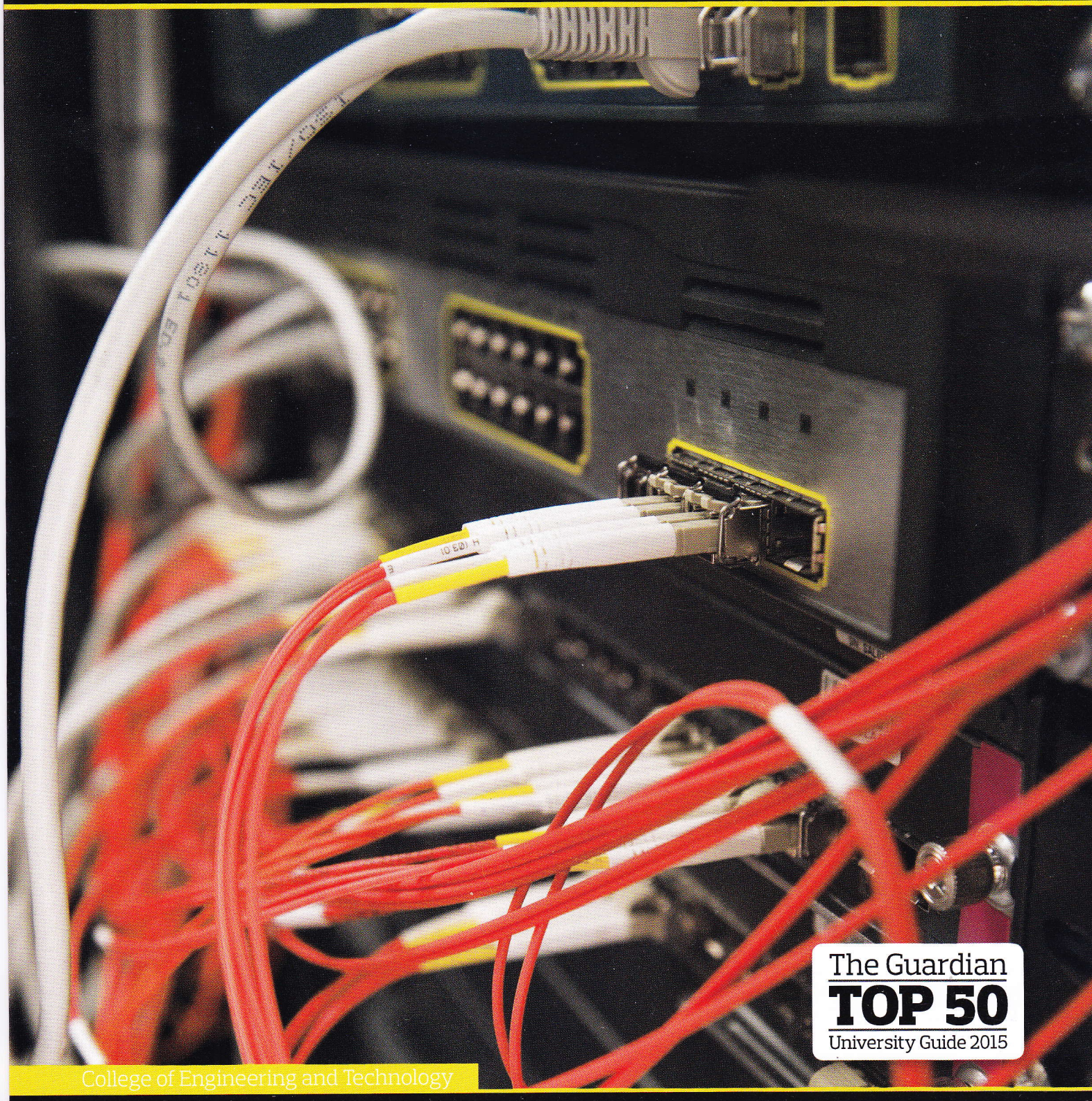
Information Technology

MSc



The Guardian TOP 50 University Guide 2015

College of Engineering and Technology

UNIVERSITY of DERBY

www.derby.ac.uk/engtech

Information Technology

(Campus Based)

MSc

Essential Information

Location
Derby campus, Kedleston Road

Duration
One year full time or three years part time

Start dates
September, January and May

Entry requirements
An undergraduate degree (at least second class) or an equivalent qualification.

Entry requirements for EU/International students
As above (or the international equivalent). If English is not your first language, then you'll need to hold IELTS 6.5 or above.

Suitable for applicants from

The course aims to

- Improve your career prospects as a forward-thinking professional who can harness new technologies in exciting ways.
- **Equip you with the theoretical and practical skills which can be applied directly to the challenges faced by industry today.**
- Give you vital insights into a wide range of cutting-edge and emerging business technologies, such as Big Data Analytics.

About the course

Information technology is at the heart of modern business enterprises. Emerging technologies and developments with smartphones, ubiquitous computing and mobile internet usage are increasing the demand for well qualified and high-calibre IT professionals.

This course will prepare you to tackle work-based challenges and use industrial IT tools and systems practically and intelligently. You'll learn and experiment in our impressive modern facilities and will be guided by our expert staff to find solutions to existing and emerging industrial issues.

You'll cover a range of topics including:

- Business Intelligence (BI) and analytics with SAS
- Database design and implementation
- Requirements gathering for IT systems
- IT project management
- Computer program design and implementation
- Web application design and modelling.

Thanks to our partnership with SAS, you will be exposed to cloud based analytics tools that enable enterprise Business Intelligence (BI). SAS is the largest independent vendor of enterprise BI tools, and has been a global leader in providing software and services for BI and analytics since 1976. This alliance demonstrates our commitment to providing you with the latest knowledge and skills, applicable to the sector now and for the future.

We also use our links with other local, national and multinational organisations to ensure our courses increase your employability. You're encouraged to tailor the course to suit your needs as there may be a specific expertise that you wish to develop.

Towards the end of your studies, you will undertake a major project to demonstrate your advanced professional status. A personal supervisor will help you to manage this project to successful completion. The theme of the project may be work based if you're a part time student or you may use the opportunity to enhance and develop your career prospects in a particular field.

Course content

The course is made up of three stages – Postgraduate Certificate, Postgraduate Diploma and MSc.

Postgraduate Certificate and Postgraduate Diploma

You'll study three of these modules to achieve the Postgraduate Certificate and the remaining three to achieve the Postgraduate Diploma:

Studying at Masters Level and Research Methods

This module will develop your ability to study at masters level, enhance your research skills and help you to develop, plan and execute a research project.

Business Analytics with SAS

This module equips you with the knowledge and skills required to consult, design and specify an enterprise-level solution for BI. You'll be introduced to the concepts of business analytics and BI tools, and will explore how they can be applied to the enterprise. Gaining a greater awareness of the need for systems and information governance, will give you a clear understanding of the critical success factors applied to corporate enterprise decision-support systems.

Database Development

Database technologies are at the heart of the data revolution happening in industry today. You'll gain a critical and in-depth awareness of the theory, concepts, technology, practices

In conjunction with:

SAS
THE POWER TO KNOW.

and issues involved in the analysis, design, development, deployment and maintenance of database systems. You'll also explore issues related to data management and data storage, such as the UK Data Protection Act.

Information Technology Project Management

Good project management is critical to the successful development of IT products. Poor project management is the reason why so many IT projects fail. This module will explore the differences between the two. Covering the management of IT oriented projects, will help you develop the skills and understanding to address organisational, managerial and professional issues that affect IT, providing invaluable experience to prepare you for the management of large-scale projects in the workplace.

Object Oriented Analysis, Design and Implementation

The core of an IT system is the computer program that drives it. Knowing how computer programs are developed is key to understanding the problems that can affect IT projects. This module will present you with the popular object orientation paradigm in the context of industrial web application architectures. It takes you through the full development process including requirements gathering, analysis, specification, design, implementation and finally critical review. You'll use industry-standard notations, different approaches to the development process and the latest computer-aided software engineering tools.

Web Technologies

Web-based systems, web-enabled systems and web-enhanced systems have become all pervasive. Emerging web technologies are continuously being introduced by vendors, consortia and academic researchers. It is vital that you have an understanding of current and future architectures, communication and technological requirements of web technologies. You'll be introduced to a number of tools, techniques, technologies and architectures so that you can make critically informed judgements on the suitability of web solutions for a particular purpose.

MSc

You'll study this module:

Independent Scholarship

This triple module enables you to integrate the knowledge you've gained in other modules to formulate, research and resolve a real-world, commercial IT problem. You'll present your findings and solution in the form of a dissertation.

Similar courses:

- MSc Information Technology (Online)
- MSc Cyber Security
- MSc Mobile App Development
- MSc Advanced Computer Networks

"Derby has lots of links with business and the local and national computing industry, which is great because of the lectures and talks these companies come in and give to us."

Daniel Storey

Essential Information

How To Apply
www.derby.ac.uk/applyonline

Fees for UK/EU students
2014/2015 fees were £755 per 20 credit module. You'll study the equivalent of nine 20 credit modules in total. Please see our website for the latest information.

Fees for international students
2014/2015 fees were £11,260 per year. Please see our website for the latest information.

Contact us
Dennis Parkes
T: 0044 (0) 1332 591155
T: D.C.Parkes@derby.ac.uk

Follow us on

inspire innovate impact
Distinctly Derby

Order your prospectus online:
www.derby.ac.uk/prospectus

If you'd like this information in large print, braille or audio please contact:

T: 01332 591044

E: marketing@derby.ac.uk

University of Derby
Kedleston Road
Derby DE22 1GB

The information in this leaflet was correct at the time of printing; please check our website for the most up to date information.

UNIVERSITY *of* DERBY

www.derby.ac.uk/engtech

58318PW11/14