

FULL LIST OF MODULES FOR YEAR 3 STUDENTS FOR 2024-25

YEAR 3 STUDENTS

Level 6 Elective Modules Available
<i>Automotive Design with Motorsport</i>
Computational Continuum Mechanics A
<i>Embedded C for Microcontrollers A (autumn iteration)</i>
<i>Embedded C for Microcontrollers A (spring iteration)</i>
<i>Equality, Diversity and Inclusion in Engineering A</i>
Finite Element Analysis and Applications A
Fracture Mechanics A
Fluid Mechanics 3A
Machine Dynamics and Vibrations A
<i>Manufacturing Technology and Management A</i>
Mathematics A
Mechatronics 3A
Nuclear Chemical Engineering* (H3H8 and H3G2 only)
Introduction to Nuclear Energy A*
Stress Analysis 3A
Structure, Properties and Analysis of Polymers A
Statistics A
Thermodynamics 3A
Tribology A
<i>(BPES) Business Economics OR Managerial Economics Online</i>
<i>(BPES) Entrepreneurship OR Entrepreneurship Online</i>
<i>(BPES) Finance & Financial Management OR Corporate Finance Online</i>

* compulsory if you are on the MEng in Mechanical with Nuclear Engineering Stream (H3H8 or H3G2)

ALL STUDENTS

Please read the key below carefully to help you understand which modules you can choose and when/how they are examined.

KEY
runs autumn only
runs spring only
two term module
<i>capped modules</i>
<u>In term assessment</u>
January exam

Predicted Modules for Year 4 (2025-2026)

Prerequisites for ME modules	Level 7 Elective Modules Available (modules on the same lines have Exam Clashes and cannot be chosen together)		
	Computational Continuum Mechanics B		
	<i>Embedded C for Microcontrollers B (autumn iteration)</i>		
	<i>Embedded C for Microcontrollers B (spring iteration)</i>		
	<i>Equality, Diversity and Inclusion in Engineering B (Level 7)</i>		
	Finite Element Analysis and Applications B		
	Fracture Mechanics B		
	Fluid Mechanics 3B		
	<i>Manufacturing Technology and Management B</i>		
	Mathematics B		
	Mechatronics 3B		
	Stress Analysis 3B		
	Introduction to Nuclear Energy B	(IDX) Nuclear Materials 1* (MATE)	(IDX) Modelling and control of multi-body mechanical systems (EEE)
	Structure, Properties and Analysis of Polymers B		
	Statistics B		
	Tribology B		
	Advanced Control		
	Advanced Numerical Methods for Engineers		
	Advanced Stress Analysis		
	Applied Vibration Technology		
	Computational Fluid Dynamics		
	<i>Design Art Creativity</i>		
	Combustion Safety and Fire Dynamics	<i>(IDX) Human neuromechanical control and learning (BIOE)</i>	
	Energy Systems		
Fluid Mechanics 3A	Environmental and Applied Fluid Dynamics		
Mechatronics 3A	<i>Introduction to Robotics</i>		
	<i>Machine Learning</i>		
	<i>Interfacing and Data Processing</i>		
Intro to Nuclear Energy A	Nuclear Reactor Physics*	(IDX) Sustainable electrical systems (EEE)	(IDX) Advanced Optimisation (EEE)
Intro to Nuclear Energy A	Nuclear Thermal Hydraulics*	(IDX) Optimisation (EEE)	
H3H8/H3G2 Programme	Nuclear Fusion (MATE) NEW		
	<i>Sustainable Engineering Design NEW</i>		
	<i>(IDX) Applications of Fluid Dynamics (AERO) NEW</i>		
	<i>(IDX) Biomaterials for Bioengineers (BIOE)</i>		

* compulsory if you are on the MEng in Mechanical with Nuclear Engineering Stream (H3H8 or H3G2)

**Level 7 Advanced Application (AA) Modules
(you take 1)**

(AA course) Aircraft Engine Technology
(AA course) Future Clean Transport Technology
(AA course) Metal Processing Technology
(AA course) Mechanical Transmissions Technology

You may not take a B Variant of a module where you have already taken the A Variant.

No more than 2 IDX modules in Year 4.