

**Mechanical Engineering Program
University of Saskatchewan**

June 18, 2008

Second Year (36 credit units)

<i>Term 1</i>	CMPT	116.3	Computers I
	EE	201.3	Electric and Magnetic Circuits
	GE	213.3	Mechanics of Materials
	ME	214.3	Introduction to Materials and Manufacturing
	ME	227.3	Thermodynamics I
	MATH	223.3	Intermediate Calculus
<i>Term 2</i>	GE	226.3	Mechanics III
	RCM	300.3	Effective Professional Communication
	ME	215.3	Fluid Mechanics I
	ME	229.3	Introduction to Engineering Design
	ME	251.3	Engineering Analysis I
	MATH	224.3	Differential Equations

Notes:

- (1) Only required if you entered the College in September 2006 (or more recently). Choose from the following list. You must take a *different* class than you took for your first-year Natural Science Elective.

ASTR	213.3	Astronomical Photometry	EVSC	210.3	Environmental Physics
ASTR	214.3	Astronomical Spectroscopy	EVSC	303.3	Sampling & Laboratory Analysis
BIOL	120.3	The Nature of Life	GEOG	120.3	Introduction to Global Environmental Systems
BIOL	121.3	The Diversity of Life	GEOL	121.3	Earth Processes
CHEM	115.3	General Chemistry II	GEOL	224.3	Mineralogy
CHEM	221.3	Analytical Chemistry I	GEOL	245.3	Introduction to Sedimentary Rocks
CHEM	231.3	Inorganic Chemistry I	GEOL	258.3	Structural Geology
CHEM	242.3	Physical Chemistry I	PHYS	128.3	Contemporary Physics
CHEM	250.3	Organic Chemistry	PHYS	251.3	Relativistic Mechanics & Quantum Physics

Third Year (42 credit units)

<i>Term 1</i>	ME	313.3	Mechanics of Materials I
	ME	316.3	Dynamics and Vibrations
	ME	318.3	Mechanical Engineering Laboratory I
	ME	321.3	Engineering Analysis II
	ME	324.3	Engineering Materials
	ME	327.3	Heat Transfer
<i>Term 2</i>	ME	314.3	Machine Design I
	ME	323.3	Mechanics of Materials II
	ME	328.3	Mechanical Engineering Laboratory II
	ME	330.3	Manufacturing Processes
	ME	335.3	Fluid Mechanics II
	ME	352.3	Engineering Analysis III

<i>Either Term</i>	GE	348.3	Engineering Economics
			Natural Science Elective ¹ (3 credit units)
			Humanities or Social Science Elective ² (3 credit units)

Fourth Year (39 credit units)

<i>Term 1</i>	ME	417.3	Thermodynamics II
	ME	418.3	Mechanical Engineering Laboratory III
	ME	431.3	Control Systems
	ME	450.3	Finite Element Analysis

<i>Term 2</i>	GE	449.3	Engineering in Society
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<i>Term 1 & 2</i>	ME	495.6	Industrial Design Project
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<i>Term 1 or 2</i>	Design Elective ^{3,4}	(3 credit units)
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	Technical Elective ^{4,5}	(3 credit units)
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	Senior Humanities or Social Science Elective ⁶	(3 credit units)
	Complementary Studies Elective ⁷	(3 credit units)

- (2) Students entering the College prior to September 2006 need to take this elective. Students entering the College in September 2006 (or more recently) take this elective in first year.

- (3) Design electives MUST be chosen from the following list.
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| ME | 490.3 | Design of Fluid Power Circuits |
| ME | 491.3 | Thermal Systems Design |
| ME | 492.3 | Materials in Engineering Design |
| ME | 493.3 | Machine Design II |

- (4) All students must take a minimum of two Design Electives.

- (5) Technical electives can come from the following list or any 200, 300, or 400 level class from the Department of Computer Science or another branch of Science or Engineering (upon approval of the Department of Mechanical Engineering).

ME	460.3	Automation and Robotics in Manufacturing	ME	478.3	Introduction to Fire Protection Engineering
ME	463.3	Advanced Structural Analysis	ME	490.3	Design of Fluid Power Circuits
ME	471.3	Introduction to Aerodynamics	ME	491.3	Thermal Systems Design
ME	472.3	Advanced Control Systems	ME	492.3	Materials in Engineering Design
ME	473.3	Introduction to Computational Fluid Dynamics	ME	493.3	Machine Design II
ME	475.3	Introduction to Mechatronics	GEOE	466.3	Petroleum Geomechanics
ME	476.3	Multiphase Flow and Heat Transfer	CHE	464.3	Petroleum Production Engineering
ME	477.3	Advanced Engineering Materials	ABE	313.3	Instrumentation

- (6) A Senior Humanities or Social Science Elective is a 200 level (or higher) course from the list maintained by the College at http://www.engr.usask.ca/index.php?cmd=tree_nodeID545

- (7) This elective can be a Humanities, Social Science, or Business Science class. See the list on page 4 of the Transfer Credit Guide (<http://www.engr.usask.ca/TransferCreditGuide>)