

## Mechanical Engineering

September 2019 (for students who entered first year in September 2016 or 2017)

<p><b>Year 2</b></p> <p><b>Term A</b></p> <p>AM 2270A Applied Mathematics for Engineering II  MME 2202A Mechanics of Materials  MME 2204A Thermodynamics I  MME 2259A Product Design and Development  MME 2260A Industrial Materials  MME 2200Q Engineering Shop Safety Training  Writ 2130F Building Better (Communication) Bridges: Rhetoric &amp; Professional Communication for Engineers</p> <p><b>Term B</b></p> <p>AM 2276B Applied Mathematics for Elec. &amp; Mech. Engineering III  MME 2213B Engineering Dynamics  MME 2273B Introduction to Fluid Mechanics and Heat Transfer  MME 2285B Engineering Experimentation  SS 2143B Applied Statistics and Data Analysis for Engineers  ECE 2274B Electric Circuits and Electromechanics</p> <p><b>Year 3</b></p> <p><b>Term A</b></p> <p>AM 3413A Applied Mathematics  MME 3303A Fluid Mechanics II  MME 3379A Materials Selection  MME 3381A Kinematics and Dynamics of Machines  ECE 3374A Introduction to Electronics for Mechanical Engineering</p> <p><b>Term B</b></p> <p>MME 3307B Heat Transfer II  MME 3334B Thermodynamics  MME 3350B System Modelling and Control  MME 3360B Finite Element Methods in Mechanical Engineering  MME 3380B Mechanical Components of Design</p> <p><b>Year 4</b></p> <p><b>Term A</b></p> <p>MME 4499 Mechanical Engineering Design Project  ES 4498F Engineering Ethics, Sustainable Development &amp; the Law</p> <p>One 0.5-credit non-technical elective taken from the approved list  Two 0.5-credit technical electives</p> <p><b>Term B</b></p> <p>MME 4499 Mechanical Engineering Design Project  Two 0.5-credit non-technical electives taken from the approved list  Three 0.5-credit technical electives</p>	<p><b>NOTES:</b></p> <p><b>Non-technical electives:</b>  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.</p> <p><b>Technical electives:</b>  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 <i>must</i> be approved by the MME Department.</p> <p><b>Technical Electives</b>  Some technical electives may not be offered in a given academic year. Consult the Department for accurate listing.</p> <table border="1"> <tr><td>MME 4410</td><td>Mechanical and Materials Engineering Thesis</td></tr> <tr><td>MME 4423A/B</td><td>Internal Combustion Engines</td></tr> <tr><td>MME 4424A/B</td><td>Mechanical Properties of Materials</td></tr> <tr><td>MME 4425A/B</td><td>Mechanical Vibrations</td></tr> <tr><td>MME 4427A/B</td><td>Selected Topics in Mechanical Engineering III</td></tr> <tr><td>MME 4428A/B</td><td>Selected Topics in Mechanical Engineering IV</td></tr> <tr><td>MME 4429A/B</td><td>Nuclear Engineering</td></tr> <tr><td>MME 4435A/B</td><td>Pressure Vessel Design</td></tr> <tr><td>MME 4437A/B</td><td>Advanced CAE: Simulation</td></tr> <tr><td>MME 4446A/B</td><td>Composite Materials</td></tr> <tr><td>MME 4450A/B</td><td>Control Systems: Theory and Practice</td></tr> <tr><td>MME 4452A/B</td><td>Robotics and Manufacturing Automation</td></tr> <tr><td>MME 4453A/B</td><td>Corrosion and Wear</td></tr> <tr><td>MME 4459A/B</td><td>Advanced CAE: Manufacturing Technologies</td></tr> <tr><td>MME 4460A/B</td><td>HVAC II</td></tr> <tr><td>MME 4469A/B</td><td>Biomechanics of the Musculoskeletal System</td></tr> <tr><td>MME 4470A/B</td><td>Medical and Assistive Devices</td></tr> <tr><td>MME 4473A/B</td><td>Advanced CAE: Simulation</td></tr> <tr><td>MME 4474A/B</td><td>Selected Topics in Mechanical Engineering I</td></tr> <tr><td>MME 4475A/B</td><td>Selected Topics in Mechanical Engineering II</td></tr> <tr><td>MME 4480A/B</td><td>Advanced CAE: Reverse Engineering</td></tr> <tr><td>MME 4482A/B</td><td>Fundamentals of MEMS</td></tr> <tr><td>MME 4483A/B</td><td>HVAC I</td></tr> <tr><td>MME 4485A/B</td><td>Fluid Machinery</td></tr> <tr><td>MME 4487A/B</td><td>Mechatronic System Design</td></tr> <tr><td>MME 4490A/B</td><td>Engineering in a Global Context: Advanced Manufacturing <i>*Course with an International Component: see MME office for details</i></td></tr> <tr><td>MME 4492A/B</td><td>Production Management for Engineers</td></tr> </table>	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 III	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	Advanced CAE: Simulation	MME 4474A/B	Selected Topics in Mechanical Engineering I	MME 4475A/B	Selected Topics in Mechanical Engineering II	MME 4480A/B	Advanced CAE: Reverse Engineering	MME 4482A/B	Fundamentals of MEMS	MME 4483A/B	HVAC I	MME 4485A/B	Fluid Machinery	MME 4487A/B	Mechatronic System Design	MME 4490A/B	Engineering in a Global Context: Advanced Manufacturing <i>*Course with an International Component: see MME office for details</i>	MME 4492A/B	Production Management for Engineers
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