University of the West of England
BRISTOL

ACADEMIC SERVICES

PROGRAMME SPECIFICATION

Part 1: Basic Data			
Awarding Institution	University of the West of England, Bristol		
Teaching Institution	Global College of Engineering and Technology (GCET) Muscat		
Delivery Location	GCET, Muscat Oman		
Study abroad / Exchange / Credit recognition			
Faculty responsible for programme	Faculty of Environment and Technology (FET)		
Department responsible for programme	Department of Engineering Design and Mathematics (EDM)		
Modular Scheme Title	FET UG Modular Scheme		
Professional Statutory or Regulatory Body Links			
Highest Award Title	BEng(Hons) Mechanical Engineering and Vehicle Technology		
Default Award Title			
Fall-back Award Title			
Interim Award Titles	BEng Mechanical Engineering and Vehicle Technology Diploma of Higher Education Mechanical Engineering and Vehicle Technology Certificate of Higher Education Mechanical Engineering and Vehicle Technology		
UWE Progression Route			
Mode(s) of Delivery	FT/PT		
ISIS Codes	**H390**		
Relevant QAA Subject Benchmark Statements			
First CAP Approval Date	14 October 2016	Valid from	October 2016
Revision CAP Approval Date	6 November 2017	Revised with effect from	November 2017
Version	2		
Review Date			

Part 2: Educational Aims of the Programme

The aim of the Faculty's BEng (Hons) programmes is to respond to the need for effective engineering practitioners by offering programmes that are an intellectually challenging mix of taught engineering science and experiential learning. The practitioner approach is intended to produce engineers with a strong orientation towards problem solving, underpinned by theoretical knowledge.

The aim of the Mechanical Engineering and Vehicle Technology programme is to produce graduates with a broad understanding of mechanical analysis and design, combined with awareness of engineering practice, information technology, manufacturing, project management and business issues, all contextualised to the automotive engineering environment. Graduates with BEng (Hons) will be equipped to solve multi-disciplinary problems and lead future developments in industry. It is anticipated that graduates from the course will play a major role in the design, management and co-ordination of multi-disciplinary projects.

The development of the award was undertaken with reference to the UK QAA Subject Benchmark in Engineering (2010) with particular reference to the learning outcomes and ethos of the BEng (Hons) degree.

The aims of the programme are:

1. To prepare students for careers in mechanical and automotive engineering and related disciplines. The content of the programme ensures that students will have the appropriate level of knowledge and understanding of mechanical engineering so that they will also be suitable for employment in the wider engineering domain and not be restricted only to the automotive environment.
2. To provide knowledge and understanding of scientific principles and methods necessary to underpin the students' education in engineering. To provide insight into, and practical skills in, the creation of complex engineering products, particularly in relation to automotive engineering. This involves understanding the opportunities provided by vehicle power trains, chassis configurations, various materials, aerodynamics, assembly and manufacture; all considered within the constraints imposed by the relevant regulations. In addition, issues relating to efficient and effective use of resources within the power train and the reduction of environmental impact will be explored.
3. To provide the students with the ability to integrate their knowledge and understanding of core subject material in order to solve a substantial range of engineering problems, including ones of a complex nature.
4. To prepare students for progression to study for higher degrees in appropriate engineering subjects.
5. To continue the development of those general study skills that will enable students to become independent, lifelong learners.

Programme requirements for the purposes of the Higher Education Achievement Record (HEAR)

Designed in conjunction with key national and multi-national employers, this programme provides graduates with the mix of skills and capabilities required by Omani industry for the specification, design and delivery of mechanical and vehicle engineering systems and solutions, including control systems, as required by the manufacturing industries, transport, heavy vehicles, plants, and other industries.
Delivered in a way that develops technically competent individuals who think and communicate effectively and who can conduct inquiry, solve problems, undertake critical analysis and deliver effective and fully loaded automotive systems solutions in a constantly changing Omani business context. It provides a solid foundation for lifelong learning, emphasising the development of knowledge, skills and professional values essential to the practice of systems development.

Part 3: Learning Outcomes of the Programme

The award route provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas:

(A) Knowledge and understanding of:

1. Automotive and Mechanical Engineering principles and design.
2. Generic engineering topics, plus additional specialist subjects relating to automotive engineering (such as vehicle dynamics, aerodynamics and power train systems).
3. Structures, materials and safety.
4. Integration of mechanical and non-mechanical elements in complex engineering systems.
5. Business issues relating to automotive engineering products and manufacture.
6. Social, environmental, ethical, economic and commercial factors and their influence on engineering practice. The effect of legislation.

(B) Intellectual Skills (generic)

1. The ability to produce solutions to problems through the application of engineering knowledge and understanding.
2. The ability to use scientific principles in the modelling and analysis of engineering systems, processes and products. The ability to select and apply appropriate mathematical methods for modelling and analysing relevant problems.
3. The ability to use a broad spectrum of technologies/techniques and solve complex engineering problems.
4. Adoption of a creative and innovative approach to solving problems and design and manage conflicting objectives and constraints.
5. Comprehension of the broad picture and demonstration of a professional attitude to the responsibilities of engineering practitioners.
6. Critical Thinking: The ability to select and apply appropriate mathematical and computer based methods for modelling and analysing problems in fields relating to the design, manufacture and control of automotive components and systems

(C) Subject, Professional and Practical Skills

1. Appropriate skills including safe working in experimental work in laboratories and workshops.
2. Demonstrate practical testing of engineering ideas through laboratory work or simulation with supporting technical analysis and critical evaluation of results.
3. Understanding and execution of the design process.
4. Use of a range of computer software for design, analysis and control.
5. Execution and management of multi-disciplinary projects, both individually and as a member of a group.

(D) Transferable Skills and other attributes

1. Communication skills: to communicate orally or in writing, including, for instance, the results of technical investigations, to peers and/or to “problem owners”.
2. Self-management skills: to plan and manage time, to meet deadlines and to work with others.
3. IT Skills in Context (to use software in the context of problem-solving investigations, and to interpret findings)
4. Problem formulation and solution.
5. Progression to self-learning: To gain experience of and to develop skills independently of structured class work.
6. Comprehension of professional literature: to read and to use literature sources appropriate to the discipline to support learning activities.

Part 3: Learning Outcomes of the Programme

The focus of the foundation year (level 0) is on the acquisition both of appropriate academic skills and relevant subject knowledge to allow students to develop and progress through levels 1, 2 and 3 in relation to knowledge and understanding, cognitive, subject specific and study skills

Learning Outcomes:	UFMFH3-30-1	UFMFJ9-30-1	UFMFN3-30-1	UFMFG3-15-1	UFMFF3-15-1	UFMF88-30-2	UFMFMC-30-2	UFMFK9-15-2	UFMFL8-15-2	UFMFHA-15-2	UFMFQA-15-2	UFMFYJ-15-3	UFMFXJ-15-3		UFMF7K-15-3	UFMFU6-15-3	UFMFM7-15-3	UFCF95-15-3	UFMFT9-30-3	UFMFNC-30-3	UFMFX8-30-3	UFMFD7-15-3	UFMFP9-15-3	
A) Knowledge and understanding of:																								
1. Automotive and Mechanical Engineering principles and design.	X		X	X	X	X	X		X		X	X	X		X	X		X	X	X	X	X	X	
2. Generic engineering topics, plus additional specialist subjects relating to automotive engineering (such as vehicle dynamics, aerodynamics and power train systems).	X	X	X	X	X	X	X	X	X		X	X	X			X		X	X	X	X	X		
3. Structures, materials and safety.			X			X	X			X						X	X	X	X	X	X		X	
4. Integration of mechanical and non-mechanical elements in complex engineering systems.			X		X	X	X		X	X	X	X	X			X		X	X	X	X	X		
5. Business issues relating to automotive engineering products and manufacture.			X			X	X			X						X	X	X	X	X	X			
6. Social, environmental, ethical, economic and commercial factors and their influence on engineering practice. The effect of legislation.			X			X				X							X	X			X	X		
(B) Intellectual Skills																								
1. The ability to produce solutions to problems through the application of engineering knowledge and understanding.			X	X	X	X			X	X	X	X	X			X		X	X	X	X	X	X	
2. The ability to use scientific principles			X	X	X	X			X	X	X	X	X		X	X		X	X	X	X	X	X	

in the modelling and analysis of engineering systems, processes and products. The ability to select and apply appropriate mathematical methods for modelling and analysing relevant problems.																									
3. The ability to use a broad spectrum of technologies/techniques and solve complex engineering problems.			X		X							X	X					X	X		X	X	X		
4. Adoption of a creative and innovative approach to solving problems and design and manage conflicting objectives and constraints.			X			X				X					X	X	X	X			X	X			
5. Comprehension of the broad picture and demonstration of a professional attitude to the responsibilities of engineering practitioners.			X			X				X					X	X	X	X			X	X	X		
6. Critical Thinking: The ability to select and apply appropriate mathematical and computer based methods for modelling and analysing problems in fields relating to the design, manufacture and control of automotive components and systems	X	X	X	X	X	X	X	X	X		X	X	X			X		X	X		X	X	X		
(C) Subject/Professional/Practical Skills																									
1. Appropriate skills including safe working in experimental work in laboratories and workshops.	X		X	X		X			X	X	X	X			X	X	X	X	X		X		X		
2. Demonstrate practical testing of engineering ideas through laboratory work or simulation with supporting technical analysis and critical evaluation of results.	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X		
3. Understanding and execution of the design process.						X				X		X	X					X			X	X	X		
4. Use of a range of computer software for design, analysis and control.	X	X	X	X	X	X	X	X	X		X	X	X			X		X	X		X	X	X		

5. Execution and management of multi-disciplinary projects, both individually and as a member of a group.			X			X				X							X	X			X		X	
(D) Transferable skills and other attributes																									
1. Communication skills: to communicate orally or in writing, including, for instance, the results of technical investigations, to peers and/or to “problem owners”.			X			X			X	X							X	X			X			
2. Self-management skills: to plan and manage time, to meet deadlines and to work with others.			X			X	X			X						X	X	X	X	X	X	X	X	X	
3. IT Skills in Context (to use software in the context of problem-solving investigations, and to interpret findings)			X		X		X									X	X	X		X					
4. Problem formulation and solution.			X			X				X					X	X	X	X			X	X	X		
5. Progression to self-learning: To gain experience of and to develop skills independently of structured class work.					X	X				X					X		X	X		X	X				
6. Comprehension of professional literature: to read and to use literature sources appropriate to the discipline to support learning activities.		X	X		X	X	X		X	X	X	X			X	X	X	X	X	X	X	X	X		

Part 4: Student Learning and Student Support

Teaching and learning strategies to enable learning outcomes to be achieved and demonstrated

The programme learning outcomes are delivered through an appropriate mix of lecture, tutorial and practical lab-based sessions supported by directed independent learning. Throughout the delivery, fundamental engineering principles are explored and consolidated through practical lab-based learning. The development of design and modelling skills is embedded in a number of modules at each level. Group work activities and projects are used to add to the development of academic knowledge with the aim of producing well-rounded individuals who understand the demands of the professional environment the will enter as graduates. At appropriate stages of the programme industrial experts are brought in to lead sessions.

At GCET Muscat (Oman), there is a policy for a minimum average requirement of 18 hours/week contact time over the course of the full undergraduate programme. This contact time encompasses a range of face to face activities as described below. In addition a range of other learning activities will be embedded within the programme which, together with the contact time, will enable learning outcomes to be achieved and demonstrated.

In Engineering it is recognized that a higher contact time is desirable and so laboratory-based modules have an extra factor included in the time calculation which provides more hours. In addition the level 2 and 3 students have timetabled Peer-Assisted Learning hours, where trained level 3 and 4 students (as appropriate) work with groups.

On the BEng (Hons) Mechanical Engineering and Vehicle Technology programme teaching is also a mix of scheduled learning and independent learning.

Class Activities
The mode of delivery of a module is determined by its Module Leader, and typically involves a combination of one or more lectures, tutorials, 'lectorials', laboratory classes, group activities and individual project work.

Modules are predominantly delivered by means of large group lectures, supported by smaller 'lectorials': classes for groups of 20-30 students to allow a closer interaction and discourse with staff.

Academic Support
Academic advice and support is the responsibility of the staff delivering the module in question. Staff are expected to be available outside normal timetabled hours, either by appointment or during published "surgery" hours, in order to offer advice and guidance on matters relating to the material being taught and on its assessment.

Pastoral Care
The College offers pastoral care through two routes:

- Academic Personal Tutors: All level 1 students are assigned a Personal Academic Tutor, who is an academic member of staff in their department. Students meet individually with their tutor at least twice a year and also participate in group sessions with the Personal Academic Tutor's tutor group (max size 15) during years 1 and 2. In year 3 project supervisors take on the role of Personal Academic Tutor.

- Student Advisers, a team of administrative staff who provide comprehensive, full-time student support service on a drop-in basis or by appointment. Advisers are trained to provide advice on matters commonly of concern, including regulatory and other matters; the Adviser will, when necessary, advise the student to seek advice to from other professional services including the university's Centre for Student Affairs or from members of academic staff.

Progression to Independent Study
Many modules require students to carry out independent study, such as research for projects and assignments, and a full range of facilities are available to help students with these. The philosophy is accordingly to offer students both guided support and opportunities for independent study. Guided

Part 4: Student Learning and Student Support

support, mainly in the form of timetabled sessions, takes the form of lectures, tutorials, seminars and practical laboratory sessions. Students are expected to attend all sessions on their timetable, and this is especially important because of the high content of practical work in the programme.
The progression to independent study will also be assisted by the nature of the support offered in individual modules. Typically, module leaders will provide a plan for the module indicating the activities to be carried out and the forms of learning to be undertaken during the delivery of the module, with a view to encouraging students to plan ahead and to take responsibility for managing their time and resources.

Description of the teaching resources provided for students
The College offers a specialised computing facility alongside the general College provision. There is a general PC computing laboratory running Windows and two specialist computing labs. The specialist laboratories are equipped with the specific software for Engineering students; including Software Design Tools development environment, CAD, mathematics and statistics packages to support the taught program. The specialist Computing laboratories are designed to target the discipline taught in that area.

The College provides a user support Helpdesk. The Helpdesk provides first line support to the users.

Description of any Distinctive Features

Design and Engineering Lab Facilities
Students can access a suite of newly purchased specialist laboratories benefiting from a recent and ongoing investment. These include Automotive Engineering, Structures, Material Science, Dynamics, Thermo-fluids, plus manufacturing workshops including CNC machines and rapid prototyping.

Technology Enhanced Learning
Staff members in the department are keen adopters of technology to support and enhance student learning. This includes:

- Computer based e-assessment implemented in a number of modules, so that students can take regular short tests with automated computer generated feedback.
- Recordings of some lectures (audio and video) which are made available after classes via the university's Virtual Learning Environment.

Mathematics Support
The Math Support Centre provides drop-in one-to-one tuition each day and a web-site that provides a portal to a variety of on-line resources in mathematics and statistics.

Part 5: Assessment

Approved variant to University Academic Regulations and Procedures

Assessment Strategy

The programme learning outcomes are achieved by using a range of assessment techniques across the modules at different levels. The programme requires the application of fundamental concepts and theory, often expressed in mathematical language to practical engineering situations. The assessment strategy reflects this requirement with coursework assignments used to allow students to develop understanding of concepts and explore their understanding through task according to level, practical examinations that ensure that these concepts can be applied with an appropriate level of reflection and traditional examinations where theory and application can be combined under controlled conditions. Group work activities and projects are used to develop a wider range of skills such as team work, project work and research methodology. Students are encouraged to communicate concepts and findings through reports and presentations.

The mixture of examination/practical/coursework tasks reflects the broad and specific aims/objectives of the programme to introduce key concepts and domain knowledge and to develop skills in the selection and application of relevant tools and methods

Assessment Map

The programme encompasses a range of **assessment methods** including essays, posters, presentations and written examinations. These are detailed in the following assessment map:

Assessment Map for BEng (Hons) Mechanical Engineering and Vehicle Technology

		Unseen Written Exam	Partly Seen Written Exam	Computer Based Exam	Lab based Assessment	Written Assignment	Computer based tests	In class Written Tests	Report / Project	Dissertation	Oral Presentation	Portfolio
Compulsory Modules Level 0	**UFCEXX-30-0**	A(24)						A (16)	B(60)			
	UFMFBG-30-0	A(75)			B(12.5)			B(12.5)				
	UFMFEG-30-0				A(100)							
	UFCFGK-30-0								B(75)		A(25)	
Compulsory Modules Level 1	**UFMFJ9-30-1**	A (75)				B (12.5)	B (12.5)					
	UFMFN3-30-1	A (25)					A (25)		B(50)			
	UFMFH3-30-1	A(40) B(40)					A (10) B (10)					
	UFMFF3-15-1	A(100)										
	UFMFG3-15-1	A (75)			B (25)							
Compulsory Modules Level 2	**UFMF88-30-2**	A(25)							B(75)			
	UFMFMC-30-2	A(100)										
	UFMFK9-15-2	A(75)					B (25)					
	UFMFL8-15-2	A (75)			B (25)							
	UFMFQA-15-2	A(67.5)					A (7.5)		B(25)			
	UFMFHA-15-2								A(100)			
Compulsory Modules Level 3	**UFMFXJ-15-3**	A (100)										
	UFMFX8-30-3								A (10)	A (80)	A (10)	
	UFMFU7-15-3	A(50)				B (50)						
	UFCF95-15-3								A(100)			
Optional Modules Level 3	**UFMFYJ-15-3**	A (100)										
	UFMFU6-15-3	A (50)				B (25)	B (25)					
	UFMF7K-15-3	A (100)										
	UFMFNC-30-3								A(100)			
	UFMFT9-30-3	A (75)							B (25)			

*Assessment should be shown in terms of Written Exams, Practical exams, or Coursework as indicated by the colour coding above.

BEng (Hons) Mechanical Engineering and Vehicle Technology at GCET Muscat Oman

Part 6: Programme Structure

This structure diagram demonstrates the student journey from Entry through to Graduation for a typical full time student, including: level and credit requirements; interim award requirements; module diet (including compulsory and optional modules)

ENTRY	Core Modules	Optional Modules	Awards
Year 0 ↓	UFMFBG-30-0 Foundation Mathematics: Algebra and Calculus UFCEXX-30-0 Program Design and Implementation UFMFEG-30-0 Engineering Experimentation UFCFGK-30-0 Professional and Academic Skills	None	120 credits at Level 0 Successful completion of all level 0 modules required to permit progression to level 1.
Year 1 ↓	UFMFJ9-30-1 Engineering Mathematics UFMFN3-30-1 Design, Materials & Manufacturing UFMFH3-30-1 Stress & Dynamics UFMFF3-15-1 Energy and Thermodynamics UFMFG3-15-1 Fluid Dynamics	None	**Interim award:** **CertHE Mechanical Engineering and Vehicle Technology** Credit Requirements: 240 credits At least 100 credits at level 1 or above. 120 credits at level 0
Year 2	UFMF88-30-2 Design and Electromechanical Systems UFMFK9-15-2 Engineering Mathematics 2 UFMFL8-15-2 Dynamics UFMFQA-15-2 Stress Analysis UFMFHA-15-2 Project Management UFMFMC-30-2 Automotive Technology	None	**Interim award:** **DipHE Mechanical Engineering and Vehicle Technology** Credit requirements: 360 credits At least 100 credits at level 2 or above. At least 120 credits at level 1 or above. 120 credits at level 0.

ENTRY **Year 3**	**Core Modules** UFMFU7-15-3 Computational Methods UFMFXJ-15-3 Vibrational Dynamics UFCF95-15-3 Entrepreneurial Skills UFMFX8-30-3 Individual Project BEng **Students must take 30 credits from:** UFMFNC-30-3 Automotive Manufacturing UFMFT9-30-3 Motorsport Performance	**Optional Modules** **Choose 15 credits from:** UFMFD7-15-3 Energy Technologies UFMF7K-15-3 Materials and Structures for Special Applications UFMFU6-15-3 Composite Engineering UFMFP9-15-3 Mechanics of Material UFMFYJ-15-3 Control Engineering	**Interim award:** **BEng Mechanical Engineering and Vehicle Technology** Credit requirements: 420 credits At least 60 credits at level 3 or above. At least 100 credits at level 2 or above. At least 140 credits at level 1 or above. 120 credits at level 0. **Highest award:** **BEng(Hons) Mechanical Engineering and Vehicle Technology** Credit requirements: 480 credits At least 100 credits at level 3 or above. At least 100 credits at level 2 or above. At least 140 credits at level 1 or above. 120 credits at level 0.

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Part time:
The following structure diagram demonstrates the student journey from Entry through to Graduation for a typical **part-time student.**

ENTRY ↓	Part-time Level 0.1	**Compulsory Modules** UFMFBG-30-0 Foundation Mathematics: Algebra and Calculus UFCFGK-30-0 Professional and Academic Skills	120 credits at Level 0 Successful completion of all level 0 modules required to permit progression to level 1.
	Part-time Level 0.2	UFCEXX-30-0 Program Design and Implementation UFMFEG-30-0 Engineering Experimentation	
	Part – time Level 1.1	**Compulsory Modules** UFMFN3-30-1 Design, Materials & Manufacturing	**Awards:** **Interim Award:**

	Part – time Level 1.2	UFMFJ9-30-1 Engineering Mathematics UFMFH3-30-1 Stress & Dynamics UFMFG3-15-1 Fluid Dynamics UFMFF3-15-1 Energy &Thermodynamics	**CertHE Mechanical Engineering and Vehicle Technology** Credit Requirements: 240 credits At least 100 credits at level 1 or above. 120 credits at level 0
	Part – time Level 2.1	UFMF88-30-2 Design and Electromechanical Systems UFMFK9-15-2 Engineering Mathematics 2 UFMFL8-15-2 Dynamics	**Interim award:** **DipHE Mechanical Engineering and Vehicle Technology** Credit requirements: 360 credits At least 100 credits at level 2 or above. At least 120 credits at level 1 or above. 120 credits at level 0.
	Part - time Level 2.2	UFMFMC-30-2 Automotive Technology UFMFQA-15-2 Stress Analysis UFMFHA-15-2 Project Management	
	Part – time Level 3.1	**Core Modules** UFMFU7-15-3 Computational Methods UFMFXJ-15-3 Vibrational Dynamics UFCF95-15-3 Entrepreneurial Skills **Choose one from:** UFMFD7-15-3 Energy Technologies UFMFU6-15-3 Composite Engineering UFMFP9-15-3 Mechanics of Materials UFMF7K-15-3 Materials and Structures for Special Applications UFMFYJ-15-3 Control Engineering	**BEng Mechanical Engineering and Vehicle Technology** Credit requirements: 420 credits At least 60 credits at level 3 or above. At least 100 credits at level 2 or above. At least 140 credits at level 1 or above. 120 credits at level 0.
	Part – time Level 3.2	**Core Modules** UFMFX8-30-3 Individual Project BEng **Students must take 30 credits from:** UFMFNC-30-3 Automotive Manufacturing UFMFT9-30-3 Motorsport Performance	**Highest Award** **BEng(Hons) Mechanical Engineering and Vehicle Technology** Credit requirements: 480 credits At least 100 credits at level 3 or above. At least 100 credits at level 2 or above. At least 140 credits at level 1 or above. 120 credits at level 0.)

GRADUATION

Part 7: Entry Requirements

Applicants holding the following qualifications are eligible to apply for entry to Level 0 of the programme:

- Thanawiya amma (General Secondary School Certificate) or the one year certificate with an overall mark of 70%, or above
- Thanawiya amma (General Secondary School Certificate) with an overall mark of 65% or above PLUS a mark of over 60% in each stage of the GCET Foundation Studies Programme

PLUS

Part 7: Entry Requirements

- A minimum overall score of IELTS 5.5, or equivalent

Further details of entry requirements for applicants holding the IB Diploma or A Levels can be found at: http://www1.uwe.ac.uk/whatcanistudy/applyingtouwe/undergraduateapplications/entryrequirements.aspx

Applicants holding more advanced qualifications may be considered for entry to the programme with advanced standing on an individual basis.

Part 8: Reference Points and Benchmarks

The following reference points and benchmarks have been used in the design of the programme:
QAA UK Quality Code for HE
National qualification framework
Subject benchmark statements
College strategies and policies
Staff research projects

QAA subject benchmark statements:

All modules in the programme have been written to conform to the learning outcomes required by the Engineering Council UK. This is mandatory for accredited engineering programmes. The specific outcomes are derived from the requirements for electronic and digital engineering described in The IMechE Handbook of Learning Outcomes for BEng and MEng programmes. The modules have been designed to ensure adequate and appropriate coverage of these outcomes across the levels of study.

SEEC level descriptors have informed the design of the assessment of the learning outcomes.

College strategies and policies:
This programme addresses the College strategies through the following:

- To produce “Able and Ready to Work Graduates”
- To develop Distinctive Curriculum.
- To establish assessment and feedback processes that enhance and deepen learning..
- To promote research-informed education and evidence-based practice that supports an increasingly diverse student body.
- To sustain and extend approaches to learning that further enhance the employability of GCET graduates and the career destinations they are able to reach.
- To use technology and the campus environment to further enhance the student learning experience and teaching effectiveness within the context of a larger and more diverse student population

Staff research projects:
Research and industrial collaborations are key to several modules including UFMFHA-15-2, UFMFMC-30-2, UFMFNC-30-3, and UFMFX8-30-3.

Employer interaction and feedback:
The College works with a number of industrial partners through the Industrial Consultative Committee. Feedback from employers through their sponsored students also helped in the design of this programme. The programme provides part-time and flexible options which ensure an ongoing interaction with regional employers.

What methods have been used in the development of this programme to evaluate and improve the quality and standards of learning? This could include consideration of stakeholder feedback from, for example current students, graduates and employers.

The methods that have been used in the development of this programme include:

- Consultation with the Ministry of Higher Education in the Sultanate of Oman.
- Consultation with the Ministry of Manpower in the Sultanate of Oman and, in particular, the

Part 8: Reference Points and Benchmarks

Engineering human resources needs.

- Consultation with the University of Sultan Qaboos, the only public University in the Sultanate of Oman.
- Consultation with the Directorate of Technical Vocation Education.
- Feedback from students sponsored by different industries.
- Consideration of the statistics from the National Center for Statistics and Information in the Sultanate of Oman.
- Consideration of Oman's Ninth Five-Year Development Plan (2016-2020) where manufacturing has been identified as the top sector for development.

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 he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of individual modules can be found in module specifications, available on the University's website.

FOR OFFICE USE ONLY

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	6 Nov 2017		2	Link to RIA (ID 4533)
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Date of last Periodic Curriculum Review				