



**Dual Degree Program  
BS Applied Mathematics  
BS Mechanical Engineering**



St. Mary's—Fall Semester 1		Hrs	St. Mary's—Spring Semester 1		Hrs	St. Mary's —Summer Semester 1		Hrs
EN 111 English Composition I	3	MA 244 Calculus II	4					
MA 243 Calculus I	4	PHY 315 Engineering Physics I	4					
TH 112 Intro to Spirituality	3	EN 112 English Composition II	3					
CH 220 General Chemistry I	3	EG 250 Graphics for Engineers	3					
Humanities General Education	3	COM 120 or COM 125	3					

St. Mary's—Fall Semester 2		Hrs	St. Mary's—Spring Semester 2		Hrs	St. Mary's—Summer Semester 2		Hrs
PHY 316 Engineering Physics II	4	EG 315 Thermodynamics	3					
MA 345 Calculus III: Multivariable	4	EG 320 Strength of Materials	3					
EG 300 Statics	3	MA 346 Differential Equations	3					
MA 330 Introductory Statistics	3	MA 364 Linear Algebra	3					
		MA 437 Probability & Statistics	3					

St. Mary's —Fall Semester 3		Hrs	St. Mary's —Spring Semester 3		Hrs	St. Mary's—Summer Semester 3		Hrs
MA 272 Mathematical Reasoning	3	EG 310 Dynamics	3					
CIS 254 Data Structures	3	MA 471 Mathematical Modeling	3					
Arts General Education	3	Humanities General Education	3					
Social/Behavioral Science General Education	3	Social/Behavioral Science General Education	3					
		Theology General Education	3					

UMKC—Fall Semester 4		Hrs	UMKC—Spring Semester 4		Hrs	UMKC—Summer Semester 4		Hrs
ME 324 Engineering Materials Lab	4	ME 306 Numerical Analysis	3					
ME 351 Fluid Mechanics	3	ME 352 Mechanical Instruments Lab	3					
ME 360 Applied Thermodynamics	3	ME 380 Manufacturing Methods	3					
ME 130 Engineering Graphics	3	ME 385 System Dynamics	3					
		ME 399/399L Heat & Mass Transfer/Lab	4					

UMKC—Fall Semester 5		Hrs	UMKC—Spring Semester 5		Hrs	UMKC—Summer Semester 1		Hrs
ME 492 Mechanical Design Synthesis I	3	ME 496WI Mechanical Design Synthesis	3					
ME Design Elective	3	ECE 276/277 Circuit Theory I/Lab	4					
ME Technical Elective*	3	ME Technical Elective	3					
ME 415 Control Systems Theory	3	ME Technical Elective	3					3
ME 356 Mechanical Component Design	3							

\*can petition to have upper-level elective at USM count toward a technical elective

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