LASSONDE SCHOOL OF ENGINEERING | YORK UNIVERSITÉ UNIVERSITY

BACHELOR OF ENGINEERING
MECHANICAL ENGINEERING

Year	Term	Course number	Course name	Pre-Requisite / Co-Requisite
1	F	EECS 1011	Computational Thinking Through Mechatronics	
1	F	ENG 1101	Renaissance Engineering 1: Ethics, Communication & Problem Solving	
1	F	MATH 1013	Applied Calculus I	
1	F	MATH 1025	Applied Linear Algebra	
1	F	PHYS 1800	Engineering Mechanics	MATH 1013
1	W	CHEM 1100	Chemistry and Materials Science for Engineers	
1	W	EECS 1021	Object Oriented Programming from Sensors to Actuators	EECS 1011
1	W	ENG 1102	Renaissance Engineering 2: Engineering Design Principles	ENG 1101
1	W	ESSE 1012	The Earth Environment	ENG 1101, ENG 1102, PHYS 1801
1	W	MATH 1014	Applied Calculus II	MATH 1013
1	W	PHYS 1801	Electricity, Magnetism & Optics for Engineers	PHYS 1800, MATH 1014
2	F	ENG 2001	Engineering Projects: Management, Economics & Safety	ENG 1101
2	F	MECH 2112	Mechanical Engineering: Professionalism & Society	ENG 1102
2	F	MECH 2201	Thermodynamics	PHYS 1800, CHEM 1100
2	F	MECH 2202	Heat and Flow Engineering Principles	MATH 1013, PHYS 1800, MATH 1014
2	F	MECH 2301	Mechanics of Materials 1	MATH 1013, PHYS 1800, MATH 1014
2	F	MECH 2401	Engineering Graphics & CAD Modeling	ENG 1102
2	W	MATH 2015	Applied Multivariate and Vector Calculus	MATH 1014
2	W	MATH 2930	Introduction to Probability and Statistics	EECS 1011, MATH 1025, MATH 1014
2	W	MECH 2302	Dynamics	MATH 1013, PHYS 1800, MATH 1014
2	W	MECH 2409	Machine Elements Design	ENG 1102, MECH 2301
2	W	MECH 2412	Mini-Design Project 1	ENG 1102, MECH 2401
2	W	MECH 2502	Instrumentation and Measurement Techniques	MATH 1013, MATH 1025, EECS 1021, MATH 1014
3	F	ENVS 2150	Environment, Technology and Sustainable Society I	
3	F	MATH 2271	Differential Equations for Scientists and Engineers	MATH 1025, MATH 2015
3	F	MECH 3201	Engineering Thermodynamics	MECH 2201
3	F	MECH 3202	Fluid Dynamics	MECH 2202
3	F	MECH 3502	Solid Mechanics and Materials Laboratory	CHEM 1100, MECH 2301
3	F	EECS 3505	Electrical Systems for Mechanical Engineers	PHYS 1801, MECH 2502
3	F		Complementary Elective 1 (3 CREDITS)	
3	W	ENG 2003	Effective Engineering Communication	ENG 1101
3	W	MECH 3203	Heat and Mass Transfer	MECH 3202
3	W	MECH 3302	Mechanisms for Mechanical Systems	MECH 2302
3	W	MECH 3401	Mini Design Project 2	MECH 2201, MECH 2412, MECH 2502, MECH 3202
3	W	MECH 3503	Macro- and Micro-Manufacturing Methods	MECH 2412
3	W	MECH 3504	Thermofluid Laboratory	MECH 2201, MECH 2202, MECH 2502
4	F	ENG 3000	Professional Engineering Practice	ENG 1101, ENG 1102, ENG 2001
4	Y	ENG 4000	Engineering Project	ENG 3000
4	F	ENG 4550	Introduction to Control Systems	
4	F	MECH 4402	Simulation Tools for Design & Analysis	EECS 1011, MECH 2301, MECH 2015, MECH 3203
4	F	MECH 4502	Vibrations and Actuators	MECH 2015, MECH 3503, MECH 3504, ENG 4550
4	F		Complementary Elective 2 (3 CREDITS)	
4	F		Complementary Elective 3 (3 CREDITS)	
4	W	MECH 4201	Transport Phenomenon	MECH 2015, MECH 3302
4	W	MECH 4401	System Level Engineering	MECH 2301, ENVS 2150, MECH 3401, MECH 4504
4	W	MECH 4504	Life Cycle Analysis and Sustainability	ENVS 2150, MECH 4510
4	W	MECH 4510	Advanced Mechanical Technology	MECH 2202, MECH 2015, EECS 3505
4	W		Complementary Elective 4 (3 CREDITS)	

Year 1 Courses
Year 2 Courses
Year 3 Courses
Year 4 Courses

Co-requisites
Pre-requisites

Note: TIf there is any concern, please contact the undregraduate program assistant at mech_upa@lassonde.yorku.ca.
(Last updated on Feb 22, 2017)