developments and issues in all areas of robotics. It distinguishes itself from other robotics programmes, in the UK and abroad, by providing a deeper theoretical and practical knowledge in interactive and intelligent robotics.

The programme covers theoretical and practical knowledge of control and design, interfacing between real-world devices, autonomous processing and evaluation of acquired information, interaction with the user and intelligent decision making.

Students will have access to a robotics club and other University courses, eg an entrepreneurship course, and will work on an innovative project inspired by the latest developments in technology and society.

FURTHER STUDY, RESEARCH AND EMPLOYMENT OPPORTUNITIES

Successful students will be able to apply for employment in the service robotics industry and in robotics research institutions. In addition, a degree in robotics provides multidisciplinary skills with employment potential in a wide range of areas. These include the utilities, transport systems management, automated manufacturing, consumer electronics, robot systems design, process control, the space industry, edutainment robotics, smart homes, etc.

MODULE CHOICES

Core

- Autonomy and intelligence
- Interactive intelligent systems workshop
- MSc project (September)
- Natural language interfaces
- Personal and professional skills
- Research skills and project development
- Robotics and control

Optional

- Programming for distributed and embedded systems
- Sensors and actuators
- Vision systems
- Advanced information technology
- Design for interactive systems
- Entrepreneurship: commercialising your ideas
- Simulation of engineering systems