Programme specification

1. Overview/ factual information

Programme/award title(s)	MEng in Integrated Engineering
Teaching Institution	New Model Institute for Technology & Engineering (NMITE)
Awarding Institution	The Open University (OU)
Date of first OU validation	Spring 2021
Date of latest OU (re)validation	N/A
Next revalidation	N/A
Credit points for the award	480
UCAS Code	H113 (Course Code IEU1)
JACS Code	JACS H110 (HECoS 100184, CAH 10-01 Engineering)
Programme start date and cycle of starts if appropriate.	September and January intakes.
Underpinning QAA subject benchmark(s)	Subject Benchmark Statements: https://www.qaa.ac.uk/quality-code/subject-benchmark-statements Framework for Higher Education Qualifications (2014). UK Quality Code for Higher Education (the Quality Code), available at: https://www.qaa.ac.uk/docs/qaa/quality-code/qualifications-frameworks.pdf The Accreditation of Higher Education Programmes: UK Standard for Professional Engineering Competence, Engineering Council (www.engc.org.uk). Fourth edition.
Other external and internal reference points used to inform programme outcomes. **For apprenticeships, the standard or framework against which it will be delivered.**	N/A
Professional/statutory recognition	Accreditation with the Institution of Engineering and Technology (IET) will be applied for once the first cohort have graduated.

For apprenticeships fully or partially integrated Assessment.	N/A
Mode(s) of Study (PT, FT, DL, Mix of DL & Face-to-Face) Apprenticeship	FT
Duration of the programme for each mode of study	3 years (46 weeks per year)
Dual accreditation (if applicable)	N/A
Date of production/revision of this specification	April 2022

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 on the learning outcomes, content, and teaching, learning and assessment methods of each module can be found in student module guide(s) and the students handbook.

The accuracy of the information contained in this document is reviewed by the University and may be verified by the Quality Assurance Agency for Higher Education.

2.1 Educational aims and objectives

The programme aims to:

- Satisfy the necessary educational standards for the award of Chartered Engineer by meeting the requirements of the Engineering Council Accreditation of Higher Education Programmes.
- Imbue students with knowledge and understanding of engineering, gained through innovative learning approaches, and interacting with employers and the community.
- Nurture an ability to integrate, synthesize, apply and gain knowledge, with an awareness of social and ethical responsibilities,
- Encourage a desire to identify problems that need solving, and to find creative solutions to society's challenges.
- Develop agile, independent, curious, resilient and passionate engineers.

2.2 Relationship to other programmes and awards (Where the award is part of a hierarchy of awards/programmes, this section describes the articulation between them, opportunities for progression upon completion of the programme, and arrangements for bridging modules or induction)
This programme has been developed to complement the NMITE BEng in Integrated Engineering. The modules and delivery are common throughout FHEQ levels 4 – 6 incl. Students will be able to elect to transfer between the MEng and BEng programmes.

2.3 For Foundation Degrees, please list where the 60 credit work-related learning takes place. For apprenticeships an articulation of how the work based learning and academic content are organised with the award.
N/A

2.4 List of all exit awards
Students will be eligible for an exit award of CertHE, DipHE or Bachelor of Engineering (BEng) to reflect their highest level of completed credits only where they are unable to complete the MEng.

3. Programme structure and learning outcomes

Programme Structure - LEVEL 4						
Code	**Module Title**	**Optional Modules**	**Duration in Weeks**	**Credits**	**Is the Module Compensatable?**	**Semester**
E4001	Making Robust Decisions	N/A	4	15	Y	N/A
E4002	Making Engineering Happen	N/A	4	15	Y	N/A
E4003	Introduction to Electrical and Electronic Engineering	N/A	4	15	Y	N/A
E4004	Statics and Structures	N/A	4	15	Y	N/A
E4005	Engineering Materials and Processes	N/A	4	15	Y	N/A
E4006	Integrated Systems	N/A	4	15	Y	N/A
E4007	Introduction to Flow, Heat and Energy	N/A	4	15	Y	N/A
E4008	Design Concepts	N/A	4	15	Y	N/A

Modules run sequentially but not necessarily in the order above, however learning and assessment are distributed evenly across the programme.

Intended learning outcomes at Level 4 are listed below:

Learning Outcomes – LEVEL 4	
3A. Knowledge and understanding	
Learning outcomes:	**Learning and teaching strategy/ assessment methods**
L4 A1: develop a sound understanding of the fundamentals of engineering within Integrated Engineering **L4 A2**: acquire basic skills in modelling and analysis and the ability to solve straightforward technical challenges	Students will be introduced to the fundamentals of engineering through challenge-based learning. Assessment at FHEQ Level 4 is predominantly focused upon the development of factual and theoretical knowledge. *Educator Marked Assessments*.

3B. Cognitive skills	
Learning outcomes:	**Learning and teaching strategy/ assessment methods**
L4 B1: acquire basic design skills and the ability to create simple engineering designs using a multi-disciplinary approach **L4 B2:** develop an awareness of the responsibilities of engineers in economic, social and environmental contexts	The Learning and Teaching Strategy/assessment methods are as given under 3A above. In addition, within teams, students will be able to apply their developing skills to analyse standard problems in a multi and interdisciplinary way.

3C. Practical and professional skills	
Learning outcomes:	**Learning and teaching strategy/ assessment methods**
L4 C1: develop practical skills and the ability to conduct and evaluate experiments **L4 C2:** create, use and/or evaluate computer software with integration into engineering solutions	The Learning and Teaching Strategy/assessment methods are as given under 3A above. In addition, students will undertake focused activities within workshops and will be able to evaluate and interpret data and present the results in a clear and reliable manner.

3D. Key/transferable skills	
Learning outcomes:	**Learning and teaching strategy/ assessment methods**
L4 D1: develop project management and communication skills to an expected industrial format **L4 D2:** develop cooperative skills through team-based challenges **L4 D3:** develop independence and interdependence when learning **L4 D4:** develop a responsible and professional attitude	The Learning and Teaching Strategy/assessment methods are as given under 3A above. In addition, throughout FHEQ Level 4, students will develop their independent learning skills together with their team-building with emphasis on project management and communication (including rhetoric, effective writing, and deep and critical reading). Industry focused communication methods have been selected for those modules which have been created to instigate the development of the behavioural practices of an industry ready graduate.

[Exit Award: CertHE**]**

Programme Structure - LEVEL 5						
Code	**Module Title**	**Optional Modules**	**Duration in Weeks**	**Credits**	**Is the Module Compensatable?**	**Semester**
E5001	Making Projects Work	N/A	4	15	Y	N/A
E5002	Dynamics	N/A	4	15	Y	N/A
E5003	Design Prototypes	N/A	4	15	Y	N/A
E5004	Electromagnetics in Engineering	N/A	4	15	Y	N/A
E5005	Structural Materials and their Innovation	N/A	4	15	Y	N/A
E5006	Control Systems	N/A	4	15	Y	N/A
E5007	Energy Systems	N/A	4	15	Y	N/A
E5008	Manufacturing Systems Optimisation	N/A	4	15	Y	N/A

Modules run sequentially but not necessarily in the order above, however learning and assessment are distributed evenly across the programme.

Intended learning outcomes at Level 5 are listed below:

Learning Outcomes – LEVEL 5	
3A. Knowledge and understanding	
Learning outcomes:	**Learning and teaching strategy/ assessment methods**
L5 A1: develop a detailed understanding of the fundamentals of engineering within Integrated Engineering **L5 A2**: acquire and develop further skills in modelling and analysis and the ability to solve well-established technical challenges	Students will develop a more extensive knowledge and understanding of the core areas of engineering with, where appropriate, support in mathematics and sciences. Assessment at FHEQ Level 5 is focused on methodologies which have been selected for the purpose of developing core engineering skills, whilst assessing the ability of the student to apply prior learning. Assessments will therefore include a variety of output media including industry test reports, group presentations, etc. *Educator Marked Assessments*.

3B. Cognitive skills	
Learning outcomes:	**Learning and teaching strategy/ assessment methods**
L5 B1: acquire and develop design skills and the ability to create relatively complex engineering designs using a multi-disciplinary approach **L5 B2:** further develop an awareness of the responsibilities of engineers in economic, social and environmental contexts	The Learning and Teaching Strategy/assessment methods are as given under 3A above. In addition, students will undertake a community-based challenge activity which will require conceptual thinking, analysis, logical thought, judgment and the clear presentation of their ideas.

3C. Practical and professional skills	
Learning outcomes:	**Learning and teaching strategy/ assessment methods**
L5 C1: further develop practical skills and the ability to conduct and evaluate experiments of increasing complexity	The Learning and Teaching Strategy/assessment methods are as given under 3A above.

3D. Key/transferable skills	
Learning outcomes:	**Learning and teaching strategy/ assessment methods**
L5 D1: develop communication skills, both oral and written, to confidently communicate in a variety of formats to a range of audiences **L5 D2:** develop business skills required of an engineer **L5 D3:** interact effectively with the rest of the members of their team in all team-based challenges **L5 D4:** develop study skills through the successful management of available resources taking responsibility for their own learning **L5 D5:** further develop a responsible and professional attitude	The Learning and Teaching Strategy/assessment methods are as given under 3A above. In addition, students will apply their knowledge and understanding to more complex challenges whilst continuing to develop their independent learning, communication skills and their ability to work in teams.

[Exit Award: DipHE**]**

Programme Structure - LEVEL 6						
Code	**Module Title**	**Optional Modules**	**Duration in Weeks**	**Credits**	**Is the Module Compensatable?**	**Semester**
E6001	Making Data Productive	N/A	4	15	Y	N/A
E6002	Mechatronics	N/A	4	15	Y	N/A
E6003	Community Based Project	N/A	4	15	Y	N/A
E6004	Advanced Solid Mechanics	N/A	4	15	Y	N/A
E6005	Advanced Materials and Processes	N/A	4	15	Y	N/A
E6006	Thermal Fluids	N/A	4	15	Y	N/A
E6007	Bachelor's Investigative Project	N/A	8	30	N	N/A

Modules run sequentially but not necessarily in the order above, however learning and assessment are distributed evenly across the programme.

Intended learning outcomes at Level 6 are listed below:

Learning Outcomes – LEVEL 6	
3A. Knowledge and understanding	
Learning outcomes:	**Learning and teaching strategy/ assessment methods**
L6 A1: acquire up-to-date knowledge and understanding of theory and practice within Integrated Engineering **L6 A2:** continue to develop skills in modelling and analysis utilising these skills in order to solve complex challenges	By the end of FHEQ Level 6 it is expected that students will have become self-motivated, efficient and organised independent learners. Assessment methods are designed to include a combination of both academic and industrially focused formats. Focus will be given to assessing the development and attainment of the knowledge and understanding necessary to apply technology to engineering problems and processes, and to maintain and manage current technology. *Educator Marked Assessments*.

3B. Cognitive skills	
Learning outcomes:	**Learning and teaching strategy/ assessment methods**
L6 B1: develop creativity, synthesis and design skills, and the ability to create engineering design solutions	The Learning and Teaching Strategy/assessment methods are as given under 3A above. In addition, students will be required to participate in an individual Bachelor's Engineering Project where they will develop technical and professional skills.

3C. Practical and professional skills	
Learning outcomes:	**Learning and teaching strategy/ assessment methods**
L6 C1: design and evaluate experiments and undertake numerical modelling using a range of computer software	The Learning and Teaching Strategy/assessment methods are as given under 3A above. In addition, students will be required to participate in an individual Bachelor's Engineering Project where they will develop technical and professional skills.

3D. Key/transferable skills	
Learning outcomes:	**Learning and teaching strategy/ assessment methods**
L6 D1: continue to develop communication, teamwork and project management skills to a professional standard and be proactive in taking responsibility for the success of a project **L6 D2:** develop the facility for independent and interdependent learning, open-mindedness and critical enquiry, including self-reflection **L6 D3:** develop the ability to tackle unforeseen demands with confidence and competence as required within industry	The Learning and Teaching Strategy/assessment methods are as given under 3A above.

[Exit Award: BEng**]**

Programme Structure - LEVEL 7						
Code	**Module Title**	**Optional Modules**	**Duration in Weeks**	**Credits**	**Is the Module Compensatable?**	**Semester**
E7001	Advanced Integrated Engineering - Energy	N/A	4	15	Y	N/A
E7002	Advanced Integrated Engineering - Health	N/A	4	15	Y	N/A
E7003	Advanced Integrated Engineering - Infrastructure	N/A	4	15	Y	N/A
E7004	Advanced Integrated Engineering - Security	N/A	4	15	Y	N/A
E7005	Master's Engineering Project	N/A	16	60	N	N/A

Modules run sequentially but not necessarily in the order above, however learning and assessment are distributed evenly across the programme.

Intended learning outcomes at Level 7 are listed below:

Learning Outcomes – LEVEL 7	
3A. Knowledge and understanding	
Learning outcomes:	**Learning and teaching strategy/ assessment methods**
L7 A1: specialise in considerable depth in a chosen area of Integrated Engineering **L7 A2:** acquire up-to-date knowledge and understanding of theory and practice in a chosen area of Integrated Engineering **L7 A3:** continue to further develop skills in modelling, analysis and problem solving for complex challenges with a range of uncertainties	Students will complete a series of 4 Advanced Engineering Sprints exploring engineering challenges in depth in thematic areas such as health, energy, infrastructure and security. Following these challenges, the students will be required to participate in an individual Master's Engineering Project. They will develop enhanced technical and professional skills, and specialist knowledge. In

Learning Outcomes – LEVEL 7	
3A. Knowledge and understanding	
	addition, students will be required to record and reflect on their accumulating experiences for later use in professional recognition. Assessments at FHEQ Level 7 are designed to assess engineering capability and industry readiness, and therefore adopt mechanisms which assess ability in application. Assessment methods include a combination of both academic and industrially focused formats. These include academic reports such as literature reviews, laboratory and experimental write-ups, project reports and industry relevant formats such as industry-based test report, design review presentation and technical communication. Assessments therefore provide a demonstration of the greater range and depth of specialist knowledge at FHEQ Level 7, within a research and industrial environment, as well as a broader and more general academic base. The foundation for leadership and a wider appreciation of the economic, legal, social, ethical and environmental context of engineering are also included. *Educator Marked Assessments.*

3B. Cognitive skills	
Learning outcomes:	**Learning and teaching strategy/ assessment methods**
L7 B1: develop advanced creativity, synthesis and design skills, and the ability to create original engineering design solutions to a high professional standard **L7 B2:** independently design and evaluate experiments to a high standard	The Learning and Teaching Strategy/assessment methods are as given under 3A above.

3C. Practical and professional skills	
Learning outcomes:	**Learning and teaching strategy/ assessment methods**
L7 C1: record and reflect on experiences and improve performance as the foundation for professional lifelong learning **L7 C2:** develop an awareness of the role of future engineers within society	The Learning and Teaching Strategy/assessment methods are as given under 3A above.

3D. Key/transferable skills	
Learning outcomes:	**Learning and teaching strategy/ assessment methods**
L7 D1: develop self-directed, interdependent learning, open-mindedness and critical enquiry **L7 D2:** develop the ability to tackle unforeseen technical demands and to apply new technologies in novel situations with confidence and competence as expected in industry **L7 D3:** practise reflective, meta-cognitive development **L7 D4:** lead and work creatively within a team-based project **L7 D5:** evaluate the implications of social, cultural, environmental, legal, economic and commercial drivers in engineering challenges **L7 D6:** efficiently and effectively communicate to a professional standard	The Learning and Teaching Strategy/assessment methods are as given under section 3A above.

[Completion Award: MEng**]**

4. Distinctive features of the programme structure

- **Where applicable, this section provides details on distinctive features such as:**
  - where in the structure above a professional/placement year fits in and how it may affect progression
  - any restrictions regarding the availability of elective modules
  - where in the programme structure students must make a choice of pathway/route
- **Additional considerations for apprenticeships:**
  - how the delivery of the academic award fits in with the wider apprenticeship
  - the integration of the 'on the job' and 'off the job' training
  - how the academic award fits within the assessment of the apprenticeship

NMITE's MEng in Integrated Engineering was created with a unique philosophy of integrating not only traditionally separate disciplines of engineering, but also integrating engineering with other disciplines such as arts, humanities and business. With modules focused on engineering challenges, the implications of other disciplines for engineering, and the interactions between technical and non-technical considerations, are fully and integrally woven into the learning throughout the degree.

NMITE learning will take place through a curriculum that has been co-developed with industry and the community to meet the engineering demands of the 21st century. Through a series of sequential modules, students will work on engineering challenges, during which they will acquire knowledge, understanding, skills and competencies, primarily within a team-based environment. An accelerated schedule will enable a MEng to be achieved in three (46-week) years of academic study.

This approach responds to two key changes facing engineering – the blurring of boundaries between traditional disciplines, and the increasingly interwoven nature of society's challenges. Both require engineers able to range across disciplines, to synthesise knowledge of different types and to work effectively in teams. The next generation of engineers must be equipped with more than core technical competence. They must be passionate, challenging, multidisciplinary, applied, creative, commercially literate, instantly productive and fully integrated into the world around them.

Additional Details:

- There are no elective modules;
- There are no choices of pathway/route;
- This is not an apprenticeship programme.

5. Support for students and their learning. *(For apprenticeships this should include details of how student learning is supported in the work place)*
Students are supported in their learning through two main routes: the Academic Skills and Knowhow Centre (ASK) and the Personal Tutoring System. ASK is a skills-focussed resource centre comprising an online resource bank, one-to-one drop-ins and scheduled appointments, and group-based seminars. Its offer is closely mapped to module content, and the ASK Lead takes responsibility for understanding upcoming skills requirements in maths, communication and/or IT, and scheduling activities accordingly. Each student will be allocated an individual Personal Tutor (PT) upon arrival at NMITE. As far as possible, a student's tutor will not be changed during their degree. During the first year of the degree, students and PTs will have regular meetings to ensure that an effective and trusting relationship develops. Personal Tutors' duties include providing academic advice; structured support for students' academic and professional development; providing employment guidance; helping students obtain suitable non-academic support; and maintaining a general interest in and understanding of students' wider well-being. PTs record when meetings with students take place and a summary of matters discussed using a confidential system. Every student that discloses a disability or additional learning requirement during the application process is allocated a PT upon acceptance of a place at NMITE. This enables an effective and trusting relationship between student and tutor to develop before arrival at NMITE and ensures that everything necessary to support the student is in place from the day they arrive at NMITE Student Support Services provides students with one central point of contact for information, advice, and support with a wide range of practical matters. This includes the following: student living and accommodation, welfare and support, health and wellbeing and financial matters. Students can also access additional specialist support, such as counselling services, via the Student Support Team.

6. Criteria for admission *(For apprenticeships this should include details of how the criteria will be used with employers who will be recruiting apprentices.)*
Prospective students following traditional academic routes will be required to have a minimum of English (Grade 6) and Mathematics (Grade 6) GCSEs (or equivalent) and a minimum of 128 Tariff Points, secured via A-Levels or equivalent assessment (such as an International Baccalaureate). Using RPL and RPEL approaches, applications will also be welcomed from a diverse range of students from non-traditional academic pathways who have already begun careers, including those who have engaged in apprenticeships or military service. An applicant whose first language is not English or who has not been educated wholly or mainly in the medium of English will be expected to reach, before commencing the programme, a suitable minimum level of competence in the English language. It is essential that a student is able to understand and to communicate in both written and spoken English to a sufficient standard to fully engage with the programme. The minimum English Language requirements for entry to the programme is IELTS (or recognised equivalent) of 7.0 overall with at least 6.5 in ~~both Speaking and Writing~~all components. An applicant who is unable to evidence the minimum standard through one of the above qualifications or an equivalent will be required to undertake relevant study and assessment before admission to the programme. Full details will be provided in NMITE's Admissions Policy.

7. Language of study
English

8. Information about non-OU standard assessment regulations (including PSRB requirements)

Each module within this MEng will be graded as follows:

- FHEQ Levels 4, 5 and 6: Fail (<40%); Pass (40% or over);
- FHEQ Level 7: Fail (<50%); Pass (50% or over).

To meet with the accreditation requirements of the IET students must achieve a module mark of at least 50% at FHEQ Level 6 to be eligible to progress to Level 7 and continue to complete this MEng. Students who have achieved the 40% Pass mark for each module at Level 6, but not the required 50%, will not be eligible to continue to Level 7 for the award of MEng and instead will be transferred to the BEng completion route.

Full details will be provided in NMITE's Assessment Policy.

9. For apprenticeships in England End Point Assessment (EPA).

(Summary of the approved assessment plan and how the academic award fits within this and the EPA)

N/A

10. Methods for evaluating and improving the quality and standards of teaching and learning.

The Academic Affairs Committee ~~(chaired by the Chief Academic Officer)~~ has overall responsibility under the Academic Council for the development, monitoring, review and implementation of academic affairs including learning, teaching, knowledge generation and exchange.

In addition, the Quality Assurance Committee, ~~(chaired by the Chief Academic Officer)~~ is responsible for ensuring that NMITE's academic standards reflect the expectations of regulators, employers, and professional bodies, and to provide an auditable system for demonstrating this is achieved both internally and externally to NMITE.

More generally, NMITE's institutional model is built around a commitment to developing teaching and learning. Staff are therefore deeply engaged in national and international forums for improving higher education teaching and exposed to ideas for doing so that are then disseminated internally. Similarly, within NMITE, the studio-based teaching methods inherently encourage continuous discussion, reflection and feedback, both between students and

teaching staff, and between those teaching on different modules aimed at continually enhancing the quality of its provision.

10. Changes made to the programme since last (re)validation

Single change event in which the following changes were implemented:

1. Regularising the module structure to 15 credits and four week duration (or multiples thereof). The MEng Integrated Engineering previously comprised modules having 8, 12, 14 or 64 credit. As follows:
    - Synthesising modules ME4ABCER and ME4BBMIH to create Toolbox 1: Making ~~Sound~~ Robust Decisions.
    - Expanding module ME4AEPRG with core practical skills to create Toolbox 2: Making Engineering Happen.
    - Synthesising modules ME5CBMAE and ME6EBPPF to create Toolbox 3: Making Projects Work.
    - Expanding module ME5DBINF to create Toolbox 4: Making Data Productive.
    - Condensing module ME7HAMEP from 64 credits to create 60 credit Project Module: E7005 Master's Engineering Project

2. Expand FHEQL6 Project module from 15 credit ME6FABEP to 30 credit Bachelor's Investigative Project
3. Synthesising modules ME5CCCON1 with ME5DBCIT to create Community Based Challenge Module Design Concepts.
4. Condensing modules ME6ECCON2 and ME6ECPRO2 to create FHEQL6 Community-based Challenge.
5. Synthesising modules ME6FECTR3 and ME6FEEEE3 to create Engineering Sprint Module Mechatronics.
6. Moving ME4BDYN2 from FHEQ 4 into FHEQ 5 to create Engineering Sprint Module: Dynamics.

Annexe 1 - Curriculum map

This table indicates which study units assume responsibility for delivering (shaded) and assessing (✓) particular programme learning outcomes.

Level	Study module/unit	A1	A2	B1	B2	C1	C2	D1	D2	D3	D4	
4	E4001 Making Robust Decisions		✓		✓	✓	✓				✓	
4	E4002 Making Engineering Happen		✓	✓	✓		✓					
4	E4003 Introduction to Electrical and Electronic Engineering	✓				✓	✓					
4	E4004 Statics and Structures	✓	✓			✓		✓	✓			
4	E4005 Engineering Materials and Processes	✓	✓		✓							
4	E4006 Integrated Systems	✓	✓				✓					
4	E4007 Introduction to Flow, Heat and Energy	✓	✓			✓						
4	E4008 Design Concepts			✓	✓	✓		✓	✓	✓		

Level	Study module/unit	A1	A2	B1	B2	C1		D1	D2	D3	D4	D5
5	E5001 Making Projects Work				✓			✓	✓		✓	✓
5	E5002 Dynamics	✓	✓			✓						
5	E5003 Design Prototypes			✓	✓	✓		✓		✓		
5	E5004 Electromagnetics in Engineering	✓	✓	✓		✓		✓				
5	E5005 Structural Materials and their Innovation	✓	✓		✓	✓						
5	E5006 Control Systems	✓		✓		✓		✓				
5	E5007 Energy Systems	✓	✓								✓	✓
5	E5008 Manufacturing Systems Optimisation		✓		✓			✓	✓		✓	✓

Level	Study module/unit	A1	A2	B1		C1		D1	D2	D3	
6	E6001 Making Data Productive		✓			✓		✓	✓	✓	
6	E6002 Mechatronics	✓	✓	✓				✓	✓	✓	
6	E6003 Community Based Project			✓				✓		✓	
6	E6004 Advanced Solid Mechanics	✓	✓			✓					
6	E6005 Advanced Materials and Processes	✓	✓	✓		✓			✓		
6	E6006 Thermal Fluids	✓	✓			✓					
6	E6007 Bachelor's Innovation Project	✓		✓				✓	✓	✓	

Level	Study module/unit	A1	A2	A3	B1	B2	C1	C2	D1	D2	D3	D4	D5	D6
7	E7001 Advanced Integrated Engineering - Energy	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓
7	E7002 Advanced Integrated Engineering - Health	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓
7	E7003 Advanced Integrated Engineering - Infrastructure	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓
7	E7004 Advanced Integrated Engineering - Security	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓
7	E7005 Master's Engineering Project	✓	✓	✓	✓	✓	✓		✓		✓		✓	✓