UNIVERSIDAD DEL NORTE
B.S. in MECHANICAL ENGINEERING - Requisites Study Plan - Catalog

Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8	Semester 9	Semester 10
Calculus I MAT 1101 | 4 | 2 | 5	**Calculus II** MAT1111 | 4 | 0 | 4 11 Calculus I	**Calculus III** MAT1121 | 4 | 0 | 4 21 Linear Algebra 12 Calculus II		**Comp Sol of Engineering Problems** IST 4360 | 2 | 2 | 3 52 Algorithms and Prog. I 23 Differential Equations					
Linear Algebra MAT 1031 | 3 | 0 | 3		**Differential Equations** MAT4011 | 3 | 0 | 3 12 Calculus II	**Career Seminar I** IME 4240 | 0 | 2 | 0		**Fundamentals of Engineering Economics** IIN 1226 | 3 | 0 | 3		**Life-Science Elective** ELG 1150 | 2 | 2 | 3	**Complementary Elective I** ELP4030 | 3 | 0 | 3	**Complementary Elective II** ELP8090 | 3 | 0 | 3
	Physics: Mechanics FIS 1023 | 3 | 2 | 4 11 Calculus I	**Physics: Heat and Waves** FIS 1043 | 3 | 2 | 4 11 Calculus I 32 Physics: Mech	**Physics: Electricity** FIS 1033 | 3 | 2 | 4 12 Calculus II 32 Physics: Mech	**Comprehensive Exam I** IIN 4310 | 0 | 0 | 0 52,13,23,33,34 Basic Courses	**Data Analysis in Engineering I** EST 7042 | 3 | 2 | 4 12 Calculus II	**Electrical Systems Elective** ELG 1101 | 2 | 2 | 3 34 Physics: Electricity		**Comprehensive Exam II** IIN 4315 | 0 | 0 | 0	
			Thermodynamics I IME7061 | 3 | 0 | 3 33 Physics: H & W	**Thermodynamics II** IME7070 | 3 | 2 | 4 44 Thermodynamics I		**Dynamic Systems Modeling** IME7095 | 2 | 2 | 3 23 Differential Equations 33 Physics: H & W 34 Physics : Electricity	**Research Project** IME 7052 | 1 | 2 | 2 56 Heat Transfer 66 Mechanical Design	**Career Seminar II** IME 4230 | 0 | 2 | 0	**Final Project (Capstone Design)** INV 7361 | 3 | 0 | 3 39 Comprehensive Exam II 98 English VIII 59 Energy Elect 69 Design and Mat Elect
Engineering Drawing IBA 0022 | 2 | 2 | 3	**Algorithms and Programming I** IST 2088 | 2 | 2 | 3	**Materials Science** IME1205 | 2 | 2 | 3	**Materials Engineering** IBA 1012 | 2 | 0 | 2 53 Materials Science	**Fluid Mechanics** IME4072 | 3 | 2 | 4 23 Differential Equations	**Heat Transfer** IME7101 | 3 | 2 | 4 35 Comprehensive Exam I 44 Thermodynamics I 55 Fluid Mechanics	**Thermofluids Systems Design** IME 7192 | 2 | 2 | 3 45 Thermodynamics II 56 Heat Transfer	**Instrumentation and Control** IME 8310 | 3 | 2 | 4 47 Dynamic Systems Modeling	**Energy Elective** ELG 7040 | 3 | 0 | 3 56 Heat Transfer	**Mechanical Engineering Elective** ELG 7045 | 3 | 0 | 3 56 Heat Transfer 66 Mechanical Design
Introduction to Mechanical Eng. IME0010 | 1 | 0 | 1		**Statics** IBA4032 | 3 | 0 | 3 32 Physics: Mech	**Dynamics** IBA 4061 | 3 | 0 | 3 12 Calculus II 63 Statics	**Mechanics of Machinery** IME 1210 | 2 | 2 | 3 64 Dynamics	**Mechanical Design** IME7220 | 3 | 2 | 4 35 Comprehensive Exam I 74 Solid Mechanics 65 Mechanics of Mach.	**Mechanical Systems Design** IME 7085 | 2 | 2 | 3 66 Mechanical Design	**Assets Management** IME 7042 | 2 | 0 | 2	**Design and Materials Elective** ELG 7035 | 3 | 0 | 3 66 Mechanical Design	
			Solid Mechanics IME4200 | 3 | 0 | 3 63 Statics	**Manufacturing Processes** IME4030 | 2 | 2 | 3 53 Materials Science			**Philosophy Elective** ELG 1160 | 3 | 0 | 3	**Humanities Elective** ELG 1130 | 3 | 0 | 3	**Social Sciences Elective** ELG 1190 | 3 | 0 | 3
Communication Skills I CAS3020 | 3 | 0 | 3	**Communication Skills II** CAS3030 | 3 | 0 | 3 81 Communications I					**Ethics Elective** ELG 1170 | 3 | 0 | 3	**Innovation and Social Dev. Elective** ELG 8400 | 3 | 0 | 3	**History Elective** ELG 1140 | 3 | 0 | 3	**Caribbean Studies Elective** ELG 1180 | 3 | 0 | 3
Language Req. I IGL 4890 B | 4 | 0 | 0	**Language Req. II IGL 4895** B | 4 | 0 | 0	**Language Req. III IGL 4900** B | 4 | 0 | 0	**Language Req. IV IGL 4905** B | 4 | 0 | 0	**Language Req. V IGL 4910** B | 4 | 0 | 0	**Language Req. VI IGL 4915** B | 4 | 0 | 0	**Language Req. VII IGL 4920** B | 4 | 0 | 0	**Language Req. VIII IGL 4925** B | 4 | 0 | 0		
Ht | Hp | Cr 13 | 4 | 15	Ht | Hp | Cr 12 | 4 | 14	Ht | Hp | Cr 15 | 4 | 17	Ht | Hp | Cr 17 | 4 | 15	Ht | Hp | Cr 12 | 10 | 17	Ht | Hp | Cr 12 | 6 | 15	Ht | Hp | Cr 11 | 8 | 15	Ht | Hp | Cr 14 | 6 | 17	Ht | Hp | Cr 15 | 2 | 15	Ht | Hp | Cr 15 | 0 | 15

Course Name CODE			
TYPE	HT	HP	CR

xy prereq xy co req

TOTALS		
HT	HP	CR
136	48	155

Students who have completed 7th semester may aspire to PML 7122 INDUSTRIAL INTERNSHIP

Figure 5.1 ME Program Prerequisite Structure.