

Programme Specification

MSc Energy and Sustainability with Electrical Power Engineering (2017-18)

This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if s/he takes full advantage of the learning opportunities that are provided.

Awarding Institution	University of Southampton
Teaching Institution	University of Southampton
Mode of Study	Full Time
Duration in Years	1 Year
Accreditation details	Currently Partially Accredited by the The Institution of Engineering Technology
Final award	Master of Science (MSc)
Name of award	Energy and Sustainability with Electrical Power Engineering
Interim Exit awards	Postgraduate Diploma Postgraduate Certificate
FHEQ level of final award	7
UCAS code	N/A
QAA Subject Benchmark or other external reference	The UK Quality Assurance Agency's Framework for Higher Education Qualifications FHEQ level 7 (Masters). In addition, the following reference points have been used in designing the programme: <ul style="list-style-type: none">· European and governmental policy statements· University Learning and Teaching Strategy· Collaboration with professional bodies· University of Southampton Knowledge Transfer Account· Liaison with industry
Programme Coordinator	Dr Paul Chappell
Date specification was written	10/06/2015
Date Specification last updated	10/04/2017

Programme Overview

Brief outline of the programme

The full-time programme is studied over one year. On successful completion of all parts, the MSc provides the student with part of the educational requirement to apply for professional registration as a chartered engineer through the IET. The programme provides the person with skills, knowledge, experience and comprehension of worldwide energy needs and technical solutions to the increasing demand for energy in a sustainable environment. It is expected that graduating students will have experienced the most up-to-date research to develop their engineering skills and to lead a successful career in the industrial energy sector.

Please note: As a research-led University, we undertake a continuous review of our programmes to ensure quality enhancement and to manage our resources. As a result, this programme may be revised during a student's period of registration, however, any revision will be balanced against the requirement that the student should receive the educational service expected. Please read our [Disclaimer](#) to see why, when and how changes may be made to a student's programme.

Programmes and major changes to programmes are approved through the University's programme validation process which is described in the University's Quality handbook.

Learning and teaching

Students are taught through lectures, tutorials and laboratory sessions. Some modules provide visits to industrial sites and lectures from visiting industrialists and academics to illustrate the breath and depths of energy problems faced by developed and developing countries. Learning and Teaching Strategy within the Faculty seeks to promote independent learning and to develop intrinsically motivated thinkers who can critically analyse engineering problems and find optimal solutions.

Assessment

The assessment strategy sets out to allow you to demonstrate your successful learning using fair and reliable assessment methods. The student is assessed through a range of settings to demonstrate their knowledge, comprehension and ability. Assessment may include formative and summative tasks such as written reports, coursework using software and sitting unseen examinations.

[This will be used in the 'find a course' entry on the University website for marketing purposes]

Educational Aims of the Programme

Electronics and Computer Science (ECS) has a leading international reputation for its research. Within ECS, each MSc programme offers a postgraduate education in one of the research specialisations. The aims of this programme are:

- For you to gain a sound knowledge and understanding of the key issues and processes in Energy and Sustainability. In particular, to relate this to the requirements and limitations of the existing bulk electrical energy transport infrastructure.
- To provide education and training to students from the EU region as well as regions outside the EU relevant to both a developed world and developing world context.
- To develop your skills in; critical appraisal and analysis of energy project options and systems, independent research and oral and written communication.
- To achieve an integrated, multi-disciplinary coverage of energy and sustainability education and training at postgraduate level.
- To provide relevant in-career postgraduate training for professionals working in energy and sustainability.

As a graduate of this programme you will have developed your analytical and practical skills and be able to use problem solving techniques and evidence in decision making, exploiting technology to meet future expectations through lifelong learning.

Programme Learning Outcomes

Knowledge and Understanding

Having successfully completed this programme you will be able to demonstrate knowledge and understanding of:

- A1 Principles of energy and sustainability.
- A2 Theoretical principles and practical limitations of current knowledge and understanding in Energy and Sustainability, with reference to generation and bulk electrical energy transport.
- A3 Contemporary management, legal, operational and business practices which are relevant to the sector.
- A4 Demonstrate the ability to acquire new knowledge and understanding through the critical reading of scientific and technical books and papers.
- A5 Health and safety issues, risk assessment and regulatory frameworks that underpin the responsibilities of professionals working in energy and sustainability.

Teaching and Learning Methods

Acquisition of core knowledge of understanding is achieved mainly through lectures supplemented by laboratory classes, seminars, tutorials, directed reading, video presentations, case studies, project work, and independent study. These methods may be supplemented by field visits and presentations from visiting specialist speakers where appropriate. Throughout the programme you are encouraged to use additional recommended reading material for private study to consolidate the formal learning process, and to broaden and deepen your understanding.

Assessment methods

Assessment will be through individual coursework, essays, and reports, oral and poster presentations, field-based reports, written assignments consisting of short and long problems, written examinations, a dissertation; and where appropriate, team assignments and presentations. Students are given feedback both verbally and written via the cover sheets for assignments.

Subject Specific Intellectual and Research Skills

Having successfully completed this programme you will be able to:

- B1** Integrate knowledge from various disciplines within Energy and Sustainability in order to solve engineering problems holistically.
- B2** Identify, critically evaluate and apply appropriate scientific methods to produce solutions for complex problems in energy and sustainability.
- B3** Apply professional judgement to energy and sustainability projects with regard to environmental Impact, safety and reliability.
- B4** Carry out and reflect on activities congruent with a professional in energy and sustainability.
- B5** Select and research a topic of relevance to the programme of study and independently conduct the investigation in a planned, structured and professional manner.
- B6** Develop the ability to apply concepts and skills, particularly those of advanced problem solving, critical analysis and evaluation, within the chosen study area.

Teaching and Learning Methods

Intellectual skills cover the range starting from Knowledge, Comprehension, Application, Analysis, Synthesis to Evaluation. The teaching and learning methods used in this programme will develop this range of intellectual skills. Lectures, visiting guest lectures and tutorials will develop knowledge and comprehension, coursework and assignments will develop application. Group discussions and debates and presentations along with group work and individual project/dissertation will develop analysis, synthesis and evaluation skills.

Assessment methods

The assessment methods in this programme will support the development of intellectual and research skills. Knowledge and Comprehension will be assessed through short examination style questions either as a formal closed book examination or as an open book assignment. Audio-visual presentations, extensive open-ended assignments and novel unexplored problems as projects will be used to assess analysis, synthesis and evaluation skills developed.

Transferable and Generic Skills

The generic/transferable skills that his programme will develop include

- C1** Communication - Presentation, audio-visual and written.
- C2** Critical evaluation and appraisal
- C3** Information technology including subject specific software and some programming
- C4** Numeracy – mathematical skills
- C5** Analysis of Systems
- C6** Research Skills – library search skills, literature review skills

Teaching and Learning Methods

A number of modules have a significant coursework element. This can range from design work through to presentations resulting from directed reading. Group assignments and design projects are intended to develop team working, project and time management skills. The individual MSc project includes independent research, project management and report writing. Debates and questions will be encouraged in lectures to develop evaluation and appraisal skills. Tutorials will cover industry standard software to develop IT skills. Assessments will be set such that they develop numeracy, analysis and research skills.

Assessment methods

The assessment in the project will be evaluated for its communication quality i.e. written work, posters, audio-visual presentations etc. Some work will also be peer-reviewed to allow students to develop skills in presenting a fair but good critique. Assignments will require use of generic IT software e.g. spreadsheets, MATLAB etc. which will be evaluated for quality of use as well as for outcome. Assessment may include development of fundamental mathematical models and their implementation to develop numeracy skills and analysis. Independent research as part of the MSc project/dissertation will develop research skills including library search skills, critical review of literature and synthesis into new ideas.

Subject Specific Practical Skills (optional)

N/A

Disciplinary Specific Learning Outcomes (optional)

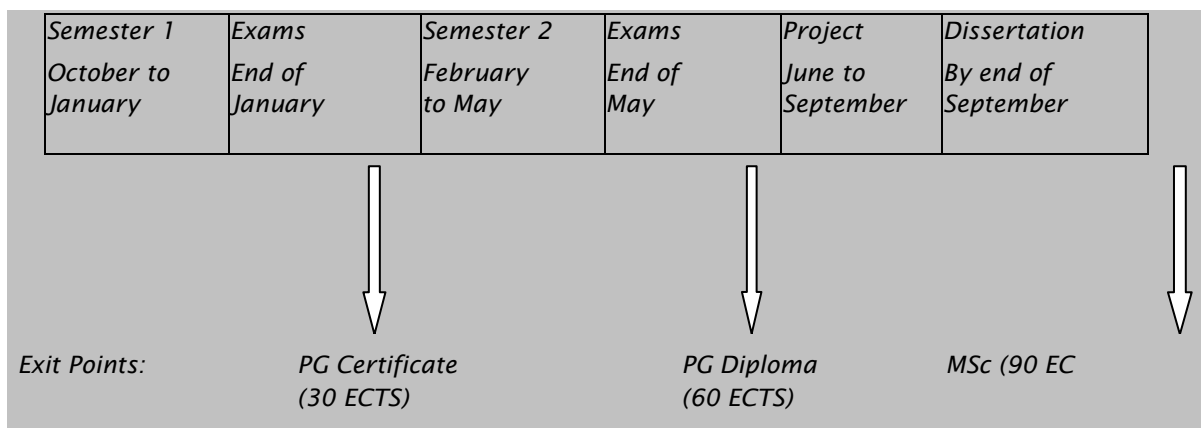
N/A

Programme Structure

Typical course content

The programme is delivered in a series of modules. Each taught module is 7.5 ECTS points (European Credit and Transfer System). As a rough guide a 7.5 ECTS point module requires *around 200 hours* of work. This would include all work i.e. formal lectures, assignments, revision, examination tutorials etc. The programme works on the principle of credit accumulation i.e. you must be awarded credit for a module and accumulate sufficient credits to be eligible for one of the exit awards described below. To be awarded credit for any module you must pass a module by achieving at least the module pass mark. Module pass marks are given in individual module specifications which are included in the Programme Guide and is issued to all students upon enrolment.

The programme follows the University's regulations for Standalone Masters programmes as set out in the University Calendar, and the ECS specific regulations which supplement these. See sections IV and XII of <http://www.calendar.soton.ac.uk>. The pass mark for MSc modules is 50%, and the regulations cover progression criteria, referral, repeat and resubmission arrangements, together with degree classification. This programme provides three exit points with the following exit awards as shown in the Figure below:



For a post-graduate certificate you must accumulate a minimum of 30 ECTS points of taught modules. For a post-graduate diploma you must accumulate a minimum of 60 ECTS points of taught modules. For a Master of Science you must accumulate a minimum of 90 ECTS points of which a minimum of 60 ECTS points must be taught modules and 30 ECTS points must be for independent research project. You must have accumulated a minimum of 60 ECTS points from the taught modules and achieved at least the average pass mark as specified in the progression rules before you will be permitted to undertake your independent research project. Progression rules are contained in the faculty student handbook, http://www.fpse.soton.ac.uk/student_handbook, issued to all new students as well as the University Calendar (<http://www.calendar.soton.ac.uk/sectionVII/mscregs.html>). There is also the ECS student homepage <https://secure.ecs.soton.ac.uk/student/>.

For a student enrolled on a full-time basis, the duration of this programme is 1 calendar year inclusive of 3 weeks Christmas vacation and 4 weeks Easter vacation or 45 weeks exclusive of vacation. The programme structure is shown in Table 1 which lists all the modules. Detailed explanation of core and compulsory modules can be found in the Progression Rules. All Energy and Sustainability MScs contain a minimum of 22.5 ECTS points of optional modules. It is possible to select option courses from other pathways, or from a list of ECS Part 4 Undergraduate modules.

It should be noted that it may not be possible to run some optional modules if the number of students registered on the module is very small.

The structure of the course is shown in the following Tables. Please note that the elements are taken from the established modules in the Faculty of Engineering and the Environment.

Special Features of the programme

The programme includes visiting speakers from industry and universities giving topic lecturer. There will be visits to industrial sites to illustrate current technology and future directions. The precise list of options may vary in minor ways from year to year, depending on student numbers and staff availability. Some options have prerequisites, which are stated in their on-line syllabus.

Programme details

TABLE 1. Programme Structure: Semester 1

MSc Energy and Sustainability with Electrical Power Energy			ECTS points
ELEC6220	Power System Analysis	Compulsory	7.5
ELEC6221	Power Generation: Technology and Impact on Society	Compulsory	7.5
ELEC6222	Transmission and Distribution	Compulsory	7.5
ELEC6223	Fundamental Principles of Energy	Compulsory	7.5
Taught modules Semester 1 sub total			30

TABLE 2. Programme Structure: Semester 2

MSc Energy and Sustainability with Electrical Power Energy			ECTS points
ELEC6211	Project Preparation	Compulsory	7.5

Students will select 22.5 ECTS of options from a list of at least 40 ECTS Modules that will include the following. At most, 15 ECTS may be taken at the level below level 6.

ELEC6224	Advanced Electrical Materials	Option	7.5
ELEC6225	High Voltage Insulation Systems	Option	7.5
ELEC6226	Power Electronics for DC Transmission	Option	7.5
SESG6043	Nuclear Energy Technology	Option	7.5
SESS6067	Renewable energy from environmental flows	Option	7.5
CENV6141	Bioenergy	Option	7.5
ELEC3216	Mechanical Power Transmission and Vibration	Option	7.5
ELEC3202	Green Electronics	Option	7.5

Taught modules Semester 2 sub total			30
COMP6200	MSc Project	core	30
Total			90

Additional Costs

Students are responsible for meeting the cost of essential textbooks, and of producing such essays, assignments, laboratory reports and dissertations as are required to fulfil the academic requirements for each programme of study. Costs that students registered for this programme typically also have to pay for are included in Appendix 2:

Progression Requirements

The programme follows the University's regulations for ***Progression, Determination and Classification of Results: Undergraduate and Integrated Masters Programmes*** as set out in the University Calendar (<http://www.calendar.soton.ac.uk/sectionIV/progression-regs.html>)

[This text may be amended only in cases where UPC approval of exemption from University harmonised regulations has been granted]

Intermediate exit points (where available)

For PGT programmes

You will be eligible for an interim exit award if you complete part of the programme but not all of it, as follows:

Qualification	Minimum overall credit in ECTS credits	Minimum ECTS credits required at level of award
Postgraduate Diploma	at least 60	45
Postgraduate Certificate	at least 30	20

Support for student learning

There are facilities and services to support your learning some of which are accessible to students across the University and some of which will be geared more particularly to students in your particular Faculty or discipline area.

The University provides:

- library resources, including e-books, on-line journals and databases, which are comprehensive and up-to-date; together with assistance from Library staff to enable you to make the best use of these resources
- high speed access to online electronic learning resources on the Internet from dedicated PC Workstations onsite and from your own devices; laptops, smartphones and tablet PCs via the Eduroam wireless network. There is a wide range of application software available from the Student Public Workstations. Students can also access SVE (Southampton Virtual Environment), a virtual Windows University of Southampton desktop that can be accessed from personal devices such as PCs, Macs, tablets and smartphones from any location.
- computer accounts which will connect you to a number of learning technologies for example, the Blackboard virtual learning environment (which facilitates online learning and access to specific learning resources)
- standard ICT tools such as Email, secure filestore and calendars.

- access to key information through the MySouthampton Student Mobile Portal which delivers timetables, Module information, Locations, Tutor details, Library account, bus timetables etc. while you are on the move.
- Central IT support is provided through a comprehensive website, telephone and online ticketed support and a dedicated helpdesk in the Hartley Library foyer
- Enabling Services offering assessment and support (including specialist IT support) facilities if you have a disability, dyslexia, mental health issue or specific learning difficulties
- the Student Services Centre (SSC) to assist you with a range of general enquiries including financial matters, accommodation, exams, graduation, student visas, ID cards
- Career Destinations, advising on job search, applications, interviews, paid work, volunteering and internship opportunities and getting the most out of your extra-curricular activities alongside your degree programme when writing your CV
- a range of personal support services : mentoring, counselling, residence support service, chaplaincy, health service
- a Centre for Language Study, providing assistance in the development of English language and study skills for non-native speakers.

The Students' Union provides

- an academic student representation system, consisting of Course Representatives, Academic Presidents, Faculty Officers and the Vice-President Education; SUSU provides training and support for all these representatives, whose role is to represent students' views to the University.
- opportunities for extracurricular activities and volunteering
- an Advice Centre offering free and confidential advice including support if you need to make an academic appeal
- Support for student peer-to-peer groups, such as Nightline.

Associated with your programme you will be able to access:

Student Handbook and Programme Guide

- f* The tutorial system - you will have a personal tutor
- f* Student Resource Centre which includes workstations and library
- f* Orientation programme
- f* Access to all academic and research staff (by appointment)
- f* Student Information and Resources Website
- f* Extensive well equipped and resourced laboratories

Methods for evaluating the quality of teaching and learning

You will have the opportunity to have your say on the quality of the programme in the following ways:

- Completing student evaluation questionnaires for each module of the programme
- Acting as a student representative on various committees, e.g. Staff: Student Liaison Committees, Faculty Programmes Committee OR providing comments to your student representative to feed back on your behalf.
- Serving as a student representative on Faculty Scrutiny Groups for programme validation
- Taking part in programme validation meetings by joining a panel of students to meet with the Faculty Scrutiny Group

The ways in which the quality of your programme is checked, both inside and outside the University, are:

- Regular module and programme reports which are monitored by the Faculty
- Programme validation, normally every five years.
- External examiners, who produce an annual report
- Professional body accreditation/inspection

- A national Research Evaluation Exercise (our research activity contributes directly to the quality of your learning experience)
- Institutional Review by the Quality Assurance Agency

Additional information may be added by faculties in this section – for example if there are additional quality measures in place in respect of professional placements, programmes operated overseas, etc.

Criteria for admission

The University’s Admissions Policy applies equally to all programmes of study. The following are the typical entry criteria to be used for selecting candidates for admission. The University’s approved equivalencies for the requirements listed below will also be acceptable.

Undergraduate programmes

Qualification	Grades	Subjects required	Subjects not accepted	EPQ Alternative offer (if applicable)	Contextual Alternative offer (if applicable)
GCE A level					
GCSE					
BTEC					
International Baccalaureate					
European Baccalaureate					

Postgraduate programmes

Qualification	Grade/GPA	Subjects requirements	Specific requirements
Bachelor’s degree	2:1 Honours	The following module is essential 1. Electrical Machines- (can be shown as Electrical drives, electrical motor and drives, Control of Electrical machines, control of electrical drives, Electro-mechanical energy converters, Electric machinery, electrical systems, note electrical control is good but not the same. Other relevant modules second most important one is 2. Power Systems (Power systems analysis, power system control, electrical power systems, energy power systems, transmissions and distribution of electrical power, power generation).other useful ones 3. High voltage Engineering (High Voltage). 4. Applied Electromagnetics(Electromagnetics, Electrotechnics, Electromagnetic Fields). 5. a Electrical apparatus and 5b.Power Electronics (Power converters, C	
Master’s degree			

Mature applicants

Applications from mature students (over 21 years in the October of the year of entry) are welcome. Applications will be considered on an individual basis.

English Language Proficiency

Overall	Reading	Writing	Speaking	Listening
6.5	6.0	6.0	6.0	6.0

Career Opportunities

Major employers worldwide are keen to employ our graduates. In the energy industries, there is a shortage of well qualified engineers for research, development and sustainability of power. Across ECS, our graduates find employment in system development, information technology and communications in the IT sector, and in the finance, service, communications and entertainment industries. We have strong relationships with employers, run our own Careers Hub website (www.ecs.soton.ac.uk/careers) and hold our own annual careers fair.

External Examiner(s) for the programme

Name Professor Scott Roy

Institution University of Glasgow

Students must not contact External Examiner(s) directly, and external examiners have been advised to refer any such communications back to the University. Students should raise any general queries about the assessment and examination process for the programme with their Course Representative, for consideration through Staff: Student Liaison Committee in the first instance, and Student representatives on Staff: Student Liaison Committees will have the opportunity to consider external examiners' reports as part of the University's quality assurance process.

External examiners do not have a direct role in determining results for individual students, and students wishing to discuss their own performance in assessment should contact their personal tutor in the first instance.

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 be expected to achieve and demonstrate if s/he takes full advantage of the learning opportunities that are provided. More detailed information can be found in the programme handbook or online at http://www.fpse.soton.ac.uk/student_handbook.

Appendix 1:

Learning outcomes and Assessment Mapping document template

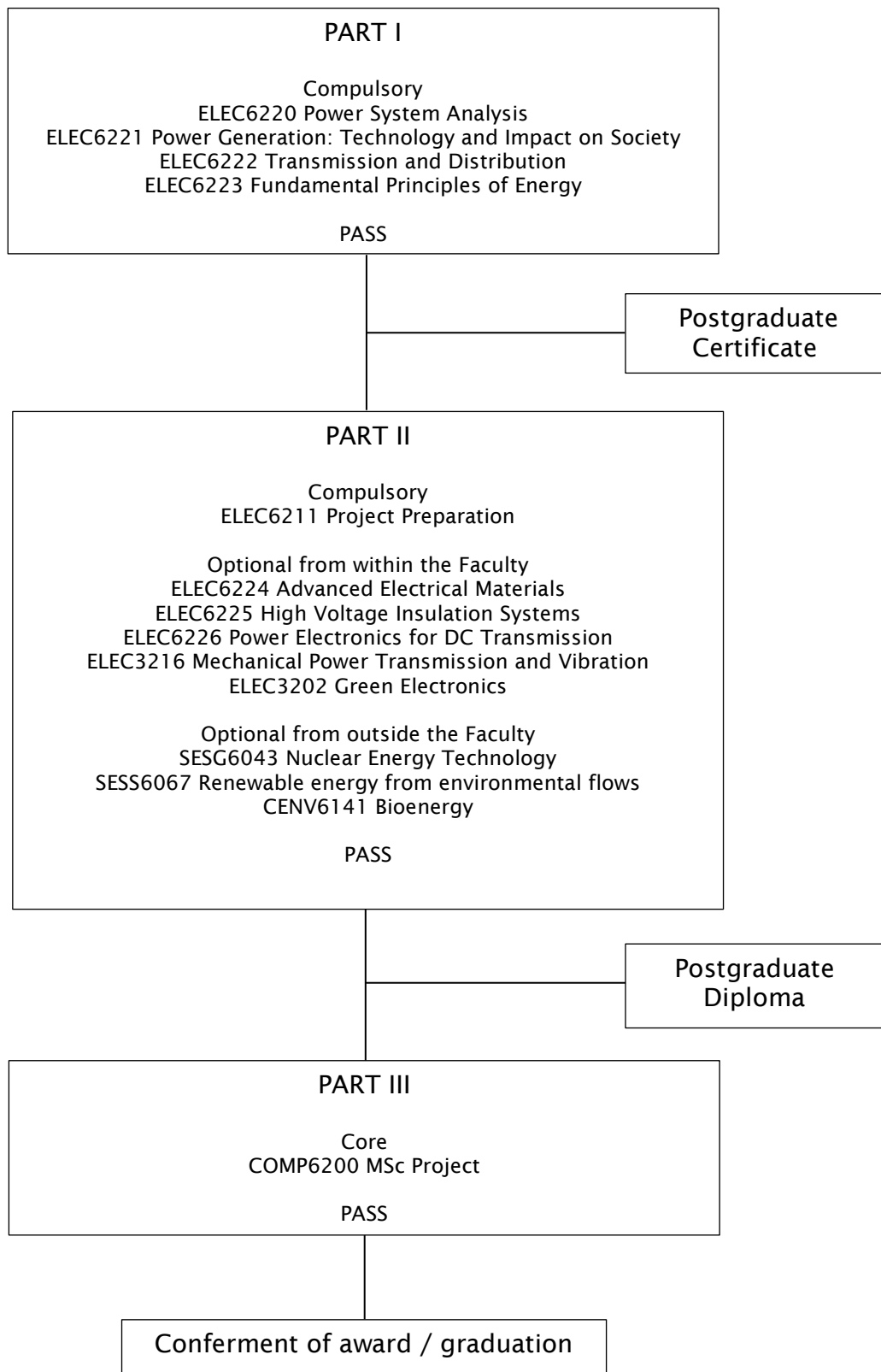
[insert module codes and module titles and mark in each box where a learning outcome referenced in the programme specification may be demonstrated by successful completion of that module. The numbers A1 A2 B1 B2 etc refer back to the learning outcomes listed under Knowledge and Understanding, Subject Specific Intellectual and Research Skills, Transferable and Generic Skills and Subject Specific Practical Skills in the Programme Learning Outcomes section of this programme specification template.].

Module Code	Module Title	Knowledge and Understanding					Subject Specific Intellectual Skills						Transferable/Key Skills					
		A 1	A 2	A 3	A 4	A 5	B 1	B 2	B 3	B 4	B 5	B 6	C 1	C 2	C 3	C 4	C 5	C 6
ELEC 6211	Project Preparation	•	•		•		•	•			•	•	•	•	•	•	•	•
ELEC 6200	MSc Project	•			•	•	•	•		•	•	•	•	•	•	•	•	•
ELEC 6220	Power System Analysis	•	•		•			•				•	•		•	•	•	
ELEC 6221	Power Generation: Technology and Impact on Society	•	•	•	•	•	•	•	•			•	•		•	•	•	
ELEC 6222	Transmission and Distribution	•	•	•	•		•	•		•		•	•		•	•	•	
ELEC 6223	Fundamental Principles of Energy	•	•	•	•		•	•				•	•		•	•	•	
ELEC 6224	Advanced Electrical Materials	•	•		•		•	•			•	•	•		•	•	•	
ELEC 6225	High Voltage Insulation Systems	•	•	•	•		•	•		•		•	•		•	•	•	
ELEC 6226	Power Electronics for DC Transmission	•	•		•		•	•				•	•		•	•	•	
SESG60 43	Nuclear Energy Technology	•			•		•	•	•			•	•		•	•	•	
SESS60 67	Renewable energy from environmental flows	•			•		•	•				•	•		•	•	•	
CENV6 141	Bioenergy	•			•		•	•	•			•	•		•	•	•	
ELEC32 16	Mechanical Power Transmission and Vibration	•			•		•	•				•	•		•	•	•	

Module Code	Module Title	Coursework 1	Coursework 2	Exam
ELEC6220	Power System Analysis	Coursework using ERACS software 50%		2 hours 50%
ELEC6221	Power Generation: Technology and Impact on Society	Business plan for energy generation 25%	Steam plant analysis 25%	2 hours 50%
ELEC6222	Transmission and Distribution	Design Project 1 25%	Design Project 2 25%	2 hours 50%
ELEC6223	Fundamental Principles of Energy	Test after 12 review lectures 15%		2 Hours 85%
ELEC6211	Project Preparation	Literature Review 40%	Project Plan and methodology 30%	Poster Presentation 30%

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MSc Energy and Sustainability with Electrical Power Engineering Programme structure



Appendix 2:

Additional Costs

Students are responsible for meeting the cost of essential textbooks, and of producing such essays, assignments, laboratory reports and dissertations as are required to fulfil the academic requirements for each programme of study. In addition to this, students registered for this programme typically also have to pay for the items listed in the table below.

In some cases you'll be able to choose modules (which may have different costs associated with that module) which will change the overall cost of a programme to you. Details of such costs will be listed in the Module Profile. Please also ensure you read the section on additional costs in the University's Fees, Charges and Expenses Regulations in the University Calendar available at www.calendar.soton.ac.uk.

Main Item	Sub-section	PROGRAMME SPECIFIC COSTS
Approved Calculators		Candidates may use calculators in the examination room only as specified by the University and as permitted by the rubric of individual examination papers. The University approved models are Casio FX-570 and Casio FX-85GT Plus. These may be purchased from any source and no longer need to carry the University logo.
Stationery		You will be expected to provide your own day-to-day stationary items, e.g. pens, pencils, notebooks, etc). Any specialist stationery items will be specified under the Additional Costs tab of the relevant module profile.
Textbooks		Where a module specifies core texts these should generally be available on the reserve list in the library. However due to demand, students may prefer to buy their own copies. These can be purchased from any source. Some modules suggest reading texts as optional background reading. The library may hold copies of such texts, or alternatively you may wish to purchase your own copies. Although not essential reading, you may benefit from the additional reading materials for the module.
Equipment and Materials Equipment	Art Equipment and Materials: Drawing paper; painting materials; sketchbooks	
	Art Equipment and Materials: Fabric, Thread, Wool	
	Design equipment and materials:	
	Excavation equipment and materials:	
	Field Equipment and Materials:	
	Laboratory Equipment and	

Main Item	Sub-section	PROGRAMME SPECIFIC COSTS
	Materials:	
	Medical Equipment and Materials: Fobwatch; stethoscopes;	
	Music Equipment and Materials	
	Photography:	
	Recording Equipment:	
IT	Computer Discs	
	Software Licenses	
	Hardware	
Clothing	Lab Coats	
	Protective Clothing: Hard hat; safety boots; hi-viz vest/jackets;	
	Fieldcourse clothing:	
	Wet Suits?	
	Uniforms?	
Printing and Photocopying Costs		In the majority of cases, coursework such as essays; projects; dissertations is likely to be submitted on line. However, there are some items where it is not possible to submit on line and students will be asked to provide a printed copy.
Fieldwork: logistical costs	Accommodation:	
	Insurance	
	Travel costs	
	Immunisation/vaccination costs	
	Other:	
Placements (including Study Abroad Programmes)	Accommodation	
	Insurance	
	Medical Insurance	
	Travel costs	
	Immunisation/vaccination costs	
	Disclosure and Barring Certificates or Clearance	
	Translation of birth certificates	
	Other	
Conference expenses	Accommodation	
	Travel	
Optional Visits (e.g. museums, galleries)		
Professional Exams		
Parking Costs		
Anything else not covered elsewhere		

Main Item	Sub-section	PROGRAMME SPECIFIC COSTS

Revision History

1. Minor revisions (including title) 10 July 2007 (SCK)
2. New Brand added July 2008
3. Updated to reflect University restructuring June 2011 AB.
4. Revisions approved by Senate 19 June 2013 as part of new programme validation process
5. Minor changes made to form guidance on completion of Intended Learning Outcomes, and Learning outcomes and Assessment Mapping document template, for clarity; and changes to wording of support for student learning section, altering to second person throughout - agreed with the Chair and to be reported to UPC October 2013
6. Update to Support and Student Learning, IT Services - June 2015
7. Update to Language Requirements - June 2015
8. Approved by ECS Education Committee - 10 June 2015
9. Update to Programme Overview (CMA Changes) - 24 August 2015
10. Update to Programme Overview (CMA Changes) - 14 September 2015
11. 2016-17 FPC Approval - 24 February 2016
12. Optional Module Viability added - 07 December 2016
13. Roll-over to 2017-18 (no changes) - 07 March 2017
14. FPC approval for 2017/18 - 08 March 2017