University of Brighton

PROGRAMME SPECIFICATION

Final

PART 1: COURSE SUMMARY INFORMATION

Course summary		
Final award	MEng Automotive Engineering	
Intermediate award	BEng(Hons) Automotive Engineering BEng Automotive Engineering DipHE Automotive Engineering CertHE Automotive Engineering	
Course status	Validated	
Awarding body	University of Brighton	
College	Life, Health and Physical Sciences	
School	Computing, Engineering and Mathematics	
Location of study/ campus	Moulsecoomb	
Partner institution(s)		
Name of institution	***Host department***	***Course status***
1.		
2.		
3.		
Admissions		
Admissions agency	UCAS	

<table>
<tr><td>Entry requirements
Include any progression opportunities into the course.</td><td>Check the University’s website for current entry requirements.

For entry to Stage 1 of the course:
A-levels or BTEC
Entry requirements are in the range of A-level BBC–CCC (112–96 UCAS Tariff points), or BTEC Extended Diploma DMM–MMM. Our conditional offers typically fall within this range.
A-levels must include maths and a physical science.
We will generally make you an offer if your predicted grades are at the top of this range. If your predicted grades are towards the lower end of this range we may still make you an offer if you have a good GCSE (or equivalent) profile or relevant non–academic achievements.
International Baccalaureate
28 points, with three subjects at Higher level which must include grade 5 in maths and physics.
GCSE (minimum grade C)
Must include English language and maths at grade 4 and a physical science at grade C.
ATAS requirements
The JACS code for this course is H330, meaning that students from outside the European Economic Area (EEA) and Switzerland will have to apply for an Academic Technology Approval Scheme (ATAS) certificate before they apply for a visa. Details can be found on the gov.uk website.
For non-native speakers of English
IELTS 6.0 overall, with 6.0 in writing and a minimum of 5.5 in the other elements.

Entry is also possible at Stage 2 or 3 of the course. See Appendix A for details.</td></tr>
<tr><td>Start date (mmm-yy)
Normally September</td><td>Sep-17</td></tr>
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Mode of study		
Mode of study	***Duration of study (standard)***	***Maximum registration period***
Full-time	4 years	10 years
Part-time	8 years	10 years
Sandwich	5 years	10 years
Distance	Not Available	Not Available

Course codes/categories	
UCAS code	H335
Contacts	
Course Leader (or Course Development Leader)	Dr Steven Begg
Admissions Tutor	Dr Shaun Lee

Examination and Assessment			
External Examiner(s)	**Name**	**Place of work**	**Date tenure expires**
	Dr D Venetsanos	**Kingston University, London**	**September 2020**
Examination Board(s) (AEB/CEB)	**Engineering**		

Approval and review		
	Approval date	**Review date**
Validation	April 2005[1]	November 2015[2]
Programme Specification	January 2017[3]	April 2018[4]
Professional, Statutory and Regulatory Body 1 (if applicable): The Institution of Mechanical Engineers (IMechE)	May 2015	May 2017[5]
Professional, Statutory and Regulatory Body 2 (if applicable): The Institution of Engineering and Technology (IET)	May 2015	May 2017

[1] Date of original validation.
[2] Date of most recent periodic review (normally academic year of validation + 5 years).
[3] Month and year this version of the programme specification was approved (normally September).
[4] Date programme specification will be reviewed (normally approval date + 1 year). If programme specification is applicable to a particular cohort, please state here.
[5] Date of most recent review by accrediting/ approving external body.

PART 2: COURSE DETAILS

AIMS AND LEARNING OUTCOMES
Aims The aims of the course are:
The aims of this programme are: • To offer study pathways relevant to Automotive Engineering, which draw upon the industrial and research expertise of the School. • To provide students with a broad engineering educational base with an emphasis on core mechanical engineering subjects (thermodynamics, fluid mechanics, dynamics, control, manufacturing, electronics, electrical machines, mechanics, materials, computing and design), which graduates can use to build careers in industry, research, education or the service sector. • To provide an engineering education in which the emphasis is placed on the integration of analytical tools and application of practical skills through design exercises, case studies, and projects. • To develop students' skills so that they are able to effectively utilise the latest technologies, including computer-based tools for design, modelling and simulation. • To provide a programme that fulfils the educational requirement for Chartered Engineer status. Preparing graduates for high level careers in industry, research, consultancy or the service sector by developing students' versatility and depth of understanding enabling them to deal with new problems in different areas of engineering, provide technical and managerial leadership and implement changes in technology.
Learning outcomes The outcomes of the main award provide information about how the primary aims are demonstrated by students following the course. These are mapped to external reference points where appropriate[6].

Knowledge and theory	On successful completion of the course the graduate should be able to: 1. Apply appropriate scientific principles and mathematical methods to analyse practical problems and develop engineering solutions for these problems. 2. Evaluate unfamiliar problems, solve them by selecting and applying appropriate computer based engineering tools, and critically assess the solution with reference to the underlying limitations of the selected tool. 3. Integrate knowledge of design principles, codes of practice, safety, engineering materials and components to enable appropriate design solutions within unfamiliar situations. 4. Demonstrate understanding of management and business practices within legal, professional and ethical constraints. 5. Display an understanding the processes involved in the design of internal combustion engines and apply critical judgements to the selection of appropriate power train components. 6. Evaluate the performance an automobile through the synthesis information gathered from the application of theoretical appropriate engine modelling and analysis software and the use of engine test cells. 7. Demonstrate an awareness of the constraints imposed by environmental legislation and customer demand on the whole life energy required to produce and operate a vehicle and its supporting infrastructure.

[6] Please refer to *Course Development and Review Handbook* or QAA website for details.

	8. Demonstrate a technical breadth across a range of engineering disciplines, with a focus on aeronautical, automotive, or mechanical engineering. 9. Carry out in-depth analysis in their specialist area. 10. Critically evaluate a range of solutions systematically and recommend a well-justified proposal.
Skills Includes intellectual skills (i.e. generic skills relating to academic study, problem solving, evaluation, research etc.) and professional/ practical skills.	11. Design and conduct laboratory experiments and critically evaluate the outcome in terms of the measurement system employed and underlying scientific principles. 12. Design, manufacture and test a functional mechanical product. 13. Evaluate technical and business risks within the requirements of commercial and industrial constraints. 14. Plan and manage a programme of work. 15. Recommend well-justified proposals based on appropriate decision making processes and effectively communicate within a business and social context. 16. Exercise initiative and personal responsibility, and independently develop knowledge and skills in related disciplines. 17. Integrate knowledge across disciplines to solve a wide range of engineering problems in novel and challenging situations. 18. Lead and manage inter-disciplinary project teams from concept to implementation.
QAA subject benchmark statement (where applicable)[7]	UK Standard for Professional Engineering Competence, UK-SPEC, published by the Engineering Council UK, ECUK.

PROFESSIONAL, STATUTORY AND REGULATORY BODIES (where applicable)

Where a course is accredited by a PSRB, full details of how the course meets external requirements, and what students are required to undertake, are included.

Accredited by the Institution of Engineering and Technology on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as a Chartered Engineer.

Accredited by the Institution of Mechanical Engineers (IMechE) on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as a Chartered Engineer.

A mapping with the UK Standard for Professional Engineering Competence, UK-SPEC, published by the Engineering Council UK, ECUK, was employed to derive the learning outcomes for the programme.

LEARNING AND TEACHING

Learning and teaching methods

This section sets out the primary learning and teaching methods, including total learning hours and any specific requirements in terms of practical/ clinical-based learning. The indicative list of learning and teaching methods includes information on the proportion of the course delivered by each method and details where a particular method relates to a particular element of the course.

The information included in this section complements that found in the Key Information Set (KIS), with the programme specification providing further information about the learning and teaching methods used on the course.

A wide range of techniques appropriate to the subject area are utilised throughout the course. These include: Lectures, Tutorials, Fully integrated practical work, Design, manufacture and test projects, Group and individual projects and assignments, Peer group presentations, and Guest lectures.

Innovative learning and teaching approaches include a major design and application project (ME105) in Stage 1, which integrates practical and theoretical work. In Stage 2 a course specific design exercise is

[7] Please refer to the QAA website for details.

run over an intensive week, and external industrial visitors contribute to the assessment and realistic industrial feel of the activity. Students have access to high quality laboratory facilities such as the School's flight simulator and the IC engine test beds of the Sir Harry Ricardo Laboratories.

Stage 1 is focused on the development of generic engineering skills that are common to all study pathways. Real world applications and practical work are used to introduce engineering theory and concepts. In order to support students in developing their study skills long modules (running over both Semesters) are employed in Stage 1. This approach allows more time for students to assimilate the course material and provides more opportunities for formative feedback through non-summative assessment. In subsequent Stages shorter modules are employed so that students can study engineering applications appropriate to their study pathway. In Stage 4 modules are shared with MSc programmes.

In Stage 4 (Level 7) students engage with MSc level modules. They also undertake a business oriented MSc level module, OPM42 taught at the Business school. Students are also organised in small groups for the Major Team Project, MEM01, where students from different disciplines of mechanical and electronic engineering work together to work on industrially related projects. Students on the EWI programme tend to have their projects based on actual scenarios in the water industry. Other students will be encouraged to work on real projects set by our industrial partners in the locality.

Teaching methods vary from module to module depending on what is considered to be most effective by the staff responsible. The learning and teaching approach used is specified in each module descriptor. The nominal contact time for 10 CATS points in Stages 1 and 2 is 1.5 hours per week over 26 weeks with the expectation that students will carry out independent learning for an additional 1.5 to 2 hours per week. Hence the normal contact time per week would be 18 hours with the expectation that the student's total commitment to the course would be approximately 35 to 40 hours per week. In Stage 3, due to the increased maturity and focus of the students, nominal contact time for 10 CATS points is reduced to 1 hour per week and independent study increases to 2 to 2.5 hours per week. Studentcentral is used to provide a framework for guiding students in their independent learning periods.

Design features prominently throughout the courses and is used as a vehicle to integrate the other engineering subjects. The Stage 3 Product Innovation and Management module is used to strengthen the programme theme, along with the Stage 3 individual project and the specialist modules in Stages 2 and 3.

Engineering Applications 1 (EA1) is included in Stage 1 as a project-based exercise. The quality of that work has been improved over a number of years and has been widely recognised by the professional bodies.

All undergraduates undertake project work, other than EA1, culminating in the Stage 3 Project and the Stage 4 Team Project. Projects may take different forms such as design, manufacture, analysis and original investigation. All will involve independent literature studies. Many of the projects are connected with research interests of supervising staff, and some result from industrial liaison and Knowledge Transfer Partnerships. The Stage 3 project is always carried out on an individual basis and will be pertinent to the student's study pathway. In order to develop team working skills other projects and assignments are often carried out in groups.

ASSESSMENT

Assessment methods

This section sets out the summative assessment methods on the course and includes details on where to find further information on the criteria used in assessing coursework. It also provides an assessment matrix which reflects the variety of modes of assessment, and the volume of assessment in the course.

The information included in this section complements that found in the Key Information Set (KIS), with the programme specification providing further information about how the course is assessed.

The use of long modules allows for better assessment planning with less bunching at the end of semester one and potentially less assessments in total.

Student**central** is an increasingly important part of the formative feedback strategy of the course with some limited application to summative assessment.

Examinations are normally closed book and of three hours duration for 20 CATS modules assessed principally by examination. For those modules where coursework is used to assess a significant number of the learning outcomes the examination length is two hours.

The following table highlights where the assessment takes place for each learning outcome of the course.

	Learning Outcome	**Assessment Method**	**Module**	**Number of Credits**
Knowledge and theory	1. Apply appropriate scientific principles and mathematical methods to analyse practical problems and develop engineering solutions for these problems.	Tests, online tests, Examinations, logbooks and reports	ME110, XE120, ME257, ME258, ME244, ME247, XE220, ME345, ME348.	140
	2. Evaluate unfamiliar problems, solve them by selecting and applying appropriate computer based engineering tools, and critically assess the solution with reference to the underlying limitations of the selected tool.	Tests, online tests, Examinations, logbooks and reports	XE120, ME257, ME258, ME246, ME247, XE220, ME345, ME348, XE336.	160
	3. Integrate knowledge of design principles, codes of practice, safety, engineering materials and components to enable appropriate design solutions within unfamiliar situations.	Tests, online tests, Examinations, logbooks and reports	ME105, ME111, ME113, XE121, ME257, ME258, ME244, ME245, ME354.	140
	4. Demonstrate understanding of management and business practices within legal, professional and ethical constraints.	Tests, online tests, Examinations, logbooks and reports	XE221, ME353.	40
	5. Display an understanding the processes involved in the design of internal combustion engines and apply critical judgements to the selection of appropriate power train components.	Tests, online tests, Examinations, logbooks and reports	ME110, ME249, ME353, ME354, XE336.	120
	6. Evaluate the performance an automobile through the synthesis information gathered from the application of theoretical appropriate engine modelling and analysis software and the use of engine test cells.	Tests, online tests, Examinations, logbooks and reports	ME257, ME258, ME247, ME348, ME353, ME354, XE336.	130
	7. Demonstrate an awareness of the constraints imposed by environmental legislation and customer demand on the whole life energy required to produce and operate a vehicle and its supporting infrastructure.	Tests, online tests, Examinations, logbooks and reports	ME353, ME354, XE336.	80
	8. Demonstrate a technical breadth across a range of engineering disciplines, with a focus on aeronautical, automotive, or mechanical engineering.	Report, viva-voce, progress reports	ME353, MEM01, XEM84, XEM72, XEM78, XEM56.	120

	9. Carry out in-depth analysis in their specialist area.	Report, viva-voce, progress reports	ME353, ME354, MEM01, OPM42, XEM84, XEM48, XEM72, XEM78, XEM56.	175
	10. Critically evaluate a range of solutions systematically and recommend a well-justified proposal.	Report, viva-voce, progress reports	ME353, ME354, MEM01, OPM42, XEM48, XEM72, XEM78.	145
Skills	11. Design and conduct laboratory experiments and critically evaluate the outcome in terms of the measurement system employed and underlying scientific principles.	Laboratory tests, report	ME110, ME249, XE336.	80
	12. Design, manufacture and test a functional mechanical product.	Report, performance test of product	ME105, ME111, ME113, ME245, ME246, XE221.	100
	13. Evaluate technical and business risks within the requirements of commercial and industrial constraints.	Report, viva-voce, progress reports, Dragons Den	XE221, ME353.	40
	14. Plan and manage a programme of work.	Report, viva-voce, progress reports	ME105, ME245, XE221, ME353, XE336.	110
	15. Recommend well-justified proposals based on appropriate decision making processes and effectively communicate within a business and social context.	Report, viva-voce, progress reports	XE121, ME246, ME249, XE221, ME353, XE336.	130
	16. Exercise initiative and personal responsibility, and independently develop knowledge and skills in related disciplines.	Report, viva-voce, progress reports	ME105, XE121, ME353, XE336.	100
	17. Integrate knowledge across disciplines to solve a wide range of engineering problems in novel and challenging situations.	Report, viva-voce, progress reports	ME353, MEM01, OPM42, XEM72, XEM78.	110
	18. Lead and manage inter-disciplinary project teams from concept to implementation.	Report, viva-voce, progress reports	MEM01.	40

SUPPORT AND INFORMATION	
Institutional/ University	**All students benefit from:** University induction week Student Handbook: the University and you Course Handbook Extensive library facilities Computer pool rooms (**indicate number of workstations by site**) E-mail address Welfare service Personal tutor for advice and guidance studentcentral (virtual learning environment)
Course-specific Additional support, specifically where courses have non-traditional patterns of delivery (e.g. distance learning and work-based learning) include:	**In addition, students on this course benefit from:** The School's extensive laboratory facilities including the CAE's Sir Harry Ricardo Laboratories and the Flight Simulator.

	Industrially relevant projects and assignments through the School's Industrial Advisory Board, Knowledge Transfer Programmes and other industrial collaborations. Personal tutor for advice and guidance Placements Office to help students get an industrial placement and support them during their placement. Specialist engineering software. **Research Informed Teaching** Teaching is informed by research of very high quality. In the 2008 Research Assessment Exercise 95% the School's engineering research was judged to be of international quality of which 70% was internationally leading, by the Unit of Assessment for Mechanical, Aeronautical and Manufacturing Engineering. At Stages 3 and 4 of the course lecturers deliver on their specialist research fields. Examples would be members of the Sir Harry Ricardo Laboratories lecturing on internal combustion engines, and Professor Sazhin's fluid mechanics modules. This expertise is also used to provide context for topics taught in earlier stages of the course. Two key features of the research environment identified by the RAE panel were strong industrial links and the quality of experimental facilities. The course benefits from a wide range of industrial input at all stages. This ranges from guest lectures on state-of-the-art technology to support for individual projects in Stage 3. The experimental facilities of the Sir Harry Ricardo Laboratories are used to support a range of Stage 3 individual projects. Most of these are inspired by on-going research programmes. Research income has also been used to develop teaching laboratories to support experimental activities in a number of topics including: thermodynamics, control systems, instrumentation and sensors, and fluid mechanics. Modules at each stage of the course are shared across the School's engineering disciplines. It is anticipated that the recent addition of the Vetronics Research Centre, VRC, to the School (the only Academic Centre of Excellence in the UK conducting research and training in the subject area of Vehicle Electronics) will provide opportunities to support a range of activities in these modules in addition to providing inspiration for individual projects in Stage 3. **Education for Sustainable Development** Sustainability is a core element of engineering practice. This can be seen across a range of disciplines from the selection of a manufacturing process (energy cost and environmental impact) to the design of a road vehicle power train (response to legislation and energy resources). As such sustainable development has always been an implicit element in many modules. Students are introduced to concepts of sustainability and ethics throughout the course. Students research into Ethics and Sustainability issues in their chosen area of engineering in the first year (XE121 Engineering Concepts). The work is delivered as a report as well as a short presentation. In the second year in XE221 Engineering Design, Innovation & Management, a week dedicated just to this module will be set aside for students to focus on how to solve problems relating to sustainability and global issues. Topics may include on how to solve a particular problem in a village in South India. In the final year (Stage 3) XE324 Product Innovation and Management students will be given problems in relating to globalisation issues. The course aims to educate students for sustainable development by studying science and developing scientific skills, research skills and critical thinking.

PART 3: COURSE SPECIFIC REGULATIONS

COURSE STRUCTURE

This section includes an outline of the structure of the programme, including stages of study and progression points. Course Leaders may choose to include a structure diagram here.

This programme is designed to provide a route to membership of the Institution of Mechanical Engineers, Institution of Engineering and Technology as well as to registration as Chartered Engineer (CEng) and European Engineer (EurIng).

The programme is divided into four Stages, with Stage 1 at Education Level 4. Candidates satisfying the appropriate admissions criteria may enter the programme at either Stage 1, 2, or 3. A common core of subjects is studied at Stage 1 with modules delivered over a whole academic year. This provides students with a more continuous period for assimilation of material, time to develop their study skills, and better support to enable integration of knowledge across subjects. Subjects specific to each study pathway are introduced at subsequent Stages with taught modules delivered on a Semester. Throughout the programme project based modules are studied over the whole academic year.

Teamwork, conceptual design, manufacture and testing are included in a Stage 1 design project, commended by the Engineering Council and used as a model by other Universities.

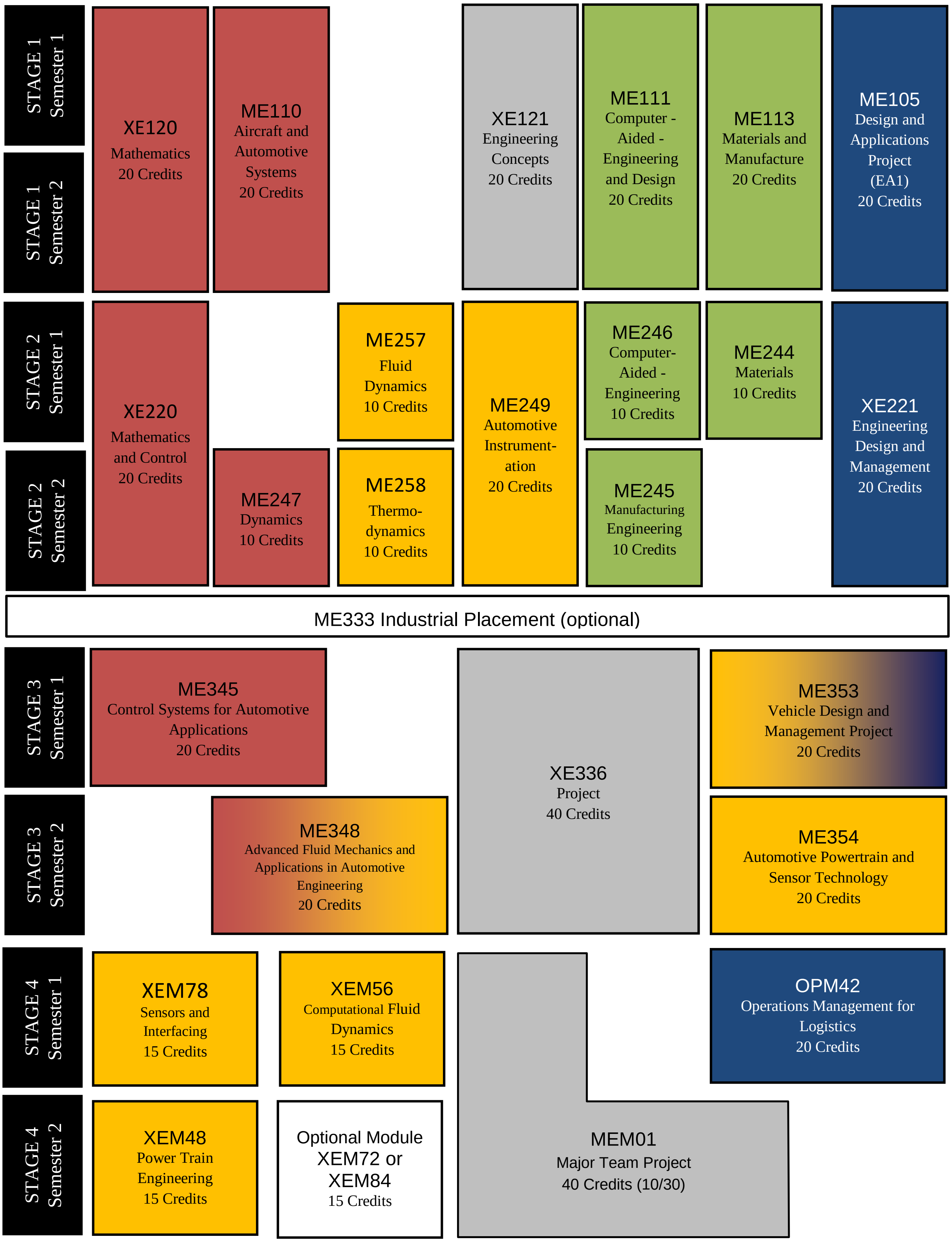
At the end of Stage 2 students may take an industrial placement with companies in the UK or mainland Europe. This is accredited for Eng.Tech status by the IMechE.

Management skills, essential for the modern professional engineer, are taught at Stages 2 and 3. Specialism within a particular study pathway is introduced at Stage 2. A wide range of Stage 3 modules cater for these special interests in particular the individual technical project.

The programme has been designed to prepare students for leadership roles in their specialist discipline. Stage 4 of the programme provides a balance of specialism specific modules and business related modules with skills integrated via the Main Team Project.

The five main areas of competence defined in the UK Standard for Professional Engineering Competence, UK-SPEC, published by the Engineering Council UK, ECUK, have been used to inform the content and curriculum of the programme. These areas of competence are:

1. Use of general and specialist engineering knowledge and understanding
2. Application of appropriate theoretical and practical methods
3. Technical and commercial leadership and management
4. Effective interpersonal and communication skills
5. Commitment to professional standards and recognition of obligations to society and environment.



STAGE 1 Semester 1
STAGE 1 Semester 2
XE120 Mathematics 20 Credits
ME110 Aircraft and Automotive Systems 20 Credits
XE121 Engineering Concepts 20 Credits
ME111 Computer - Aided - Engineering and Design 20 Credits
ME113 Materials and Manufacture 20 Credits
ME105 Design and Applications Project (EA1) 20 Credits
STAGE 2 Semester 1
STAGE 2 Semester 2
XE220 Mathematics and Control 20 Credits
ME247 Dynamics 10 Credits
ME257 Fluid Dynamics 10 Credits
ME258 Thermo-dynamics 10 Credits
ME249 Automotive Instrument-ation 20 Credits
ME246 Computer-Aided - Engineering 10 Credits
ME245 Manufacturing Engineering 10 Credits
ME244 Materials 10 Credits
XE221 Engineering Design and Management 20 Credits
ME333 Industrial Placement (optional)
STAGE 3 Semester 1
STAGE 3 Semester 2
ME345 Control Systems for Automotive Applications 20 Credits
ME348 Advanced Fluid Mechanics and Applications in Automotive Engineering 20 Credits
XE336 Project 40 Credits
ME353 Vehicle Design and Management Project 20 Credits
ME354 Automotive Powertrain and Sensor Technology 20 Credits
STAGE 4 Semester 1
STAGE 4 Semester 2
XEM78 Sensors and Interfacing 15 Credits
XEM56 Computational Fluid Dynamics 15 Credits
OPM42 Operations Management for Logistics 20 Credits
XEM48 Power Train Engineering 15 Credits
Optional Module XEM72 or XEM84 15 Credits
MEM01 Major Team Project 40 Credits (10/30)

Modules				
Status: M = Mandatory (modules which must be taken and passed to be eligible for the award) C = Compulsory (modules which must be taken to be eligible for the award) O = Optional (optional modules)* A = Additional (modules which must be taken to be eligible for an award accredited by a professional, statutory or regulatory body, including any non-credit bearing modules) * *Optional modules listed are indicative only and may be subject to change, depending on timetabling and staff availability*				
Level[8]	***Module code***	***Status***	***Module title***	***Credits***
4	ME105	C	Design and Applications Project (EA1)	20
4	ME110	C	Aircraft and Automotive Systems	20
4	ME111	C	Computer Aided Engineering and Design	20
4	ME113	C	Materials and Manufacture	20
4	XE120	C	Mathematics	20
4	XE121	C	Engineering Concepts	20
5	ME244	C	Materials	10
5	ME245	C	Manufacturing Engineering	10
5	ME246	C	Computer Aided Engineering	10
5	ME247	C	Dynamics	10
5	ME249	C	Automotive Instrumentation and Testing	20
5	ME257	C	Fluid Dynamics	10
5	ME258	C	Thermodynamics	10
5	XE220	C	Mathematics and Control	20
5	XE221	C	Engineering Design, Innovation and Management	20
6	ME333	O	Sandwich Placement	0
6	ME345	C	Control Systems for Automotive Applications	20
6	ME348	C	Advanced Fluid Mechanics and Applications in Automotive Engineering	20
6	ME353	C	Vehicle Design and Management Project	20
6	ME354	C	Automotive Powertrain and Sensor Technology	20
6	XE336	M	Project	40
7	MEM01	C	Major Team Project	40
7	OPM42	C	Operations Management for Logistics	20
7	XEM48	C	Power Train Engineering	15
7	XEM56	C	Computational Fluid Dynamics	15
7	XEM78	C	Sensors and Interfacing	15
7	XEM72	O	Sustainable Automotive Power Technology	15
7	XEM84	O	Engineering with MATLAB	15

[8] All modules have learning outcomes commensurate with the FHEQ levels 0, 4, 5, 6, 7 and 8. List the level which corresponds with the learning outcomes of each module.

AWARD AND CLASSIFICATION

Award type	***Award****	***Title***	***Level***	***Eligibility for award***		***Classification of award***	
				Total credits[9]	Minimum credits[10]	Ratio of marks[11]:	Class of award
Final	MEng	Automotive Engineering	7	Total credit 480	Minimum credit at level of award 120	Level 6 and 7 (50:50)	Honours degree
Intermediate	BEng (hons)	Automotive Engineering	6	Total credit 360	Minimum credit at level of award 120	Levels 5 and 6 (25:75)	Honours degree
Intermediate	BEng	Automotive Engineering	6	Total credit 300	Minimum credit at level of award 60	Level 6	Unclassified degree
Intermediate	DipHE	Automotive Engineering	5	Total credit 240	Minimum credit at level of award 120	Level 5 marks	Diploma
Intermediate	CertHE	Automotive Engineering	4	Total credit 120	Minimum credit at level of award 120	Level 4 marks	Certificate

***Foundation degrees only**

Progression routes from award:

Award classifications

Mark/ band %	**Foundation degree**	**Honours degree**	**Postgraduate[12] degree (*excludes PGCE and BM BS)***
70% - 100%	Distinction	First (1)	Distinction
60% - 69.99%	Merit	Upper second (2:1)	Merit
50% - 59.99%	Pass	Lower second (2:2)	Pass
40% - 49.99%		Third (3)	

[9] Total number of credits required to be eligible for the award.

[10] Minimum number of credits required, at level of award, to be eligible for the award.

[11] Algorithm used to determine the classification of the final award (all marks are credit-weighted). For a Masters degree, the mark for the final element (e.g, dissertation) must be in the corresponding class of award.

[12] Refers to taught provision: PG Cert, PG Dip, Masters.

EXAMINATION AND ASSESSMENT REGULATIONS	
Please refer to the *Course Approval and Review Handbook* when completing this section. **The examination and assessment regulations for the course should be in accordance with the *University's General Examination and Assessment Regulations for Taught Courses* (available from staffcentral or studentcentral).**	
Specific regulations which **materially** affect assessment, progression and award on the course e.g. Where referrals or repeat of modules are not permitted in line with the University's *General Examination and Assessment Regulations for Taught Courses.*	The course regulations are in accordance with the University's General Examination and Assessment Regulations (available from the school office or Academic Services). In addition, the following course-specific regulations apply: In order to progress to Stage 3 of the MEng programme a student must normally achieve an aggregate mark of 60% or above for Stage 2. Students who fail to achieve this threshold will normally be transferred to Stage 3 of the BEng programme. If the Board of Examiners decide that a candidate's industrial training and assessment (i.e. a pass in ME333) is satisfactory then the phrase "having followed a sandwich programme" is included in the award title. Referrals may be allowed in modules at all stages of the course. Referrals in modules in the final stage of a degree (Stage 4) maybe granted, but only to allow the student to earn the requisite number of CATS points for the award. Students will not normally be allowed to repeat the Stage 3 project, XE336, or the Stage 4 project, MEM01.
Exceptions required by PSRB These require the approval of the Chair of the Academic Board	The IMechE and IET stipulate that: Compensation can only be applied if all the PSRB learning outcomes (shown in the mapping to AHEP) have been met by modules that have been passed. At each stage of the course compensation can be applied up to a maximum of one sixth of the credits available[1]. Normally compensation can only be applied when a module mark is no more than 10 marks below the pass mark[2].

[1] For undergraduate courses with 120 credits per stage the maximum compensation would be 20 credits.
For single stage masters courses with 180 credits per stage the maximum compensation would be 30 credits.

[2] In the case of level 0, 4, 5 and 6 modules the minimum mark would be 30.
In the case of level 7 modules the minimum mark would be 40.

Appendix A – Entry Requirements

Entry is possible at three Stages in the programme. The entry requirements listed here are for students starting their course in 2015. Individual offers may vary.

Entry to Stage 1 – Educational Level 4

Applicants who do not meet the requirements shown in the "Entry requirements" table above, but have relevant experience may be interviewed and their application considered on an individual basis.

Entry to Stage 2 – Educational Level 5

Candidates should possess one of the following:

- An HND with an appropriate merit/distinction profile.
- An appropriate Foundation Degree with an average of at least 70%.
- Other qualifications and experience will be considered on an individual basis. Admission will depend upon their qualifications and experience meeting the learning outcomes for the modules that comprise Stage 1 of this programme.

Entry to Stage 3 – Educational Level 6

It is not normal for entry to be accepted for Stage 3 of the MEng.