

Foundation Degree (FDSc) Information Communication Technology

UCAS code:

Awarding Institution:
Teaching Institution:
Relevant QAA subject benchmarking group(s):
Faculty of Science

The University of Reading
Newbury College
Foundation Degree
Programme length: 2 years full time
or 3-4 years part time
Date of specification: 16-Feb-04

For students entering Year 1 in 2004

Programme Director: TBA

Programme Adviser: TBA

Board of Studies: Foundation Degree Information Communication Technology

Accreditation: British Computer Society (to be confirmed)

Summary of programme aims

The Foundation Degree (FD) provides a new model of vocational higher education based on close collaboration between employers and providers of higher education. The New Technology Institute Thames Valley Region (NTI TVR) sponsors the FD in Information Communication Technology (ICT). The course is based on a coherent set of industry recognised and professional qualifications that are brought together to provide students with a FD level qualification.

The aim of the FD is develop the knowledge, skills and attributes of students already working in the ICT industry to enable them to develop into professional technicians able to play a disciplined and innovative role in development and maintenance across the ICT industries.

Transferable skills

The University's Strategy for Teaching and Learning has identified a number of generic transferable skills which all students are expected to have developed by the end of their degree programme. In following this programme, students will have had the opportunity to enhance their skills relating to career management, communication (both written and oral), information handling, numeracy, problem-solving, team working and use of information technology.

As part of this programme students are expected to have gained experience in the following transferable skills: IT (programming, word processing, databases and use of standard software), technical writing, oral presentations, team-working, problem-solving, use of library resources, time-management, career planning and management, and business awareness.

Programme content

The programme is based around two inter-related strands:

- Technical skills
- Professional engineering

The six technical skills include: Networking, PC Systems, Programming, Internet Technology, Applications and Operating Systems.

The professional engineering strand includes: software engineering, professionals skills, project work and independent study.

Year 1		<i>Credits</i>	<i>Level</i>
<i>Compulsory modules</i>			
<i>Mod Code</i>	<i>Module Title</i>		
	<i>Networking 1</i>	10	0
	<i>PC Systems 1</i>	10	0
	<i>Programming</i>	10	0
	<i>Internet Technology 1</i>	10	0
	<i>Applications 1</i>	10	0
	<i>Operating Systems 1</i>	10	0
	<i>Professional Skills 1</i>	20	C
	<i>Work-based Independent Study</i>	20	C
	<i>Software Engineering</i>	20	C
Year 2		<i>Credits</i>	<i>Level</i>
<i>Compulsory modules</i>			
<i>Mod Code</i>	<i>Module Title</i>		
	<i>Networking 2</i>	10	C
	<i>PC Systems 2</i>	10	C
	<i>Advanced Programming and Databases</i>	10	C
	<i>Internet Technology 2</i>	10	C
	<i>Applications 2</i>	10	C
	<i>Operating Systems 2</i>	10	C
	<i>Professional Skills 2</i>	20	I
	<i>Work-based Project</i>	40	I

Progression requirements

In order to have satisfactorily completed the first year of a the degree a student shall normally be required to achieve an overall average in 120 credits taken in Part 1 of the pass mark, and a mark of at least 30% in individual modules amounting to not less than 100 credits. Students who follow the degree part time will be required to satisfy the same criteria as above when they complete the modules shown above as “first year”.

In order to pass the Foundation degree overall, students must Pass the first year and obtain an average of at least 40% in the second year, and a mark of at least 30% in individual modules amounting to not less than 100 credits in both years.

Summary of teaching and assessment

For the FD the relevance of skills and their application in a work-based environment, underpinned by academic knowledge and understanding is critical.

Teaching is organised in modules that typically involve lectures, work-based learning and practical work. Teaching will be delivered by NTI TVR partner colleges, in conjunction with employers, using a mixture of face to face teaching; web-based and distance learning methods; self-directed studies; project work; and problem-based learning. Typically a student will study the equivalent of 120 credits per year. Modules are typically made up of units, where a unit corresponds to studying part of an industry recognised or professional qualification. Students will be able where appropriate to gain the industry recognised or professional qualification.

Work-based learning is central to the FD and students undertaking the course will need to be working in the ICT industry. However it is recognised that a particular employer may not be practicing in all of the six technical themes and the work-based learning will be personalised to suit the particular student and employer's circumstances.

The assessment of the FD will be based on University approved assessments which will include a mixture of assignments and formal examinations. Where appropriate both formative and summative assessments will be work-based. The employer will provide appropriate mentoring in conjunction with the college.

Admission requirements

Entrants to this programme are normally required to have obtained:
Grade C or better in English in GCSE; and achieved
UCAS Tariff: 160 points
Equivalent qualifications are acceptable

Admissions Tutor: College of North West London

Support for students and their learning

All students on this FD will be members of the University of Reading and able to use the facilities of the University.

University support for students and their learning falls into two categories. Learning support includes IT Services, which has several hundred computers and the University Library, which across its three sites holds over a million volumes, subscribes to around 4,000 current periodicals, has a range of electronic sources of information and houses the Student Access to Independent Learning (S@IL) computer-based teaching and learning facilities. There are language laboratory facilities both for those students studying on a language degree and for those taking modules offered by the Institution-wide Language Programme. Student guidance and welfare support is provided by Personal Tutors, the Careers Advisory Service, the University's Special Needs Advisor, Study Advisors, Hall Wardens and the Students' Union.

All of the NTI TVR members also have NTI facilities which will be available to the FD students.

Career prospects

The FD in ICT is designed to be industry oriented, for students who are already in employment. It is expected that graduates will continue to work within the ICT industry in a development and support role as a professional technician.

Opportunities for study abroad or for placements

N/A

Educational aims of the programme

To develop the students' knowledge of the practice and underlying theory of Information Communication Technology, necessary for them to continue in employment and reach professional technician status in a wide variety of industries; to encourage their critical and analytical skills; and to develop their skills in applying practical concepts to the design, implementation and maintenance of information systems.

Programme Outcomes

Knowledge and Understanding

<p>A. Knowledge and understanding of:</p> <ol style="list-style-type: none">1. The well-established principles in ICT, including:<ol style="list-style-type: none">a. Networkingb. PC Systemsc. Programmingd. Internet Technologye. Applicationsf. Operating Systemsg. Software Engineering2. The way in which those principles have developed3. The main methods of enquiry in ICT4. Their own limitations and how this influences their field of study and is applicable in a work context.	<p>Teaching/learning methods and strategies</p> <p>The areas 1 a. to 1f will be covered in the respective first and second year modules associated with the technical skills theme. 1 g. will be covered in Professional engineering module: Software Engineering.</p> <p>Areas 2.-4. will be covered in each theme, in addition the Professional engineering strand modules will reinforce 3. and 4.</p> <p><i>Assessment</i></p> <p>Knowledge is tested through a mix of examination and practical work.</p>
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Skills and other attributes

<p>B. Intellectual skills – able to:</p> <ol style="list-style-type: none">1. Demonstrate knowledge and understanding related to aspects outlined above2. Apply such knowledge and understanding to information systems, including those used in a work context3. Critically evaluate and test an ICT system4. Recognise and conform to appropriate professional, ethical and legal practices5. Reflect and communicate	<p>Teaching/learning methods and strategies</p> <p>By applying cognitive theoretical skills to problem solving work related and case studies in each technical skill. The professional engineering modules will also address these issues. 4. will be particularly focussed on in Professional Skills 2.</p> <p><i>Assessment</i></p> <p>Skills and other attributes are tested through a mix of examination and practical work. The work-based individual project provides a major piece of work where by students can demonstrate all of these skills.</p>
<p>C. Practical skills – able to:</p> <ol style="list-style-type: none">1. Specify, design and construct ICT based systems, including those used in a work context2. Evaluate systems3. Recognise Risks and Safety aspects4. Operate ICT equipment effectively	<p>Teaching/learning methods and strategies</p> <p>By demonstrating and applying theoretical skills and practical approaches to problem solving in the form of coursework and practical work. The Software Engineering module will particularly address 1. While all the technical skills themes will support this. Evaluation skills (2.) are featured in all level C. and I. modules.</p> <p>3. will be covered in the Professional engineering strand.</p> <p>4. will be a feature of the themes within the technical skills strand.</p> <p><i>Assessment</i></p> <p>Practical skills and other attributes are tested through a mix of examination and practical work.</p>

D. Transferable skills – able to:

1. Effectively retrieve information
2. Present cases in a quantitative dimension.
3. Manage own learning and development.
4. Appreciate the need for continuing professional development (CPD), be able to plan and execute their own CPD
5. Organise and work as part of a team.
6. Plan and manage their own careers.
7. Communicate in a manner appropriate to the situation.
8. Effectively use Information Technology.

Teaching/learning methods and strategies

These skills will be taught as part of the professional engineering strand modules, particularly in the Professional Skills 1 and 2.

Assessment

By a mix of examination and practical work. The work-based individual projects will demonstrate the majority of these skills.

Please note: This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably expect to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each module can be found in module and programme handbooks.