Stage 1 (University Foundation) – Engineering

Duration: 2 semesters

Intakes: January & September

The University of Portsmouth’s Faculty of Technology provides an extensive variety of specialist degree programmes, including Civil Engineering, Electronic Engineering, Mechanical Engineering and Petroleum Engineering. With access to cutting-edge laboratories, close industry relationships and excellent academic staff, you will receive the very best start to your chosen engineering career.

**Stream 1**

The Foundation has been designed for students who wish to study one of the following University of Portsmouth degree courses:

* BEng (Hons) Electronic Engineering

*Think of all the advances in technology over the years, from games consoles and smart phones to drones and self-driving cars. The role of electronic engineers in the future will be crucial as we become increasingly reliant on faster, more intelligent technologies. On this course you’ll learn about the many aspects of electronic engineering in a practical and exciting way.*

* BEng (Hons) Mechanical Engineering

*Most of what you see has been made, developed or modified by an engineer. Meeting the challenges of the changing world, there will always be a demand for mechanical engineers. This course encompasses the design, development, manufacture, installation, operation and maintenance of engineered products.*

* BSc (Hons) Computer Networks

*This course will provide you with knowledge and practical skills to design, implement, and support computer networks at small and large companies, and to engineer new networking technologies influencing the future of the industry.*

**Course information**

One credit is equivalent to 10 hours of learning. This programme is comprised of 135 credit points, equivalent to 1350 notional hours comprised of 436 contact hours and 914 self-directed hours. You will study the following modules over two semesters:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Module Name** | **Module Code** | **Core/ Option** | **Credit** | **Assessment Type** | **Weighting (%)** |
| ICT Skills  **Contact hours per week:** **3h** | BUS107BL | Core | 10 | (A) Practical exercise covering word and excel skills | 40 |
| (B) 2 hour closed book exam | 60 |
| Numerical Techniques 1  **Contact hours per week:** **5h** | SCI101EM | Core | 20 | (A) 2 hour closed book exam | 40 |
| (B) Final 2 hour closed book exam | 60 |
| Interactive Learning Skills and Communication  **Contact hours per week:** **5h** | ILSCBL0 | Core | 20 | (A) Research and Reference a Topic | 10 |
| (B) Oral Presentation | 20 |
| (C) Group Project | 20 |
| (D) Closed Book Examination 2.5 hours to include listening component | 40 |
| (E) PDP Portfolio | 10 |
| Engineering Principles 1  **Contact hours per week:** **5h** | ENG101 | Core | 20 | (A) 1500 word laboratory report | 20 |
| (B) 1 hour closed book exam | 30 |
| (C) 2 hour closed book exam | 50 |
| Engineering Principles 2  **Contact hours per week:** **5h** | ENS102 | Core | 20 | (A) 1 hour closed book exam mid-semester | 30 |
| (B) 1500 word laboratory report | 20 |
| (C) 2 hour closed book exam | 50 |
| Numerical Techniques 3  **Contact hours per week:** **5h** | ENG103 | Core | 20 | (A) 2 hour closed book exam | 40 |
| (B) Final 2 hour closed book exam | 60 |
| Research Method, Critical Thinking & Expression  **Contact hours per week:** **4h** | RES101 | Core | 15 | (A) 1 hour in-class test | 20 |
| (B) 1000 word written argument | 20 |
| (C) Final 2 hour closed book exam | 60 |
| Programming Concepts  **Contact hours per week:** **3h** | SCI107 | Core | 10 | (A) MCT (20 mins) | 5 |
| (B) MCT (20 mins) | 5 |
| (C) MCT (20 mins) | 5 |
| (D) Problem solving task | 25 |
| (E) Final 2 hour closed book examination | 60 |

You will be required to pass all modules (135 credits) in order to successfully complete Stage 1 (University Foundation).

**Stream 2**

The Foundation has also been designed for students who wish to study one of the following University of Portsmouth degree courses:

* BEng (Hons) Civil Engineering

*This course is a dynamic mix of specialist civil engineering knowledge and essential learning of current technical and practical methods.*

**Course information**

One credit is equivalent to 10 hours of learning. This programme is comprised of 135 credit points, equivalent to 1350 notional hours comprised of 436 contact hours and 914 self-directed hours. You will study the following modules over two semesters:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Module Name** | **Module Code** | **Core/ Option** | **Credit** | **Assessment Type** | **Weighting (%)** |
| ICT Skills  **Contact hours per week:** **3h** | BUS107BL | Core | 10 | (A) Practical exercise covering word and excel skills | 40 |
| (B) 2 hour closed book exam | 60 |
| Numerical Techniques 1  **Contact hours per week:** **5h** | SCI101EM | Core | 20 | (A) 2 hour closed book exam | 40 |
| (B) Final 2 hour closed book exam | 60 |
| Interactive Learning Skills and Communication  **Contact hours per week:** **5h** | ILSCBL0 | Core | 20 | (A) Research and Reference a Topic | 10 |
| (B) Oral Presentation | 20 |
| (C) Group Project | 20 |
| (D) Closed Book Examination 2.5 hours to include listening component | 40 |
| (E) PDP Portfolio | 10 |
| Engineering Principles 1  **Contact hours per week:** **5h** | ENG101 | Core | 20 | (A) 1500 word laboratory report | 20 |
| (B) 1 hour closed book exam | 30 |
| (C) 2 hour closed book exam | 50 |
| Engineering Principles 2  **Contact hours per week:** **5h** | ENS102 | Core | 20 | (A) 1 hour closed book exam mid-semester | 30 |
| (B) 1500 word laboratory report | 20 |
| (C) 2 hour closed book exam | 50 |
| Numerical Techniques 3  **Contact hours per week:** **5h** | ENG103 | Core | 20 | (A) 2 hour closed book exam | 40 |
| (B) Final 2 hour closed book exam | 60 |
| Research Method, Critical Thinking & Expression  **Contact hours per week:** **4h** | RES101 | Core | 15 | (A) 1 hour in-class test | 20 |
| (B) 1000 word written argument | 20 |
| (C) Final 2 hour closed book exam | 60 |
| Design Concepts  **Contact hours per week:** **3h** | SCI133 | Core | 10 | (A) Written design report and Presentation (1000 words) | 40 |
| (B) 2 hour closed book exam | 60 |

You will be required to pass all modules (135 credits) in order to successfully complete Stage 1 (University Foundation).

**Stream 3**

The Foundation has also been designed for students who wish to study one of the following University of Portsmouth degree courses:

* BEng (Hons) Petroleum Engineering

*Whether we like it or not, we rely on the long-term supply of gas and oil. Petroleum engineers play a very important role in resolving this problem and will continue to do so in the foreseeable future. This course gives you a broad ranging knowledge of all the phases involved in finding (exploration), drilling and extracting oil.*

**Course information**

One credit is equivalent to 10 hours of learning. This programme is comprised of 145 credit points, equivalent to 1450 notional hours comprised of 466 contact hours and 984 self-directed hours. You will study the following modules over two semesters:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Module Name** | **Module Code** | **Core/ Option** | **Credit** | **Assessment Type** | **Weighting (%)** |
| ICT Skills  **Contact hours per week:** **3h** | BUS107BL | Core | 10 | (A) Practical exercise covering word and excel skills | 40 |
| (B) 2 hour closed book exam | 60 |
| Numerical Techniques 1  **Contact hours per week:** **5h** | SCI101EM | Core | 20 | (A) 2 hour closed book exam | 40 |
| (B) Final 2 hour closed book exam | 60 |
| Interactive Learning Skills and Communication  **Contact hours per week:** **5h** | ILSCBL0 | Core | 20 | (A) Research and Reference a Topic | 10 |
| (B) Oral Presentation | 20 |
| (C) Group Project | 20 |
| (D) Closed Book Examination 2.5 hours to include listening component | 40 |
| (E) PDP Portfolio | 10 |
| Engineering Principles 1  **Contact hours per week:** **5h** | ENG101 | Core | 20 | (A) 1500 word laboratory report | 20 |
| (B) 1 hour closed book exam | 30 |
| (C) 2 hour closed book exam | 50 |
| Engineering Principles 2  **Contact hours per week:** **5h** | ENS102 | Core | 20 | (A) 1 hour closed book exam mid-semester | 30 |
| (B) 1500 word laboratory report | 20 |
| (C) 2 hour closed book exam | 50 |
| Numerical Techniques 3  **Contact hours per week:** **5h** | ENG103 | Core | 20 | (A) 2 hour closed book exam | 40 |
| (B) Final 2 hour closed book exam | 60 |
| Research Method, Critical Thinking & Expression  **Contact hours per week:** **4h** | RES101 | Core | 15 | (A) 1 hour in-class test | 20 |
| (B) 1000 word written argument | 20 |
| (C) Final 2 hour closed book exam | 60 |
| Chemistry  **Contact hours per week:** **5h** | SCI108 | Core | 10 | (A) Lab report 1500 words | 25 |
| (B) 2 hour closed book exam | 75 |

You will be required to pass all modules (145 credits) in order to successfully complete Stage 1 (University Foundation).