



Computer Networks BSc (Hons)

COURSE FACTS

Faculty	Computing, Engineering and the Built Environment
School	Computing, Telecommunications and Networks
Application	Apply through UCAS. Institution code B25, Course code G422
Location	City Centre Campus, Millennium Point
Duration	Full-time: three years, part-time: five years, sandwich: four years



KEY FACTS

- The course's computer networking theme follows the Cisco Systems Networking Curriculum. You will get the skills to plan, design and implement new networks, and gain the interpersonal and business awareness needed in today's professional world.
- The course is accredited by the Institute of Engineering and Technology (IET) - successful completion meets educational requirements for IEng status.

WHY CHOOSE US?

- Our School of Computing, Telecommunications and Networks is established as one of the leading academies for Apple, Microsoft and Cisco Systems.
- The school is internationally recognised for teaching quality, research and extensive industry partnerships.
- You will use embedded systems laboratories to develop real-time systems, such as specialist hardware training and development resources, and work with industry-standard software development and simulation tools.

COURSE OVERVIEW

On this course you will learn how to demonstrate a clear understanding of computer operating systems, network communication systems and can integrate hardware and software with business elements.

You will plan, design and implement new networks, including using the latest wireless network technologies allowing you to become commercial networking professionals.

The course is informed by the increased importance of the competitive global economy, new developments in high-speed digital communication systems and the necessity for strategic computer networks systems and associated applications in successful businesses. The course also emphasises the need to develop interpersonal skills, which are essential in today's professional business environment.

Business Theme	Application Development Theme	Emerging Technologies Theme	Communication Networks Theme	Infrastructure Technologies Theme
YEAR 1				
Professional Context of Technology 15 Credits	ICT Programming 15 Credits	Computer Systems Technology 30 Credits	Computer Network Basics 30 Credits	Supporting ICT Clients 30 Credits
YEAR 2				
Management in Technology Innovation 15 Credits	ICT Programming 15 Credits	Wireless Networks 30 Credits	Switched LANS and WANS 30 Credits	Infrastructure Services 30 Credits
YEAR 3				
Individual Project 30 Credits		Advanced Network Technologies 30 Credits	Network Design and Management 30 Credits	ICT Infrastructure Management 30 Credits

COURSE STRUCTURE

The course is based on a themed approach:

- **Infrastructure Technologies:** This is about understanding Microsoft operating systems and involves managing the administration, installation and troubleshooting of PC hardware and software.
- **Communication Networks:** This consists of technologies employed in Local and Wide Area Networks. It follows the Cisco CCNA curriculum and introduces protocols, LAN/WAN terminology, TCP/IP, addressing, switching, routing protocols and management of networks.
- **Emerging Technologies:** This consists of fundamental principles of computer hardware and digital storage devices, computer architecture, digital systems and data representation. You will gain an understanding of wireless networks including installation, configuration, troubleshooting and network security.
- **Application Development:** This consists of programming languages, graphical user interfaces and understanding of realistic robust programming applications.
- **Business:** This consists of providing professional development, and an introduction to the business macro-environment sector. You will gain an understanding of market-led innovation planning and management. It also develops your teamwork skills in evaluating and effectively communicating information.

ASSESSMENT

A range of assessment methods are used throughout the course including continuous assessment, in-class tests, examinations, laboratory exercises and project work.

ENTRY REQUIREMENTS

- 280 points. Minimum of two six-unit or one 12-unit A-Level (GCE or VCE)
- Pass National Diploma with Merit Merit Distinction
- Advanced Diplomas are accepted
- AGNVQ overall Merit and GCSE Maths and English grade C
- Irish: 280 points in ILC, Scot: 280pts from 4 Highers, IB: 30pts

FURTHER STUDY

The University has a range of either taught (MSc) or research (MPhil and PhD) postgraduate programmes. Details can be found on the postgraduate section of the website.

EMPLOYABILITY

This course prepares you to confidently move towards a career in: specifying, designing or managing and support of secure communications networks; providing technical, software or applications support or training; implementation and/or evaluation of secure systems; planning, implementation, management and support of PC operating systems; or as an entrepreneur providing creative solutions for businesses in the above areas.

Recent graduates from the school have gone on to work for Hewlett Packard, Bell Micro, Birmingham City Council, BT, Cisco, Deloitte, Ericsson, Fujitsu, IBM, Intel Corporation, NHS, Motorola, National Express, NEC, Royal Mail, Shell IT, JP Morgan Chase and Co, Carillion, Siemens, Nokia, Capgemini and Sytel.

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