

Master of Engineering in Mechanical and Manufacturing Engineering

Course Short Code

MMME

Course Year

1

Course Offering: 01

[Print PDF](#)

**** IMPORTANT MESSAGE ****

The purpose of this information sheet is to allow you view all modules connected to the Qualification, optional and core.

You should print this sheet out and then continue to the next step where your registration will take place.

It is your responsibility to ensure that you register correctly.

Master of Engineering in Mechanical and Manufacturing Engineering, Full-time/ Flexible

Major: Advanced Manufacturing

Must select All 5 Core modules and additional 4 optional modules (total 9 modules)

MEC1039& MEC1040 must be chosen if not taken before as are prerequisites for semester 2 modules.

Core Modules

Module Code	Module Title	Module Credits	Semester
MEC1078	Engineering Management and Engineering Economic Analysis	7.5	1

MEC1071	Manufacturing Systems Simulation	7.5	1
MEC1069	Manufacturing Process Analysis & Tool Design	7.5	2
MEC1057	Research Practice & Methodology	7.5	2
MEC1063	Project (Masters)	30	2&3

Optional Modules

Module Code	Module Title	Module Credits	Semester
EEN1079	Energy System Decarbonisation	7.5	1
MEC1039	Finite Element Analysis	7.5	1
MEC1040	Heat and Mass Transfer	7.5	1
MEC1052	Biomechanics of Tissue Engineering	7.5	1
MEC1078	Engineering Management and Engineering Economic Analysis	7.5	1
MEC1058	Energy Auditing and Energy Management	7.5	1
MEC1084	Surface Engineering & Tribology	7.5	1
EEN1068	Entrepreneurship for Engineers	7.5	2
MEC1068	Global Sustainable Development Challenges (NEW)	7.5	2
MEC1054	Advanced FEA	7.5	2
MEC1056	Computational Thermo-Fluid Dynamics	7.5	2
MEC1059	Advanced Sustainable Energy Systems	7.5	2
MEC1060	Whole Life Cycle Analysis	7.5	2
MEC1061	Turbomachinery	7.5	2

Major: Sustainable Systems and Energy

Must select All 7 Core modules and additional 2 optional modules (total 9 modules)

MEC1039& MEC1040 must be chosen if not taken before as are prerequisites for semester 2 modules.

Core Modules

Module Code	Module Title	Module Credits	Semester
EEN1079	Energy System Decarbonisation	7.5	1
MEC1058	Energy Auditing and Energy Management	7.5	1
MEC1057	Research Practice & Methodology	7.5	2
MEC1063	Project (Masters)	30	2&3
MEC1059	Advanced Sustainable Energy Systems	7.5	2
MEC1060	Whole Life Cycle Analysis	7.5	2
MEC1068	Global Sustainable Development Challenges (NEW)	7.5	2

Optional Modules

Module Code	Module Title	Module Credits	Semester
MEC1039	Finite Element Analysis	7.5	1
MEC1040	Heat and Mass Transfer	7.5	1
MEC1052	Biomechanics of Tissue Engineering	7.5	1
MEC1078	Engineering Management and Engineering Economic Analysis	7.5	1
MEC1071	Manufacturing Systems Simulation	7.5	1
MEC1084	Surface Engineering & Tribology	7.5	1
EEN1068	Entrepreneurship for Engineers	7.5	2
MEC1054	Advanced FEA	7.5	2
MEC1056	Computational Thermo-Fluid Dynamics	7.5	2
MEC1069	Manufacturing Process Analysis & Tool Design	7.5	2
MEC1061	Turbomachinery	7.5	2

Master: Simulation-Driven Design

Must select All 6 Core modules and additional 3 optional modules (total 9 modules)

MEC1039& MEC1040 must be chosen if not taken before as are prerequisites for

semester 2 modules.

Core Modules

Module Code	Module Title	Module Credits	Semester
MEC1071	Manufacturing Systems Simulation	7.5	1
MEC1054	Advanced FEA	7.5	2
MEC1056	Computational Thermo-Fluid Dynamics	7.5	2
MEC1061	Turbomachinery	7.5	2
MEC1057	Research Practice & Methodology	7.5	2
MEC1063	Project (Masters)	30	2&3

Optional Modules

Module Code	Module Title	Module Credits	Semester
EEN1079	Energy System Decarbonisation	7.5	1
MEC1039	Finite Element Analysis	7.5	1
MEC1040	Heat and Mass Transfer	7.5	1
MEC1052	Biomechanics of Tissue Engineering	7.5	1
MEC1078	Engineering Management and Engineering Economic Analysis	7.5	1
MEC1058	Energy Auditing and Energy Management	7.5	1
MEC1084	Surface Engineering & Tribology	7.5	1
EEN1068	Entrepreneurship for Engineers	7.5	2
MEC1068	Global Sustainable Development Challenges (NEW)	7.5	2
MEC1069	Manufacturing Process Analysis & Tool Design	7.5	2
MEC1059	Advanced Sustainable Energy Systems	7.5	2
MEC1060	Whole Life Cycle Analysis	7.5	2

Major: Biomedical Engineering

Must select All 6 Core modules and additional 3 optional modules (total 9 modules)

MEC1039& MEC1040 must be chosen if not taken before as are prerequisites for semester 2 modules.

Core Modules

Module Code	Module Title	Module Credits	Semester
MEC1081	Design for Medical Innovation	7.5	1&2
MEC1082	Advanced Tissue Engineering and Regenerative Medicine	7.5	1
MEC1054	Advanced FEA	7.5	2
MEC1056	Computational Thermo-Fluid Dynamics	7.5	2
MEC1057	Research Practice & Methodology	7.5	2
MEC1063	Project (Masters)	30	2&3

Optional Modules

Module Code	Module Title	Module Credits	Semester
EEN1079	Energy System Decarbonisation	7.5	1
MEC1039	Finite Element Analysis	7.5	1
MEC1040	Heat and Mass Transfer	7.5	1
MEC1052	Biomechanics of Tissue Engineering	7.5	1
MEC1078	Engineering Management and Engineering Economic Analysis	7.5	1
MEC1071	Manufacturing Systems Simulation	7.5	1
MEC1058	Energy Auditing and Energy Management	7.5	1
MEC1084	Surface Engineering & Tribology	7.5	1
EEN1068	Entrepreneurship for Engineers	7.5	2
MEC1068	Global Sustainable Development Challenges (NEW)	7.5	2
MEC1069	Manufacturing Process Analysis & Tool Design	7.5	2
MEC1059	Advanced Sustainable Energy Systems	7.5	2

MEC1060	Whole Life Cycle Analysis	7.5	2
MEC1061	Turbomachinery	7.5	2

No Major - General Masters

Must select All 2 Core modules and additional 7 optional modules (total 9 modules)

MEC1039& MEC1040 must be chosen if not taken before as are prerequisites for semester 2 modules.

Core Modules

Module Code	Module Title	Module Credits	Semester
MEC1057	Research Practice & Methodology	7.5	2
MEC1063	Project (Masters)	30	2&3

Optional Modules

Module Code	Module Title	Module Credits	Semester
MEC1081	Design for Medical Innovation	7.5	1&2
EEN1079	Energy System Decarbonisation	7.5	1
MEC1039	Finite Element Analysis	7.5	1
MEC1040	Heat and Mass Transfer	7.5	1
MEC1052	Biomechanics of Tissue Engineering	7.5	1
MEC1078	Engineering Management and Engineering Economic Analysis	7.5	1
MEC1071	Manufacturing Systems Simulation	7.5	1
MEC1058	Energy Auditing and Energy Management	7.5	1
MEC1084	Surface Engineering & Tribology	7.5	1
EEN1068	Entrepreneurship for Engineers	7.5	2
MEC1068	Global Sustainable Development Challenges (NEW)	7.5	2
MEC1054	Advanced FEA	7.5	2
MEC1056	Computational Thermo-Fluid Dynamics	7.5	2

MEC1069	Manufacturing Process Analysis & Tool Design	7.5	2
MEC1059	Advanced Sustainable Energy Systems	7.5	2
MEC1060	Whole Life Cycle Analysis	7.5	2
MEC1061	Turbomachinery	7.5	2