Prescribed schedule for students in the Maine Engineering Pathways Program

to USM BS in Mechanical Engineering from UMM

Year One @ UMM

Year One Fall		Year One Spring	
Course	**Credit**	**Course**	**Credit**
UMM Introduction to Engineering	1	Any course that fulfills USM Cultural Interpretation Core Requirement	3
ENG 101 College Composition	3	MAT 127 Calculus II	4
MAT 131 Calculus I (Quantitative Reasoning Core Requirement)	4	PHY 122 General Physics II	4
CHY 101 General Chemistry I (Science Exploration Core Requirement)	4	Any course that fulfills USM Creative Expression Core Requirement	3
PHY 121 General Physics I	4	Any course that fulfills USM Socio-Cultural Analysis Core Requirement	3
Semester Credits	**16**	**Semester Credits**	**17**
Total UMM credits: 33			

Years Two through Four
Mechanical Engineering @ USM

Year Two Fall		Year Two Spring	
Course	**Credit**	**Course**	**Credit**
ELE 216 Circuits 1: Steady-State Analysis	3	ELE 217/219 Circuits 2: System Dynamics/Lab	4
MAT 252 Calculus 2	4	EGN 248 Intro to Differential Equations and Linear Algebra	4
MEE 150 Applied Mechanics: Statics	3	MAT 380 Theory of Probability and Statistics	3
EGN 160 Programming: C++ or Java	4	MEE 270 Applied Mechanics: Dynamics	3
MEE 230 Thermodynamics 1: Laws and Properties	3	ITP 210 Technical Writing (WRI 3 Core Requirement)	3
Semester Credits	**17**	**Semester Credits**	**17**

Year Three Fall		Year Three Spring	
Course	**Credit**	**Course**	**Credit**
ELE 323 Electromechanical Energy Conversion	3	WRI 2 Core Requirement	3
EGN 260 Materials Science for Engineers	3	EGN 304 Engineering Economics	3
MEE 251/259 Strength of Materials/Lab	4	Culture, Power, and Equity Core Requirement	3
MEE 360 Fluid Mechanics	3	MEE 372 Computer-Aided Design of Machine Elements	4
Ethical Inquiry Core Requirement	3	MEE 432/439 Heat Transfer/Lab	4
Semester Credits	**16**	**Semester Credits**	**17**

Year Four Fall		Year Four Spring	
Course	**Credit**	**Course**	**Credit**
Engineering Elective 300-level+	3	Engineering Elective 300-level+	3
International Core Requirement	3	Engineering Elective 300-level+	3
MEE 373 Design of Machines and Mechanisms	4	EGN 402 Senior Design Project (Engaged Learning Core Requirement)	3
MEE 331/339 Thermodynamics 2: Flows and Cycles/Lab	4	MEE 374 Theory and Applications of Vibrations	4
EGN 401 Senior Design Project and the Engineering Profession	3	Engineering Elective 300-level+	3
Semester Credits	**17**	**Semester Credits**	**16**
Total USM credits: 100 **Total UMM and USM credits: 133**			

In order to transfer to USM, students must successfully complete a minimum of 30 credits at a participating campus (UMPI, UMF, UMA, UMM). They should have earned a C or better in core mathematics and science courses. Transfer students missing one or more of these core courses will be considered on a case-by-case basis. The minimum overall GPA requirement to transfer into a USM engineering program is 2.5.

Admissions and High School Curriculum expectations: Suggested minimum admissions requirements are combined SAT (Math + Verbal) of 1000, and a Math SAT score of 550. A high school GPA of 2.5 or greater is recommended. Applicants should have completed two years of high school lab sciences and three years of mathematics including Algebra I, Algebra II, and Geometry. In addition, a year of Pre-Calculus is required. If the latter requirement is not met, students would likely need to take Pre-Calculus in the first semester of the MEPP rather than Calculus I. This could delay student's overall progress by up to one year.

Students already matriculated at UMA, UMF, UMPI, or UMM: Students who are already enrolled in one of the participating campuses and wish to change majors into the program may do so provided they earn a C or better in Pre-Calculus and a lab science course, and have an overall college GPA of 2.0 or greater.