List of Materials Science and Engineering courses offered in AY 2026/2027, Semester 1

MLE Level 1000

MLE2001A Materials Science & Engineering Principles & Practice II

MLE Level 2000

MLE2102 Thermodynamics and Renewable Energy Technologies

MLE2103A Materials Kinetics & Processing

MLE2301 Introduction to Materials Science & Engineering
(for students who are unable to take MSE Engineering Principles & Practice courses which may include students who wish to take Minor in Engineering Materials or transfer major to MSE)

MLE Level 3000

MLE3101 Materials Characterization Laboratory

MLE3101A Materials Characterization

MLE3103 Materials Design: Aerospace to Biomedical Applications

MLE3104 Polymeric and Composite Materials

MLE3111A Materials Properties & Processing Laboratory

MLE3203 Engineering Materials

MLE Level 4000

MLE4101 B.Eng. Dissertation *(For cohort AY2020/2021 and before-RfP)*

MLE4101B B.Eng. Dissertation *(For cohort AY2021/2022 and onwards)*

MLE4102A Design Project *(For cohort AY2020/2021 and before-PPP & for cohort AY2021/2022 and onwards)*
MLE4201 Advanced Materials Characterisation
MLE4203 Polymeric Biomedical Materials
MLE4207 Microfabrication Process and Technology
MLE4208 Photovoltaics Materials
MLE4210 Materials for energy storage and conversion
MLE4219 Materials for Optics: from Quantum Light to Nanodevices
MLE4220 Two-Dimensional Materials
MLE4221 Emerging materials for renewable fuels and clean water

MLE Level 5000

MLE5215 Atomistic Modelling of Molecules and Materials *(Must have level 4 standing and min GPA 3.50)*
MLE5220 Finite element method in materials: basic concepts and problem solving *(Must have level 4 standing and min GPA 3.5*

Timetable refers to https://nusmods.com/timetable/

All courses are subjected to change without prior notice