

## Programme Specification

<b>Programme Title</b>	<b>Pre-Masters in Science and Engineering</b>
<b>Awarding Body</b>	<b>Kaplan International Colleges and The University of the West of England</b>
<b>Level and Credits</b>	<b>NQF level 6. 80 credits.</b>
<b>Name of Award</b>	<b>Pre-Masters Diploma in Science and Engineering</b>
<b>Mode of Study</b>	<b>Full Time</b>
<b>Language of Study</b>	<b>English</b>
<b>UWE Progression Routes</b>	<b>See Appendix A</b>
<b>Valid from date</b>	<b>May 2012</b>
<b>Valid until date</b>	<b>May 2013</b>
<b>Version</b>	<b>1</b>

### Programme Aims

The Pre-Masters in Science and Engineering equips international students with a range of subject-related knowledge and skills and English language capabilities and higher level study skills in order that they become independent, self-directed learners and achieve the necessary academic standards to progress to postgraduate Masters study in UK Higher Education institutions.

### Intended Learning Outcomes of Programme

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, skills, qualities and other attributes in the following areas. Upon successful completion of this programme, students will be able to demonstrate achievement of the following learning outcomes:

<b>Learning Outcomes</b>	<b>Module Name and Code</b>
<b>Subject Knowledge and Understanding</b>	
1. Develop a questioning approach to the foundations and methods of science, and its impact on contemporary life;	PM010 - Engineering, Science and Society
2. How to engage with original research reports, using standard statistical tools to assess the quality of research;	PM011- Statistical Design for Science and Engineering Research
3. Manage an open-ended research project within resource and time constraints, ultimately composing a comprehensive research report;	PM505 - Research Project
4. Analyse and critically evaluate numerical data via the use and application of statistical methods in research, including the use of appropriate spreadsheet software for interrogation and presentation of data;	PM011 - Statistical Design for Science and Engineering Research
5. Demonstrate understanding of the principles of research design;	PM505 - Research Project
6. Use of academic writing and appropriate use of other people's work;	PM501 - Skills for Study 1 PM502 - Skills for Study 2 PM503 – Skills for Study 3

7. Communication skills, including IT skills, written communication, oral communication and poster presentation relating to the student's own research;	PM501 - Skills for Study 1 PM502 - Skills for Study 2 PM503 – Skills for Study 3 PM505 - Research Project
8. In-depth knowledge of the student's proposed field of study, and relevant literature, developed in a problem-solving context;	PM505 - Research Project
<b>Generic Academic Learning Outcomes</b>	
1. Operate the English language skills of: a) reading for information, attitude and evaluation; listening with confidence to a wide range of dialogue and monologue; b) understanding and controlling the writing process applicable to a variety of academic writing texts and situations; c) speaking accurately, coherently and appropriately on a variety of complex topics;	PM201 – Language for Study 1 PM202 – Language for Study 2 PM203 – Language for Study 3  PM501 – Skills for Study 1 PM502 – Skills for Study 2 PM503 – Skills for Study 3
2. Understand how to prepare academic writing, how to refer to other people's work without plagiarising, how to log information sources and compile biographies, and how to take notes effectively	PM501 – Skills for Study 1 PM502 – Skills for Study 2 PM503 – Skills for Study 3 PM505 - Research Project
3. Apply problem-solving and critical thinking skills within their academic context, developing into an independent learner.	PM505 - Research Project
<b>Transferable/Key Skills</b>	
1. Retrieve paper-based and electronic information from a variety of sources;	All modules
2. Plan and implement a research project;	PM505 - Research Project
3. Make effective use of IT facilities, including application software and the Internet;	All modules
4. Manage resources and time;	All modules
5. Work and learn independently;	All modules
6. Work as a member of a team;	All modules
7. Participate constructively in peer review;	All modules
8. Communicate clearly and concisely both orally and in writing.	All modules

### Assessment

The assessment regime has been designed to ensure that (a) the students are enabled to demonstrate achievement of all the core learning outcomes and (b) the learners experience a variety of assessment tasks, in line with the range of knowledge, understandings, skills and abilities they are intended to develop. Fairness and consistency in assessments is achieved through significant attention paid to students' clarity about their assignments. Outline detail of the assessments associated with each of the programmes as a whole and with each module is given within the module specifications. These are further extended and clarified in both written and oral briefings provided to students before each assignment. Attendance at all sessions is a vital part of the programme and forms an important part of the assessment. All staff operate clear and explicit criteria by which tasks are assessed and adopt and use mark schemes that are made available to the students.

Clear, comprehensive and readily accessible feedback to students on their assessments is regarded by all staff as a highly important part of their learning formation and will be given in a variety of ways, including written comments from assessors, oral comments, tutorials, and group feedback. In some cases peer feedback is also built into the assessment strategy, which gives students valuable insights into the assessment process and its role in building confidence and contributing to enhanced future performance. Feedback given on assignments will also be discussed in detail by students with the Learning Support Tutor (see Additional Relevant Information).

Further detail and examples of the nature of assessment tasks, and the learning outcomes they assess, is provided in the module specifications.

### **Learning and Teaching Approaches**

Students are normally taught in classes of limited size, providing an environment in which they can more easily ask questions and engage in dialogue with the tutor, developing confidence and skill in classroom discussion and spoken English language proficiency. Course materials and learning support provision are designed to facilitate the gradual and supported transition to greater learner independence at NQF level 6. Curricula are developed on the basis of organised progression so that the demands on the learner in intellectual challenge, skills, knowledge, conceptualisation and learning autonomy increase.

Student learning is advanced through varied teaching methods, including lectures, tutorials, workshops and laboratories, appropriate to the subject and level, and guided self-study using skills developed in the academic skills modules and supported by materials and resources provided by the International College. Students also gain experience of working together in groups and practicing a range of transferable skills, including addressing an audience.

A mix of skills-based and specialist subjects are taught, and students are supported towards achieving a range of skills and attributes, via interactions with teaching staff, peers, course materials and assessments. Self-directed study and high levels of accountability are expected at this level. Assessments require the application of research skills, and the ability to critically evaluate and consolidate new ideas, data and ideas from a broad range of sources. Where applicable, students are supported in order to develop and utilise specialist skills within their studies.

### **Programme Reading Strategy**

#### **Core readings:**

Essential reading on the Pre-Masters programme will be indicated clearly, along with the method for accessing it, e.g. students may be expected to purchase a set text, be given a study pack or be referred to texts that are available electronically, or in the library. In particular, Pre-Masters students will be expected to read some of the many texts on research methods available in the library. Module handbooks will also reflect the range of reading to be carried out.

#### **Further readings:**

Students are expected to identify additional reading relevant to their chosen research topic themselves. They will be encouraged to read widely using the library search, a variety of bibliographic and full text databases, and Internet resources. Many resources can be accessed remotely.

#### **Access and skills:**

Formal opportunities for Pre-Masters students to develop their library and literature searching skills are provided within the Skills for Study and Research project modules. Additional support is available through the Library Services web pages, including interactive tutorials on finding books and journal articles, evaluating information and referencing. Sign-up workshops are also offered by the library.

#### **Indicative reading list:**

Indicative reading lists are offered on module specifications to provide validation panels/accrediting bodies with an indication of the type and level of information students may be expected to consult. As such, the currency of the indicative texts may wane during the life span of the module specification. *Current* advice on core reading and additional texts will be available via the module handbooks.

### **Relevant QAA subject benchmark statements and other external or internal reference points**

The Pre-Masters in Science and Engineering does not seek to replicate the subject knowledge to be gained from an undergraduate degree in the associated subject area. Students will have already studied an appropriate discipline at undergraduate level.

However, the Pre-Masters is designed to equip students with a range of specific learning outcomes relevant to their chosen discipline in line with the following QAA Honours degree subject benchmark statements: Engineering (2006).

The KIC Quality Assurance Framework and the supporting Academic Standards and Quality Manual provided by KIC centrally reflect appropriate sections of the QAA Code of Practice. Subject benchmark statements for NQF Level 6 are also used, as appropriate. KIC has established graduate outcomes which reflect these.

### Programme Structure and Features

The Pre-Masters in Science and Engineering consists of seven credit-bearing modules, six of 12 and one of 8 credits.

Students entering either the 3 Term or the 2 Term Pre-Masters Programme are required to have already achieved an IELTS score of 5.5 in all four skills (listening, reading, speaking, writing) or equivalent.

A brief overview of the content of each module is presented below, for detailed information see individual module specifications.

### 3 Term Pre-Masters (Language)

Term 1		Term 2	Term 3
<b>Non-credit bearing</b>		<b>Credit bearing</b>	
PM2013T - Language for Study 1	PM203T - Language for Study 2	PM010 - Engineering, Science and Society (12 credits)	
PM5013T - Skills for Study 1		PM011 - Statistical Design for Science and Engineering Research (12 credits)	PM505 - Research Project
		*PM505 - Research Project (Double Module – 24 credits)	
		PM203 - Language for Study 3 (8 credits)	
		PM5023T - Skills for Study 2 (12 credits)	PM503 - Skills for Study 3 (12 credits)

\*PM505 is a double module. Students will have 2 hours per week in the first term and 6 hours per week in the second term.

### 3 Term Pre-Masters (Enhancement)

Term 1	Term 2	Term 3
<b>Non-credit bearing</b>	<b>Credit bearing</b>	
<b>Compulsory modules</b>	PM010 - Engineering, Science and Society (12 credits)	
PMEN01 - Personal Development Planning and Study Skills	PM011 - Statistical Design for Science and Engineering Research (12 credits)	PM505 - Research Project
PMEN03 - Intercultural Studies	*PM505 - Research Project (Double Module – 24 credits)	
<b>Example optional modules (one of the below)</b>	PM2022T - Language for Study 2 (0 credits)	PM203 - Language for Study 3 (8 credits)
PMEN02 - Computing Skills	PM5012T - Skills for Study 1 (0 credits) (Weeks 1-4)	PM503 - Skills for Study 3 (12 credits)
PMEN04 - Refresher Mathematics and Science	PM5022T - Skills for Study 2 (12 credits) (Weeks 5-10)	

\*PM505 is a double module. Students will have 2 hours per week in the first term and 6 hours per week in the second term.

### 2 Term Pre-Masters

Term 1	Term 2
<b>Credit bearing</b>	
PM010 - Engineering, Science and Society (12 credits)	
PM011 - Statistical Design for Science and Engineering Research (12 credits)	PM505 - Research Project
*PM505 - Research Project (Double Module – 24 credits)	
PM2022T - Language for Study 2 (0 credits)	PM203 - Language for Study 3 (8 credits)
PM5012T - Skills for Study 1 (0 credits) (Weeks 1-4)	PM503 - Skills for Study 3 (12 credits)
PM5022T - Skills for Study 2 (12 credits) (Weeks 5-10)	

\*PM505 is a double module. Students will have 2 hours per week in the first term and 6 hours per week in the second term.

### **Entry Requirements**

Entry onto the Pre-Masters in Science and Engineering is dependent upon successful completion of three years of higher education in a subject related to the intended progression degree. Details of country-specific entry requirements are available from KIC Sales and Admissions.

For additional entry requirements relating to specific progression routes, see Appendix A

### **Academic Regulations**

Approved variant to University Academic Regulations and Procedures.

### **Additional relevant information**

Students on the Pre-Masters programmes will be associate students of The University of the West of England, Bristol with access to the range of facilities and services, including IT and library facilities, of an undergraduate University student.

All students will receive a copy of a programme handbook and individual module guides for each module studied. The programme handbook provides information about the programme structure; assessment (including academic offences, plagiarism and assessment and examination dates); programme staff and student support; responsibilities of tutors and students and a series of appendices including the academic calendar, assessment rules and regulations, generic assignment marking criteria, complaints procedures and guidelines for tutorials.

Module handbooks provide detailed information about modules aims and learning outcomes; weekly content; assessment timetable, tasks and criteria and tutor contact details.

The University of the West of England, Bristol's International College will provide comprehensive and accessible student support services throughout the students' period of study. Each student will be allocated to a Learning Support Tutor for personal academic support. Students requiring additional English language, academic and/or pastoral support will be identified and targeted for additional support as required.

In addition to the Learning Support Tutors, a dedicated Head of Student Services manages student welfare and pastoral needs. The Head of Student Services deals with all welfare related areas from point of arrival onwards and coordinates activities such as accommodation, airport arrivals, orientation and social programmes. This is a senior position within the college, reflecting the importance placed by Kaplan International Colleges on the welfare support of students.

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