## PROGRAMME SPECIFICATION



1	Awarding Institution	Newcastle University
2	Teaching Institution	INTO Newcastle University
3	Final Award	International Foundation Certificate
4	Programme Title	INTO Newcastle University Foundation
		Certificate Pathway in Physical Sciences and
		Engineering
5	UCAS/Programme Code	2963F
6	Programme Accreditation	n/a
7	QAA Subject Benchmark(s)	n/a
8	FHEQ Level	3
9	Date written/revised	April 2007

### 10 Programme Aims

To provide a programme which:

- 1. Equips international students with the English language competence they need to study at Certificate level at Newcastle University or in another UK HEI
- Provides students with the intellectual development and subject knowledge they need
  to be academically capable of studying physical sciences or engineering subjects at
  Certificate Level at Newcastle University or in another UK HEI
- 3. Builds up students' study skills so that they are capable of entering UK HE, whilst also helping them to get accustomed to student life in the UK
- 4. Provides practical experience of British University teaching methods
- 5. Provides sufficient appreciation of British life, institutions and culture for both studying and living in the UK
- 6. Enables students to develop confidence in communicating with native speakers
- 7. Encourages students to undertake self-evaluation to help them identify additional needs
- 8. Aims to comply with University and QAA codes of practice.

#### 11 Learning Outcomes

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas:

# **Knowledge and Understanding**

On completing the programme students should:

- A1. Have acquired a basic knowledge and understanding of topics and concepts in some or all of mathematics, physics, chemistry, biology and computing (depending on the degree programme to be studied subsequently) needed to sustain successful undergraduate study in the physical sciences or engineering
- A2. Have developed the necessary practical skills to enable specified practical experiments to be carried out effectively and safely
- A3. Be able to apply appropriate quantitative methods to experimental data and to interpret experimental results
- A4. Have an appreciation of the culture of UK higher education and its expectations of students
- A5. Have knowledge and understanding of academic English in order to successfully start a degree programme at undergraduate level in the UK
- A6. Understand the basic requirements for writing a competent essay/case study report or laboratory report

# **Teaching and Learning Methods**

Knowledge and understanding is primarily taught through lectures and practical laboratory sessions supported by reading, seminar discussion and tutorials. English is primarily taught in smaller classes and reinforced through practice. Case studies and project work will involve an element of student research.

# **Assessment Strategy**

Knowledge and understanding is assessed primarily through unseen examinations, written coursework (such as numerical exercises, essays, case studies and project reports, laboratory reports), in-course tests and observation of ability to carry out specific practical experiments.

#### Intellectual Skills

On completing the programme students should be able to:

- B1. Use and interpret data
- B2. Read academic texts and other sources of information with some degree of analytical skill
- B3. Discuss and evaluate the results of experiments or other forms of research either orally or in writing
- B4. Use quantitative techniques related to chemical, physical or biological experimentation, as appropriate
- B5. Apply appropriate mathematical techniques to numerical data
- B6. Apply knowledge to solve problems of limited complexity

## **Teaching and Learning Methods**

These skills are best taught and learned through practice, although the Study Skills module will provide students with advice on what is expected of UK students and strategies for developing these skills, particularly B1, B2 and B3. Laboratory and seminar/tutorial/calculation class work will assist in development of B1, B3-B6

#### **Assessment Strategy**

All of the above intellectual skills will be assessed as part of overall assessment of case study and project reports and/or oral presentations, calculation class exercises, laboratory work and laboratory reports. The Study Skills module will assess B1 and B3 in particular. Unseen examinations will assess B1, B4-B6.

#### **Practical Skills**

On completing the programme students should be able to:

- C1. Carry out basic techniques in laboratory work with emphasis on development of good laboratory skills/technique and an appreciation of laboratory safety.
- C2. Present scientific data and ideas in clear and logical form, either tabulated, graphically or in written or oral English
- C3. Develop strategies for effective note taking in lectures and seminars
- C4. Read and take notes from an academic text or other sources of information
- C5. Take part in a discussion in a seminar or tutorial context
- C6. Write an essay or laboratory report in an academic context in understandable English following the appropriate conventions
- C7. Apply proper referencing and other aspects of good academic practice
- C8. Demonstrate competence in appropriate mathematical techniques

### **Teaching and Learning Methods**

The study skills module will deliver C3 and introduce C6 and C7, but the lessons learned will be reinforced and practiced in other modules. The skills, C4 and C5, will be taught through the English for Academic Purposes module largely through small group teaching with plenty of practice and C7 will also be introduced in those modules. However, every other module will also use and reinforce these skills. Laboratory classes and seminar/tutorial exercises will develop C1, C2, C6-C8

#### **Assessment Strategy**

Practical laboratory, scientific and mathematical skills will be assessed through observation of experimental technique and laboratory reports, seminar/tutorial exercises and in some tests and exams. English language competency will be tested directly in the English for Academic

Purposes module using a mixture of tests and coursework and covering reading, writing, speaking and listening. Other modules will indirectly assess English language competence and the ability to take notes and use sources, as they all require an ability to express ideas in English. C7 will be assessed through specific exercises in the study skills module and as part of assessment of case study and project reports and essays submitted in academic modules.

# Transferable/Key Skills

On completing the programme students should be able to:

- D1. Work as a member of a team with colleagues from other cultures and backgrounds
- D2. Make oral presentations using appropriate scientific language and terminology
- D3. Use IT skills effectively
- D4. Manage their time effectively
- D5. Use library and other information sources effectively
- D6. Think and work effectively on their own when required
- D7. Express ideas and facts in an acceptable format in understandable English
- D8. Understand and communicate effectively with native speakers of English
- D9. Analyse their own strengths and weaknesses and take action accordingly
- D10. Demonstrate good levels of numeracy

## **Teaching and Learning Methods**

The Study Skills module's lectures will introduce students to these key skills and provide guidance on techniques, with practice occurring largely in the other modules and in small group teaching on the Study Skills module. Students will further develop D8 through attendance at selected classes which are part of modules from appropriate undergraduate degree programmes

# **Assessment Strategy**

Some group work is required and students' success in working in teams will therefore be assessed via the quality of the end product. Several assessed oral presentations are built into the Study Skills module. D3-D7 and D10 will be assessed via coursework assessment and in particular through case studies, essays, seminar/tutorial exercises and laboratory reports. The Study Skills module will also assess teamwork and essay writing. D9 will be assessed through preparation of a reflective log with particular emphasis on development of D8 skills.

# 12 Programme Curriculum, Structure and Features

### Basic structure of the programme (See details at Appendix 1)

A one-year 120 credit programme which combines study of English for academic purposes (20 or 40 credits depending on level of English on entry) with the study of ICT and study skills, and academic study in mathematics, physics, chemistry, biology and computing as appropriate to the degree programme to be studied subsequently.

# Key features of the programme (including what makes the programme distinctive)

The combination of English for academic purposes, study skills and academic content in an environment designed to support international students and bring them up to the standard required for entry to an undergraduate programme.

## Programme regulations (link to on-line version)

http://www.ncl.ac.uk/regulations/programme/2009-2010/documents/INTOFoundationCert-PhySciandEng.doc

The specific modules selected must be agreed with the Degree Programme Director in accordance with any pre-requisites for the preferred degree programme to be studied subsequently. [Note: For preferred degree programmes requiring study of 100 credits of academic modules in the foundation certificate, students will only be admitted if their English skills are such that they only require study of 20 credits of English for academic purposes].

# 13 Criteria for admission

Academic entry qualifications

Completion of Twelve years of schooling (or the local equivalent to meet the same standard) with good grades, particularly in science subjects.

Level of English Language capability

An English Language capability equivalent to an overall IELTS score of 5.0 including a score of no less than 5.0 in writing is required. For preferred degree programmes requiring study of 100 credits of academic modules in the foundation certificate, students will only be admitted if their English skills are such that they only require study of 20 credits of English for Academic Purposes. This will require an equivalent of IELTS of at least 5.5 including a minimum of 5.0 in writing.

Admissions policy/selection tools

Candidates will be selected according to their ability to complete the programme successfully and gain entry to their chosen programme and will be counselled accordingly.

Non-standard Entry Requirements Will be considered on their merits

Additional Requirements

n/a

# 14 Support for Student Learning

#### Induction

During the first week of the first semester students attend an induction programme. New students will be given a general introduction to University life and the University's principle support services and general information about the INTO Newcastle Centre and their programme, as described in the Degree Programme Handbook. New and continuing students will be given detailed programme information and the timetable of lectures/practicals/labs/tutorials/etc. The International Office offers an additional induction programme for overseas students (see <a href="http://www.ncl.ac.uk/international/coming">http://www.ncl.ac.uk/international/coming</a> to <a href="http://www.ncl.ac.uk/international/coming">newcastle/orientation.phtml</a>)

#### Study skills support

Students will learn a range of Personal Transferable Skills, including Study Skills, as outlined in the Programme Specification. Some of this material, e.g. time management is covered in the appropriate Induction Programme. Students are explicitly tutored on their approach to both group and individual work.

### Academic support

The initial point of contact for a student is with a lecturer or module leader, or their tutor (see below) for more generic issues. Thereafter the Degree Programme Director or Centre Director may be consulted. Issues relating to the programme may be raised at the Staff-Student Committee, and/or at the Board of Studies.

### Pastoral support

All students are assigned a personal tutor whose responsibility is to monitor the academic performance and overall well-being of their tutees. Details of the personal tutor system can be found at <a href="http://www.ncl.ac.uk/undergraduate/support/tutor.phtml">http://www.ncl.ac.uk/undergraduate/support/tutor.phtml</a>. The INTO Newcastle University Tutoring and Counselling Service will support students to make applications to Newcastle and elsewhere through UCAS.

In addition the University offers a range of support services, including the Student Advice Centre, the Counselling and Wellbeing team, the Mature Student Support Officer, and a Childcare Support Officer, see <a href="http://www.ncl.ac.uk/undergraduate/support/welfare.phtml">http://www.ncl.ac.uk/undergraduate/support/welfare.phtml</a>

### Support for students with disabilities

The University's Disability Support Service provides help and advice for disabled students at the University - and those thinking of coming to Newcastle. It provides individuals with: advice about the University's facilities, services and the accessibility of campus; details about the technical support available; guidance in study skills and advice on financial support arrangements; a resources room with equipment and software to assist students in their studies. For further details see <a href="http://www.ncl.ac.uk/disability-support/">http://www.ncl.ac.uk/disability-support/</a>

## Learning resources

The University's main learning resources are provided by the Robinson and Walton Libraries (for books, journals, online resources), and Information Systems and Services, which supports campus-wide computing facilities, see

http://www.ncl.ac.uk/undergraduate/support/acfacilities.phtml

# 5 Methods for evaluating and improving the quality and standards of teaching and

#### learning

#### Module reviews

All modules are subject to review by questionnaires which are considered by the Board of Studies. Changes to, or the introduction of new, modules are considered at the Board of Studies. Student opinion is sought at the Staff-Student Committee and/or the Board of Studies. New modules and major changes to existing modules are subject to approval by the University Teaching and Learning Committee.

#### Programme reviews

The Board of Studies conducts an Annual Monitoring and Review of the degree programme and reports to University Teaching and Learning Committee.

#### External Examiner reports

External Examiner reports are considered by the Board of Studies. The Board responds to these reports through University Teaching and Learning Committee. External Examiner reports are shared with institutional student representatives, through the Staff-Student Committee.

## Student evaluations

All modules, and the degree programme, are subject to review by student questionnaires. Informal student evaluation is also obtained at the Staff-Student Committee, and the Board of Studies.

### Mechanisms for gaining student feedback

Feedback is channelled via the Staff-Student Committee and the Board of Studies.

## Faculty and University Review Mechanisms

The programme is subject to the University's Internal Subject Review process, see <a href="http://www.ncl.ac.uk/aqss/qsh/internal\_subject\_review/index.php">http://www.ncl.ac.uk/aqss/qsh/internal\_subject\_review/index.php</a>

## 16 Regulation of assessment

#### Pass mark

# Academic modules

Modules will be marked on a 0-100 scale. The pass mark for academic modules is 40. The following forms of assessment may be used: class tests, seen and unseen examinations, coursework, oral tests, presentations, group-work.

#### **English for Academic Purposes**

These modules are internally assessed, using Newcastle's English Language Proficiency Scale (and benchmarked against IELTS). Modules will be marked on a 0-90 scale with 50 being equivalent to IELTS 5.0, 60 equivalent to IELTS 6.0, 6.5 equivalent to IELTS 6.5, etc. The pass mark for the English for Academic Purposes modules is 60.

Satisfactory completion of the Foundation Certificate requires that:

- (a) the average mark over all academic modules, taking due account of the credit value, is not less than 40:
- (b) no single mark for any academic module is below 35;
- (c) marks of less than 40 are compensated in academic modules, provided the total credit value of these modules does not exceed 20;
- (d) the average mark for English for Academic Purposes is not less than 60 (equivalent to IELTS 6.0) with no competence (reading, writing, listening and speaking) below 55
- (e) no compensation for English for Academic Purposes is permitted

A student who fails a module will be able to have <u>one</u> further attempt to achieve a pass for that module. Students will not be permitted to proceed to a degree programme at Newcastle University carrying a failure in any module.

Performance higher than a basic pass (in both academic modules and English for academic Purposes) will be required for entry into Newcastle University degree programmes as specified in the progression requirements for specific degree programmes.

### Common Marking Scheme

INTO Newcastle University employs the following marking scheme:

<40	Fail
40-49	Pass
50-59	Good
60-69	Very Good
70-79	Excellent
<del>80+</del>	Outstanding

#### Role of the External Examiner

An External Examiner, a distinguished member of the subject community, is appointed by Faculty Teaching and Learning Committee, after recommendation from the Board of Studies. The External Examiner is expected to:

See and approve examination papers

Moderate examination and coursework marking

Attend the Board of Examiners

Report to the University on the standards of the programme

### In addition, information relating to the programme is provided in:

The University Prospectus (see <a href="http://www.ncl.ac.uk/undergraduate/">http://www.ncl.ac.uk/undergraduate/</a>);

The INTO Newcastle University Brochure (contact INTO@ncl.ac.uk)

The University Regulations (see <a href="http://www.ncl.ac.uk/">http://www.ncl.ac.uk/</a> regulations);

The Foundation Certificate Programme Handbook.

Please note. This specification provides a concise summary of the main features of the programme and of the learning outcomes that a typical student might reasonably be expected to achieve if she/he takes full advantage of the learning opportunities provided. The accuracy of the information contained is reviewed by the University and may be checked by the Quality Assurance Agency for Higher Education.