

# **Mechanical Engineering**

# **September 2021** (for students who entered first year in September 2020)

Year 2	
Term A	
NMM 2270A	Applied Mathematics for Engineering II (Formerly AM 2270A)
<b>MME 2202A</b>	Mechanics of Materials
MME 2204A	Thermodynamics I
MME 2259A	Product Design and Development
MME 2260A	Industrial Materials
Writ 2130F	Building Better (Communication) Bridges: Rhetoric &
	Professional Communication for Engineers
Term B	
NMM 2276B	Applied Mathematics for Elec. & Mech. Engineering III

(Formerly AM 2276B)

**MME 2200S Engineering Shop Safety Training** 

MMF 2213B **Engineering Dynamics** 

Computational Methods in Mechanical Engineering MME 2221B Introduction to Fluid Mechanics and Heat Transfer MME 2273B

MME 2285B **Engineering Experimentation** 

SS 2143B Applied Statistics and Data Analysis for Engineers

#### Year 3

# Term A

MME 3325A Mechanical Vibrations MME 3303A Fluid Mechanics II MME 3379A **Materials Selection** 

Kinematics and Dynamics of Machines MME 3381A

ECE 3374A Introduction to Electronics for Mechanical Engineering

## Term B

MME 3307B Heat Transfer II MME 3334B Thermodynamics

MME 3350B System Modelling and Control

Finite Element Methods in Mechanical Engineering MME 3360B

MME 3380B Mechanical Components of Design

# Year 4

#### Term A

MME 4499 Mechanical Engineering Design Project

ELI 4110F Engineering Ethics, Sustainable Development & the

Law

One 0.5-credit non-technical elective taken from the approved list

Two 0.5-credit technical electives

## Term B

Mechanical Engineering Design Project

Two 0.5-credit non-technical electives taken from the approved list

Three 0.5-credit technical electives

### **NOTES:**

#### Non-technical electives:

Please choose 1.0 credits (one 1.0-credit or two 0.5-credit courses) from the 1000 level and one 0.5-credit course from the 2000 (or higher) level.

#### **Technical electives:**

Students may elect to substitute technical electives from other engineering disciplines or from the Faculty of Science, provided they have the required prerequisites, and provided at least half of their technical electives be from the list below. A maximum of two 0.5-credit courses may be taken from the Faculty of Science and used towards the BESc degree. All courses outside the MME technical elective list must be approved by the MME Department.

#### **Technical Electives**

Some technical electives may not be offered in a given academic year. Consult the Department for accurate listing.

MME 4410	Mechanical and Materials Engineering Thesis
MME 4423A/B	Internal Combustion Engines
MME 4424A/B	Mechanical Properties of Materials
MME 4425A/B	Mechanical Vibrations
MME 4427A/B	Selected Topics in Mechanical Engineering I
MME 4428A/B	Selected Topics in Mechanical Engineering IV
MME 4429A/B	Nuclear Engineering
MME 4435A/B	Pressure Vessel Design
MME 4437A/B	Advanced CAE: Simulation
MME 4446A/B	Composite Materials
MME 4450A/B	Control Systems: Theory and Practice
MME 4452A/B	Robotics and Manufacturing Automation
MME 4453A/B	Corrosion and Wear
MME 4459A/B	Advanced CAE: Manufacturing Technologies
MME 4460A/B	HVAC II
MME 4469A/B	Biomechanics of the Musculoskeletal
	System
MME 4470A/B	Medical and Assistive Devices
MME 4473A/B	Computer Integrated Manufacturing (CIM)
MME 4474A/B	Selected Topics in Mechanical Engineering I
MME 4475A/B	Selected Topics in Mechanical Engineering I
MME 4480A/B	Advanced CAE: Reverse Engineering
MME 4482A/B	Fundamentals of MEMS
MME 4483A/B	HVACI
MME 4485A/B	Fluid Machinery
MME 4487A/B	Mechatronic System Design
MME 4490A/B	Engineering in a Global Context: Advanced
	Manufacturing *Course with an
	International Component: see MME office
	for details
MME 4492A/B	Production Management for Engineers