

(Transferring Sept. 2016) MECHANICAL ENGINEERING PROGRAM FOR UPEI Transfer Students – 163 ch min. path (rev. Feb. 13, 2015)

CONTENT CLASSIFICATION	1 (Sep '11)	2 (Jan '12)	3 (Sep '12)	4 (Jan '13)	5 (Sep '13)	6 (Jan '14)	7 (Sep '14)	8 (Jan '15)
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 Algebra			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	ECE 1813 (3C,1T)3 Electricity & Magnet	ECE 2701 (3C,1T)3 Electric Circuits & Electronics					ECE 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 3613 (3C)3 System Dynamics	ME 2122 (3C,2L*)3 Mechanics of Mat. II		ME 4613 (3C)3 Mechanical Vibration
			ME 2003 (3C,1T)3 Dynamics for Engg.	ME 2143 (3C,2L*)3 Kinematics & Dyn.		ME 3623 (3C)3 Autom. Controls I		
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 3435* (3L*)1 Heat Transfer Lab	Manuf. II 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			Electric Machines Lab (3L*)1
	Tech. Commun. Lab (3L)1	Mechanics I Laboratory (2L)1	ME 3515* (3L*)1 Fluid Mechanics Lab					
Design and Synthesis	ENGG 1015 (1C)1 Intro. Design & Problem Solving				ME 3341 (3C,2T*)3 Machine Design	ME 2352 (3C,2L)4 Design Optimization	ME 4424* (1C,2L)2 Sustainable Energy 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 Syst. & Design	ME 4860(1C,2T,4L)4 Senior Design Project	ME 4860 (1C,2T,4L)4 Senior Design Project
					ME 3345* (4L*)2 Machine Design Proj	ME 2125* (2L*)1 Mech. of Materials Design Project		
Complementary Studies (Humanities, Social Sciences, Administrative Studies)	ENGG 1001 (1C)0 Eng. Practice Lec.							ENGG 4013** (3C)3 Law and Ethics
	ENGG 1003 (2C)3 Tech. Commun.			One Compl. Studies Elective (3C)3	One Compl. Studies Elective (3C)3		ME 4861 (1C)1 Mechanical Health and Safety	ME 3232 / CE 3963** (3C)3 Eng. Economics One Compl. Studies Elective (3C)3
Technical Electives							Two Tech Electives (7 or 8 ch)	One Tech Elective (3 or 4 ch)
Credit Hours					19 (15C, 1T, 6L)	20 (15C, 2T, 8L)	19 (15C, 1T, 8L)	23 (19C, 1T, 7L)

- NOTES: (1) Courses with GREEN BACKGROUND are the courses taken at UPEI. **Full credit given only when UPEI block transfer is obtained and UNB-ME discipline-specific electives are taken at UPEI.**
 (2) Courses with ORANGE BACKGROUND are the courses in different year as compared to students doing years 1 and 2 at UNB.
 (3) Students must take at least 10 ch of technical electives. At least 7 ch must be from the list of ME technical electives.
 (4) Students must take at least 6 ch of complementary studies electives at UNB; one course has to be either HIST3925, SOCI2534 or eq. At least 3 ch must be "humanities" – see regulations for definition.
 (5) All courses must be passed with a grade of at least C.
 (6) Some courses are available online and may be taken May-August: e.g. ECON 1073, CE 3963, CHE 3418; CSE: TME 3013 (TME courses require 80 ch completed)