

B.S. in Mechanical Engineering Plan of Study (Fall 2008)

	Fall	Summer / J-Term	Spring
Year 1	ENGR 150 Introduction to Engineering	THEO 101 Christian Theological Tradition	MATH 114 Calculus II
	MATH 113 Calculus I	PHED 100 Health and Fitness	PHYS 111 Intro to Classical Physics I (LAB)
	ENGR 171 Engineering Graphics (LAB)		CISC 130 Engineering SW (LAB)
	ENGL 111 Critical Reading & Writing I (or ENGL 190)		Foreign Language
	Foreign Language		
Year 2	ENGR 220 Mechanics I	HIST 1XX	ENGR 221 Mechanics II (LAB)
	MATH 200 Multi-Variable Calculus		MATH 210 Linear Algebra and Differential Equations
	PHYS 112 Intro to Classical Physics II (LAB)		ENGR 371 Manufacturing Processes and Statistical Methods (LAB)
	Foreign Language		ENGL 112 Critical Reading II
Year3	ENGR 381 Thermodynamics (LAB)	PHIL 115 Philosophy of the Human Person	ENGR 350 Introduction to Electronics (LAB)
	CHEM 115 Accelerated General Chemistry (LAB)		ENGR 382 Heat Transfer (LAB)
	ENGR 320 Machine Design & Synthesis (LAB)		ENGR 361 Engineering Materials (LAB)
	THEO 2XX		Fine Arts Elective**
Year 4	ENGR 480 Eng. Design Clinic I	Technical Elective*	ENGR 481 Eng. Design Clinic II
	ENGR 383 Fluid Mechanics (LAB)		Technical Elective*
	ENGR 410 Control Systems, Automation & Simulation (LAB)		Social Sciences Elective
	PHIL 214 Introduction to Ethics		THEO 3XX **

* One technical elective may be taken from the following list: Christian Faith and the Engineering Profession, Engineering in Rome, Engineering Economics, Engineering Project Management, or other courses subject to the approval of your advisor and the Department Chair.

** May satisfy the Human Diversity Requirement

Complete Course Listing:

Engineering Courses:

ENGR 150 – Introduction to Engineering (1 credit)
ENGR 171 – Engineering Graphics (4 credits)
ENGR 220 – Mechanics I (4 credits)
ENGR 221 – Mechanics II (4 credits)
ENGR 320 – Machine Design (4 credits)
ENGR 350 – Introduction to Electronics (4 credits)
ENGR 361 – Materials (4 credits)
ENGR 371 – Manufacturing Processes and Statistical Methods (4 credits)
ENGR 381 – Thermodynamics (4 credits)
ENGR 382 – Heat Transfer (4 credits)
ENGR 383 – Fluid Mechanics (4 credits)
ENGR 410 – Control Systems, Automation, and Simulation (4 credits)
ENGR 480 – Engineering Design Clinic I (4 credits)
ENGR 481 – Engineering Design Clinic II (4 credits)
8 Credits of Engineering Electives*

61 Engineering Credits

* One technical elective may be taken from the following list: Christian Faith in the Engineering Profession, Engineering in Rome, Engineering Economics, Engineering Project Management, or other courses subject to the approval of your advisor and the Department Chair.

Allied Requirements:

MATH 113 – Calculus I (4 credits)
MATH 114 – Calculus II (4 credits)
MATH 200 – Multivariable Calculus (4 credits)
MATH 210 – Linear Algebra and Differential Equations (4 credits)
PHYS 111 – Introduction to Classical Physics I (4 credits)
PHYS 112 – Introduction to Classical Physics II (4 credits)
CHEM 115 – Accelerated General Chemistry (4 credits)
CISC 130 – Engineering Software (4 credits)

32 allied requirement credits

Core Curriculum

Three courses in foreign language (12 credits)
Two courses in English (8 credits)
Three courses in Theology** (12 credits)
Two courses in Philosophy (8 credits)
One course in the Social Sciences** (4 credits)
One Fine Arts course** (4 credits)
One History course (4 credits)
One Physical Education course (0 credits)
One course in human diversity (4 credits)

56 core curriculum credits

** may satisfy the human diversity requirement

Total Credit Count: 149 (61 engineering credits + 88 non-engineering credits)