

(Starting Sept. 2010) MECHANICAL ENGINEERING PROGRAM – 163 ch min. path (rev. May 11, 2010) (UPEI/Acadia)

CONTENT CLASSIFICATION	1 Sep '10	2 Jan '11	3 Sep '11	4 Jan '12	5 Sep '12	6 Jan '13	7 Sep '13	8 Jan '14
Mathematics, Statistics and Numerical Methods	MATH 1003 (4C)3 Introduction to Calculus I	MATH 1013 (4C)3 Introduction to Calculus II	MATH 2513 (4C)4 Calculus for Engineers	MATH 3503(3C,1T)3 Differential Eqns for Engineers				
	MATH 1503 (3C)3 Linear Alg & Matlab			STAT 2593 (3C)3 Probability & Statist	CS 3113 / CE 3933 / CHE 3418 (3C)3 Numerical. Methods			
Computer Programming, Chemistry, Physics and Electrical Engineering	CS 1003 (3C,1T)3 Intro to Comp Prog	EE 1813 (3C,1T)3 Electricity & Magnet	EE 2701 (3C,1T)3 Electric Circuits & Electronics					EE 2683 (3C,1T)3 Electric Circuits & Machines
	PHYS 1081 (3C)3 Intr. Physics for Eng.	CHEM 1982(3C,1T)3 General Chemistry						
Applied Mechanics		ENGG 1082 (3C)3 Mechanics for Engineers	ME 2111 (3C,1T)3 Mechanics of Mat. I	ME 2122 (3C,2L*)3 Mechanics of Mat. II	ME 3613 (3C)3 System Dynamics	ME 3623 (3C)3 Autom. Controls I		ME 4613 (3C)3 Mechanical Vibration
			ME 2003 (3C)1T)3 Dynamics for Engg.	ME 2143 (3C,2L*)3 Kinematics & Dyn.				
Thermodynamics and Heat Transfer				ME 3413 (3C,1T)3 Thermodynamics		ME 3433 / CHE 3304 (3C,1T)3 Heat Transf	ME 4421 (2C,1T)2 Applied Thermo	
Fluid Mechanics					ME 3511 (3C)3 Fluid Mechanics	ME 3522 (2C,1T)2 Applied Fluid Mech		
Materials & Manufacturing			CHE 2501 (3C)3 Materials Science		ME 2222 (3C)3 Manufacturing Eng I		ME 4283 (3C)3 Manufact. Eng. II	
Laboratories (mostly part of courses)	Intr. Physics for Eng. Lab (3L) 1	CAD Lab (3L)2	CHE 2506* (3L*) 1 Material Science Lab	ME 3415* (3L*)1 Thermo. Lab	ME 3515* (3L*)1 Fluid Mechanics Lab	ME 3435* (3L*)1 Heat Transfer Lab	Manuf. II Lab (3L*)1	Electric Machines Lab (3L*)1
	Programming Lab (2L) 1	Electricity and Mag. Laboratory (3L*)1	Electric Circuits Laboratory (3L*)1		Sys Dynamics Lab (3L*)1	Auto Controls Lab (3L*)1		Vibration Lab (3L*)1
	Design & Prob. Solv. Lab (2L)1	CHEM 1987* (3L)2 Chemistry Lab	Dynamics Laboratory (2L)1		Manuf. I Lab (2L)1			
	Tech. Commun. Lab (3L)1	Mechanics I Laboratory (2L)1						
Design and Synthesis	ENGG 1015 (1C)1 Intro. Design & Problem Solving				ME 3341 (3C,2T*)3 Machine Design	ME 3352 (3C,2L)4 Design Optimization	ME 4424* (1C,2L)2 Thermal Systems Design	
Design Projects		ME 1312 (2C)2 Comp Aided Design		ME 2145* (2L*)1 Kin Dyn Design Proj.		ME 3524* (1C,1L)2 Fluid Systems & Design	ME 4860 (1C,4L)3 Senior Design Project	ME 4860 (1C,4L)3 Senior Design Project
				ME 2125* (2L*)1 Mech. of Materials Design Project	ME 3345* (4L*)2 Machine Design Proj			
Complementary Studies (Humanities, Social Sciences, Administrative Studies)	ENGG 1001 (1C)0 Eng. Practice Lec.			One Compl. Studies Elective (3C)3		ECON 1073 (3C)3 Econ. for Eng.	One Compl. Studies Elective (3C)3	ENGG 4013 (3C)3 Law and Ethics
	ENGG 1003 (2C)3 Tech. Commun.					One Compl. Studies Elective (3C)3		ME 3232 / CE 3963 (3C)3 Eng. Economics
Technical Electives							Two Tech Electives (7 or 8 ch)	One Tech Elective (3 or 4 ch)
Credit Hours	20 (17C, 1T, 8L)	20 (15C, 2T, 8L)	19 (16C, 2T, 4L)	22 (18C, 1T, 8L)	20 (15C, 2T, 7L)	21 (18C, 2T, 4L)	21 (17C, 1T, 8L)	20 (17C, 1T, 7L)

*Laboratory or project course co-requisite with a lecture course.

L* - labs on alternate weeks

NOTES: (1) Students must take at least 10 ch of technical electives, including at least 7 ch of ME technical electives.

(2) Students must take at least 9 ch of complementary studies electives; one of which has to be either HIST3925 or SOC12534 at least 3 ch must be "humanities" – see regulations for definition.

(3) All courses must be passed with a grade of at least a C.

(4) Some courses are available online and may be taken May-August: e.g. ECON 1073, CE 3963, CHE 3418; CSEs: TME 3013; TEs: TME 3213, TME 3313 (TME courses require 80 ch completed)