

Mechanical Engineering and Artificial Intelligence Systems Engineering (Option H)

September 2026 (for students who started first year in 2025 or later)

<p>Year 2</p> <p>Term A</p> <p>NMM 2270a Applied Mathematics for Engineering II AISE 2205a Algorithms and Data Structures MME 2202a Mechanics of Materials MME 2204a Thermodynamics I MME 2260a Industrial Materials MME 2259a Product Design and Development</p> <p>Term B</p> <p>NMM 2276b Applied Mathematics for Elec & Mech Eng III AISE 2251b Software Design for Systems Engineering MME 2285b Engineering Experimentation MME 2273b Intro. to Fluid Mechanics and Heat Transfer MME 2200s Advanced Machine and Safety Training SS 2143b App Stats & Data Analysis</p> <p>Year 3</p> <p>Term A</p> <p>DS 3000a Intro to Machine Learning AISE 3309a Database Systems AISE 3350a Cyber-Physical Systems Theory MME 3348a Manufacturing Processes MME 3374a Electrical Engineering for MME One 0.5 non-technical elective (can be in term A or B)</p> <p>Term B</p> <p>AISE 3010b Data Engineering and Machine Learning AISE 3351b Digital Systems and Signal Processing MME 2213b Engineering Dynamics MME 2221b Computational Methods for Mechanical Engineers Writing 2130g Building Better (Communication) Bridges: Rhetoric & Professional Communication for Engineers</p> <p>Year 4</p> <p>Term A</p> <p>AISE 4010a Deep Learning for Time Series Data AISE 4430a Introduction to Computer Networking, Security & IOT Systems MME 3325a Mechanical Vibrations MME 3381a Kinematics and Dynamics of Machines MME 3303a Fluid Mechanics II One 0.5 credit AISE technical electives (can be in term A or B)</p> <p>Term B</p> <p>AISE 4020b Artificial Intelligence Systems Engineering Design I MME 3334b Thermodynamics II MME 3350b System Modelling and Control MME 3307b Heat Transfer II MME 3360b FEA in Mechanical Engineering MME 3380b Mechanical Components Design</p>	<p>NOTES:</p> <p>Important: Students are responsible for ensuring they have the correct courses required for their degree. If you are unsure which courses you still need or if you see courses listed on the progression sheet that are no longer offered or are not offered in the term you see listed here, please contact your Academic Counsellor.</p> <p>*Non-technical Electives: Please choose a maximum of 1.0 credits (one 1.0 credit course or two 0.5 credit courses) from the 1000 level and a minimum of one 0.5 credit from the 2000 (or higher) level.</p> <p>http://www.eng.uwo.ca/undergraduate/upper-year/electives.html</p> <p>Technical Electives: ** AISE technical electives - refer to a list of AI-based technical courses approved by the AISE program committee. The list consists of AI-based courses offered by the Faculty of Engineering and Faculty of Science at Western. The list will be updated every year.</p> <p>Some technical electives may not be offered in a given academic year. Consult the Department for accurate listing.</p> <p>MME Technical Electives</p> <table border="1"> <tr><td>MME 3379A</td><td>Materials Selection</td></tr> <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 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 4437A/B</td><td>Advanced CAE: Simulation</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 4474A/B</td><td>Selected Topics in MME: Comp. 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<p>Year 5</p> <p>Term A</p> <p>MME 4499 Mechanical Engineering Design Project AISE 4450a Data Driven Control of Cyber-Physical Systems AISE 3020a AI: Ethics, Bias and Privacy ELI 4110f Engineering Ethics, Sustainable Development & the Law</p> <p>One 0.5 credit from the approved list of MME TEs One 0.5 credit from the approved list of NTEs</p> <p>Term B</p> <p>MME 4499 Mechanical Engineering Design Project Two 0.5 credit from the approved list of MME TEs One 0.5 credit from the approved list of NTEs One 0.5 credit AISE technical electives (can be in term A or B)</p>	<p>AISE Technical Electives</p> <table border="1"> <tr> <td>ECE4445A/B</td> <td>Introduction to Digital Image Processing</td> </tr> <tr> <td>ECE 4438A/B</td> <td>Advanced Image Processing and Analysis</td> </tr> <tr> <td>SE 4455A/B</td> <td>Cloud Computing</td> </tr> <tr> <td>CS3340A/B</td> <td>Analysis Of Algorithms I</td> </tr> <tr> <td>CS 4417A/B</td> <td>Unstructured Data</td> </tr> <tr> <td>SS 4861A/B</td> <td>Time Series</td> </tr> </table>	ECE4445A/B	Introduction to Digital Image Processing	ECE 4438A/B	Advanced Image Processing and Analysis	SE 4455A/B	Cloud Computing	CS3340A/B	Analysis Of Algorithms I	CS 4417A/B	Unstructured Data	SS 4861A/B	Time Series
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