

B.S. in Mechanical Engineering and B.A. in Business Plan of Study

	Fall	Spring	Summer/ J-Term
Year 1	ENGR 150 Introduction to Engineering		
	MATH 113 Calculus I	MATH 114 Calculus II	THEO 101 The Christian Theological Tradition
	ENGR 171 Engineering Graphics and Design	↔ CISC 130 Introduction to Programming and Problem Solving in the Sciences (LAB)	HIST 1XX
	ENGL 121 Critical Thinking: Literature & Writing	PHYS 211 Classical Physics I	
	Foreign Language 111*	Foreign Language 112*	
Year 2	ENGR 220 Statics	ENGR 221 Mechanics of Materials (LAB)	
	MATH 200 Multi-Variable Calculus	ENGL 20X Texts in Conversation	COJO 100 Public Speaking
	PHYS 212 Classical Physics II	CHEM 109 General Chemistry for Engineers (LAB)	PHIL 115 Philosophy of the Human Person (Sum)
	Foreign Language 211*	STAT 220 Statistics I	
Year 3	ENGR 255 Fabrication Lab***		
	MATH 210 Introduction to Differential Equations and Systems	ENGR 320 Machine Design & Synthesis (LAB)	BUS 200 Business Learning Through Service
	ENGR 371 Manufacturing Processes and Statistical Control	ENGR 322 Dynamics (LAB)	PHIL 214 Introductory Ethics
	MGMT 305 Management and Organizational Behavior	OPMT 310 Operations Management	
	ECON 251 Principles of Macroeconomics	ECON 252 Principles of Microeconomics	
Year 4	ENGR 381 Thermodynamics (LAB)	ENGR 383 Fluid Mechanics (LAB)	Fine Arts Elective**
	ENGR 350 Introduction to Electronics (LAB)	ENGR 410 Control Systems and Automation	THEO 2XX or 3XX**
	MKTG 300 Principles of Marketing	BETH 301 Business Ethics	
	ACCT 210 Introduction to Financial Accounting	ACCT 215 Managerial Accounting	
Year 5	ENGR 480 Engineering Design Clinic I	ENGR 481 Engineering Design Clinic II	
	ENGR 361 Engineering Materials (LAB)	↔ ENGR 384 Heat Transfer (LAB)	THEO 4XX
	BLAW 301, 302 or 303 Business Law	ENGR XXX Engineering Elective	
	FINC 321 Financial Management	MGMT 480 Strategic Management	

* May place out of one or more semesters if proficient at 3rd Level

** May satisfy human diversity requirement

*** Lab skills must be retained for ENGR 320. Recommended to be taken in semester immediately preceding ENGR 320 or (with instructor permission) in first half of semester concurrent with ENGR 320. May be taken in earlier semesters if student maintains proficiency with lab shop skills for ENGR 320.

↔ denotes that the two courses can be interchanged

Complete Course Listing:

Engineering Courses:

ENGR 150 – Introduction to Engineering (1 credit)
ENGR 155 – Fabrication Lab (0 credits)
ENGR 171 – Engineering Graphics and Design (4 credits)
ENGR 220 – Statics (4 credits)
ENGR 221 – Mechanics of Materials (4 credits)
ENGR 320 – Machine Design and Synthesis (4 credits)
ENGR 322 – Dynamics (4 credits)
ENGR 350 – Introduction to Electronics (4 credits)
ENGR 361 – Engineering Materials (4 credits)
ENGR 371 – Manufacturing Processes and Statistical Control (4 credits)
ENGR 381 – Thermodynamics (4 credits)
ENGR 383 – Fluid Mechanics (4 credits)
ENGR 384 – Heat Transfer (4 credits)
ENGR 410 – Control Systems and Automation (4 credits)
ENGR 480 – Engineering Design Clinic I (4 credits)
ENGR 481 – Engineering Design Clinic II (4 credits)
4 Credits of Engineering Electives

61 Engineering Credits

Allied Requirements:

MATH 113 – Calculus I (4 credits)
MATH 114 – Calculus II (4 credits)
MATH 200 – Multi-Variable Calculus (4 credits)
MATH 210 – Introduction to Differential Equations and Systems (4 credits)
PHYS 211 – Classical Physics I (4 credits)
PHYS 212 – Classical Physics II (4 credits)
CHEM 109 – General Chemistry for Engineers (4 credits)
CISC 130 – Introduction to Programming and Problem Solving in the Sciences (4 credits)

32 allied requirement credits

Business Courses:

ACCT 210 - Introduction to Financial Accounting (4 credit)
ACCT 215 - Managerial Accounting (4 credit)
BETH 301- Business Ethics (4 credit)
BLAW 301/2/3- Business Law (4 credits)
BUSN 200- Business Learning Through Service (0 credit)
OPMT 310 - Operations Management (4 credits)
FINC 321 - Financial Management (4 credits)
MGMT 305 - Management & Organizational Behavior (4 credits)
MGMT 480 - Strategic Management (4 credits)
MKTG 300 - Principles of Marketing (4 credits)

36 Business credits

Allied Requirements:

ECON 251*- Principles of Macroeconomics (4 credits)
ECON 252- Principles of Microeconomics (4 credits)
STAT 220- Statistics I (4 credits)
COJO 100- Public Speaking (4 credits)

*Fulfills social science requirement

16 allied requirements 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 Fine Arts course** (4 credits)
One History course (4 credits)

**One of these courses must satisfy the human diversity requirement

48 core curriculum credits

Total Credit Count: 193 credits