

## Foundation Certificate for Science and Engineering at Glasgow International College: module information

### For degree entry from September 2020

ALL STUDENTS WILL STUDY THE FOLLOWING MODULES TO GAIN A SOLID BASE OF SKILLS:

- **English for Academic Purposes**
- **Extended Project (customised to your university degree and career aspirations)**



YOU WILL ALSO STUDY 4 OR 5 OF THESE MODULES THAT BEST FIT YOUR DEGREE AND CAREER GOALS.

- **Biochemistry**
- **Biology**
- **Chemistry**
- **Engineering**
- **Geography and Earth Science**
- **Intermediate Mathematics**
- **Introduction to Sociology**
- **Laboratory Skills and Scientific Writing**
- **Mathematics**
- **Physics**
- **Programming**
- **Science and Society**



YOU'LL TAKE PART IN PERSONAL DEVELOPMENT ACTIVITIES DURING YOUR COURSE, DESIGNED TO BOOST YOUR EMPLOYABILITY, CONFIDENCE AND INDEPENDENCE, AND HELP YOU MAKE NEW FRIENDS.

#### EXTRA MODULES TO HELP YOU REACH UNIVERSITY: 2.5 AND 3-TERM COURSES

IF YOU'RE TAKING A 2.5 OR 3-TERM COURSE, YOU'LL STUDY THE RELEVANT MODULES ABOVE, AND 1 SET OF MODULES IN THE TABLE BELOW, DEPENDING ON YOUR ENGLISH LANGUAGE LEVEL AND DEGREE:

IF YOU HAVE AN ENGLISH LANGUAGE LEVEL THAT'S BELOW UKVI IELTS 5.5:	IF YOU HAVE AT LEAST UKVI IELTS 5.5 OR EQUIVALENT, OR DON'T NEED TO TAKE AN IELTS TEST:
<ul style="list-style-type: none"> <li>• <b>English for Academic Study 3</b></li> <li>• <b>Independent and Collaborative Study</b></li> <li>• <b>Reading and Writing 3</b></li> <li>• <b>Speaking and Listening 3</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Critical Reading, Writing and Reasoning for Higher Education</b></li> <li>• <b>Independent and Collaborative Study</b></li> </ul> <p>Plus up to 2 of these 3 modules:</p> <ul style="list-style-type: none"> <li>• <b>Digital Applications</b></li> <li>• <b>Preparatory Mathematics</b></li> <li>• <b>Preparatory Science</b></li> </ul>

YOU'LL ALSO HAVE ADDITIONAL PERSONAL DEVELOPMENT ACTIVITIES.

## EXTRA MODULES TO HELP YOU REACH UNIVERSITY: 3.5 AND 4-TERM COURSES

IF YOU'RE TAKING A 3.5 OR 4-TERM COURSE, YOU'LL STUDY ALL THE RELEVANT MODULES ABOVE, PLUS:

- **English for Academic Study 2**
- **Reading and Writing 2**
- **Speaking and Listening 2**
- **Study Skills Preparation**

YOU'LL ALSO HAVE ADDITIONAL PERSONAL DEVELOPMENT ACTIVITIES.

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### MODULE SUMMARIES – DETAILS OF WHAT YOU'LL STUDY

#### **Biochemistry**

Study organic chemistry and biological science, and develop the laboratory skills you'll need on a degree.

#### **Biology**

Gain an understanding of biological systems and organisms, as well as key laboratory processes.

#### **Chemistry**

Gain an understanding of chemical reactions, fundamental particles and the periodic table.

#### **Engineering**

Study the key principles of engineering, including statics, dynamics, thermofluids and electronics.

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

Develop your English to the level you need for university study, and to really get involved in academic discussions.

#### **Extended Project**

Learn how to plan, carry out and report an extended project; you can choose a project topic that matches your degree and career goals, and personal interests.

#### **Geography and Earth Science**

Discover the history of the Earth, its system development and processes, and the evolution of life and natural environments.

#### **Intermediate Mathematics**

Expand your knowledge of mathematical concepts including algebra, geometry, problem-solving, trigonometry and vectors.

#### **Introduction to Sociology**

Explore the classic and contemporary social theories, and the effects of globalisation and global economics.

#### **Laboratory Skills and Scientific Writing**

Develop practical laboratory skills and lab report writing, plus an awareness of laboratory safety procedures.

#### **Mathematics**

Develop your mathematical skillset in areas such as algebra, decision maths, probabilities and statistics.

#### **Physics**

Gain an understanding of astrophysics, electromagnetism, mechanics and thermodynamics.

#### **Programming**

Learn basic programming concepts, common programming problems and problem solving methodologies.

#### **Science and Society**

Investigate and critique contemporary scientific issues and debates verbally and in writing.

## EXTRA MODULES FOR 2.5 AND 3-TERM COURSES

### **Critical Reading, Writing and Reasoning for Higher Education**

Enhance your ability to read and understand complex ideas in English, and to compose convincing written arguments.

### **Digital Applications**

Develop your digital skillset, helping you use digital tools to support academic study, including using and citing digital sources.

### **English for Academic Study 3**

Expand your knowledge of English grammar and vocabulary to the level required for degree study.

### **Independent and Collaborative Study**

Work individually and in teams on an academic task, and practise applying your subject knowledge and study skills.

### **Preparatory Mathematics**

Develop your numeracy skills, including algebra, geometry and graphs.

### **Preparatory Science**

Gain an introduction to core scientific knowledge, and subject-specific language required to study the sciences.

### **Reading and Writing 3**

Develop your English reading and writing skills to a sufficient level to communicate complex ideas.

### **Speaking and Listening 3**

Improve your ability to listen and speak in English, allowing you to fully engage with academic topics.

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## EXTRA MODULES FOR 3.5 AND 4-TERM COURSES

### **English for Academic Study 2**

Improve your English grammar and vocabulary in order to communicate in an academic environment.

### **Reading and Writing 2**

Develop your English reading and writing so that you can understand and articulate ideas and reasoning.

### **Speaking and Listening 2**

Practise listening and speaking so that you are better prepared for academic debate and discussion.

### **Study Skills Preparation**

Gain an introduction to the wide range of skills and strategies you'll need to succeed at university, such as research methods and using and citing sources.

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## PERSONAL DEVELOPMENT ACTIVITIES (ALL COURSE LENGTHS)

### **Digital and employability skills**

Outside of your academic learning, you'll also be taught skills that will be useful at university and later in life. You will receive help in making the most of your creativity, improving your communication and developing your digital skills. We will also help you build a CV, portfolio and online profile to empower you after you graduate.

### **Social network**

Forming a strong social network can be hugely beneficial, even if it's just to discuss and debate ideas. Not only will you get to know your classmates, you'll also have opportunities to join professional organisations, and network with students and industry professionals: something that can be really beneficial when you go on to start your career.

### **Culture and activities**

We'll help you have a hugely beneficial cultural and social experience, and encourage you to explore different activities, sports, crafts and more. You might learn about local history and culture, or develop your wider subject knowledge and understanding of related industries.

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Note: this information refers to courses that will run in the 2019-20 academic year, and is correct at the time of publication. Published October 2018.