

Sample Course Schedule

Mechanical Engineering with Co-op

revised 7-11-08

		Total ch	Equivalent courses		
			* Tri-C	* Lakeland	* Lorain
Year 1 Fall	ESC 120 Into to Engineering Design	2			
	CHM 261/266 lab	5	CHEM 1300/130L	CHEM 1500	CHMY 171
	MTH 181 Calculus I	4	MATH 1610	MATH 2500	MTHM 181
	ENG 101 English I	4	ENG 1010	ENGL 1110 or 1111	ENGL 161
	ASC 101 Orientation	1			
	<hr/>	16			
Spring	PHY 241 University Physics I	5	PHYS 2310	PHYS 2410	PHYC 251
	ESC 152 C programming with Matlab	3			
	ESC 102 Tech. Writing & Prof. Commun.	3	ENG 1020 or 2151	ENGL 1120 or 1121	ENGL 162
	ESC 270 Materials Science	3			
	ESC 121 Career Orientation Optional (required for co-op)	1			
	MTH 182 Calculus II	4	MATH 1620	MATH 2600	MTHM 182
	<hr/>	19			
		35			
Summer	Work or School				
Year 2					
Fall	MTH 283 Multivariable Calculus	2	MATH 2310	MATH 2700	MTHM 281
	ESC 250 Differential Equations for Engineers	3	MATH 2520	MATH 2850	MTHM 283
	PHY 242 University Physics II	5	PHYS 2320	PHYS 2420	PHYC 252
	ESC 201 Statics	3			
	IME 250/251L Material Processing, Lab	4	ITMP 2670	CIMN 1110 and 1210	
	<hr/>	17			
		52			
Spring	ESC 350 Linear Algebra & Numerical Methods in Engineering	3			
	MCE 255 Computer-Aided Engineering	4			
	ESC 202 Dynamics	3			
	ESC 211 Strength of Materials	3			
	ESC 315 Electrical Engineering Concepts	3			
	<hr/>	16			
		68			
Summer	Co-op:				
	ESC 300	1			
	<hr/>	1			
		69			
Year 3					
Fall	MCE 305 Kinematics & Dyn. of Machinery	4			
	ESC 301 Fluid Mechanics	3			
	ESC 321 Thermodynamics I	3			
	MCE 371 Vibrations	4			
	ESC 310 Engineering Statistics & Probability	3			
	<hr/>	17			
		85			
Spring	Co-op:				
	ESC 300	1			
	<hr/>	1			
		86			
Summer	Gen Ed Elective	3			
	Gen Ed Elective	3			
	<hr/>	6			
		92			
Year 4					
Fall	Co-op:				
	ESC 300	1			
	<hr/>	1			
		93			
Spring	MCE 324 Introduction to Heat Transfer	4			
	MCE 367 Machine Design I	4			
	MCE 380 Instrumentation/Measurements lab	3			
	MCE 421 Applied Thermodynamics	4			
	<hr/>	15			
		108			
Summer	Co-op:				
	ESC 300	1			
	<hr/>	1			
		109			
Year 5					
Fall	MCE 450 Design Project I (writing)	2			
	ESC 282 Engineering Economy	3			
	PHL 215 Engineering Ethics (writing)	3			
	MCE 441 Intro. To Linear Control Systems	4			
	MCE Lab Elective	3			
	<hr/>	15			
		123			
Spring	MCE 451 Design Project II (writing)	2			
	MCE Elective	4			
	MCE Elective	4			
	Gen Ed Elective	3			
	Gen Ed Elective	3			
	<hr/>	16			
		139			

*All equivalent community college course work must be completed before transferring to CSU. Talk to your advisor for further details.