

## **Programme Regulations: Academic Year 2024/2025**

### **Joint Degree Programme between Singapore Institute of Technology (SIT) and Newcastle University (NU) leading to a Bachelor of Engineering with Honours in Mechanical Design and Manufacturing Engineering**

#### **Programme Code: 1416U**

1. The programme consists of 180 credits. One credit at SIT is equivalent to two credits at Newcastle University.
2. The programme is taught over eight trimesters.
3. On successful completion of the programme, learners will receive a joint degree award from Newcastle University and Singapore Institute of Technology.
4. The joint programme is assessed on an A-F letter grade and associated 5.0 - 0 grade point scale.
5. A D Grade with a corresponding grade point of 1.0 is a pass grade.
6. Learners have a maximum candidature\* of 14 trimesters to complete their programme.
7. Learners will have a maximum of one repeat assessment attempt<sup>#</sup> and one repeat module attempt<sup>#</sup> per module, unless a successful Personal Extenuating Circumstances (PEC) application is made.
8. Learners should attain at least a 2.00 Cumulative GPA (CGPA) after each trimester to maintain a good academic standing.

After each study trimester and/or consecutive trimester, the joint Board of Examiners will track the academic standing of learners with CGPA < 2.00 and issue learners with the following:

- Academic Warning – in any study trimester, CGPA < 2.00
- Academic Probation – in the next consecutive study trimester, CGPA < 2.00
- Academic Termination – in the 3<sup>rd</sup> consecutive study trimester, CGPA < 2.00

9. Learners obtaining a F grade or grade point of 0 in any module will be entitled to one repeat assessment as of right.

If the failed module is a pre-requisite for a higher-level module, learners will not be able to take the higher-level module until the pre-requisite of the previous module has been met.

If learners fail the repeat assessment, a single repeat module attempt will be offered at the next available opportunity.

10. Learners obtaining a F grade undertaking a repeat assessment attempt will have their grade point capped at 1.00 for the calculation of the CGPA.
11. Learners obtaining a D+/D or F grade have the option to undertake a repeat module attempt and the grade point will be capped at 2.00 for the calculation of the CGPA.

12. For learners who have a number of D+/D/F grades, the Board of Examiners should review their complete profile for the academic year to ensure the Board has the full information to make an informed decision on whether or not to allow learners to progress to the next trimester or require them to pause their studies or retain in a particular year to improve their academic performance. This will also allow the Board to determine where learners have used up their one repeat assessment attempt and one repeat module attempt after which they will be unable to progress in the programme.

\*To refer to SIT Academic Bulletin - [SIT Candidature Policy](#)

# To refer to SIT Academic Bulletin - [Repeat Attempt Policy](#)

Learners will normally undertake the following programme of study:

**Year 1**

<b>Module Code</b>	<b>Module Title</b>	<b>Module Type</b>	<b>Credits</b>	<b>FHEQ Level</b>	<b>Trimester</b>	<b>Module Lead</b>
UDC1001	Digital Competency Essentials	Compulsory	2	4	1	SIT
ENG1001	Engineering Mathematics 1	Compulsory	6	4	1	SIT
ENG1010	Engineering Graphics	Compulsory	6	4	1	SIT
MME1221	Engineering Statics and Dynamics	Compulsory	6	4	1	SIT
MME1251	Circuits and Digital Electronics	Compulsory	6	4	1	SIT
UCS1001	Critical Thinking and Communicating	Compulsory	4	4	1	SIT
MME3201A	Integrated Work Study Programme (Career Skills)	Compulsory	0	6	1, 2 & 3	SIT
UDE2222	Design Innovation	Compulsory	6	5	2	SIT
ENG1002	Engineering Mathematics 2	Compulsory	6	4	2	SIT
MME1262	Materials for Sustainable Design and Manufacturing	Compulsory	6	4	2	NU
MME1222	Mechanics of Materials	Compulsory	6	4	2	NU
MME1271	Fundamentals of Thermofluids	Compulsory	6	4	2	NU
USI2001	Social Innovation Project	Compulsory	3	5	3	SIT
MME2231	Applied Programming	Compulsory	6	5	3	NU
MME2281	Project Management for Engineers	Compulsory	3	5	3	NU

**Year 2**

<b>Module Code</b>	<b>Module Title</b>	<b>Module Type</b>	<b>Credits</b>	<b>FHEQ Level</b>	<b>Trimester</b>	<b>Module Lead</b>
MME3201A	Integrated Work Study Programme (Career Skills)	Compulsory	0	6	1	SIT
MME2211	Engineering Systems Modelling and Simulation	Compulsory	6	5	1	NU
MME2221*	Design of Mechanical Systems	Compulsory	6	5	1	NU
MME2232	Industrial Automation with Data Analytics	Compulsory	6	5	1	SIT
MME2261*	Advanced Materials and Manufacturing Technologies	Compulsory	6	5	1	NU
MME2252	Industrial Control Systems	Compulsory	6	5	2	NU
MME2271	Applications of Thermofluids	Compulsory	6	5	2	SIT
MME3252	Electro-Mechanical Systems Technology	Compulsory	6	6	1	SIT
MME3231	Industrial Internet-Of-Things	Compulsory	6	6	2	SIT
MME3251	Robotics	Compulsory	6	6	2	NU
MME3260	Lean Manufacturing and Six Sigma	Compulsory	6	6	2	SIT
MME3201B	Integrated Work Study Programme (IWSP, Work Attachment)	Compulsory	10	6	3	SIT

### Year 3

Module Code	Module Title	Module Type	Credits	FHEQ Level	Trimester	Module Lead
MME3201B	Integrated Work Study Programme (IWSP, Work Attachment)	Compulsory	10	6	1	SIT
MME3291	Capstone Project	Compulsory	10	6	1 & 2	NU
MME3261	Digital Manufacturing	Compulsory	6	6	2	NU
MME3262	Smart Manufacturing Systems	Compulsory	6	6	2	SIT
MME3281	Finance, Law and Standards for Engineers	Compulsory	6	6	2	NU

For students opt for Microelectronics Manufacturing (MM):

Module Code	Module Title	Elective Module Replaced	Credits	FHEQ Level	Trimester	Module Lead
ENG3001	Semiconductor Technology	MME3252	6	6	1	SIT
ENG3002	Semiconductor Processing	MME3231	6	6	2	SIT
ENG3003	Semiconductor Process Control	MME3260	6	6	2	SIT
ENG3004	Fabrication Engineering	MME3262	6	6	2	SIT

\* Learners from AY2023/2024 cohort onwards undertake part of the module curriculum, with credit-bearing, during their Overseas Immersion Programme (OIP) in Year 1, Trimester 3.

#### 1. Assessment methods

Details of the assessment pattern for each module are explained in the module profile.

#### 2. Degree classification

Degree classifications are based upon all 180 credits and the CGPA attained by learners at the end of the programme.

All modules contribute the final awards and all years of study contribute equally.

Full details of the classifications and how these are calculated can be found in the SIT Academic Bulletin – [SIT and Joint Degree Programmes](#).