

ENGINEERING (ARCHITECTURAL, CIVIL, or MECHANICAL)

NAME	I.D.#	Expected Grad Date	B.S.E. Degree
General Education Requirements		A. Architectural Concentration	
<u>3</u>	THEO 110 Intro to Christianity	<u>3</u>	ENGR 210 Thermo-Fluids Engineering
<u>3</u>	BLIT 210 Christian Scriptures	<u>3</u>	ENGR 213 Statics
<u>3</u>	CMIN 310 Christian Living	<u>3</u>	ENGR 215 Dynamics
<u>3</u>	Approved Stewardship Course* _____	<u>3</u>	ENGR 216 Mechanics of Materials
<u>3</u>	ENGL 109 College Writing I	<u>3</u>	ENGR 220 Electrical Circuits & Systems
<u>3</u>	COMM 105 Fundamentals of Communication	<u>3</u>	ENGR 255 Introduction to Architectural Engineering
<u>3</u>	HIST 200 Western Civilization	<u>3</u>	ENGR 351 Structural Analysis
<u>3</u>	Approved Social Science Course* _____	<u>3</u>	ENGR 352 Structural Steel Design
<u>6</u>	Approved Humanities Courses* _____	<u>3</u>	ENGR 353 Reinforced Concrete Design
	Select 3 hours from two different areas:	<u>3</u>	ENGR 355 Building Information Modeling
	Fine Arts, Literature, Philosophy,	<u>3</u>	ENGR 455 Construction Management
	Modern Languages _____	<u>3</u>	ENGR 456 Electrical Building Systems
<u>3-8</u>	Elementary Foreign Language I and II OR	<u>3</u>	ENGR 457 Mechanical Building Systems
	Approved International Culture course* _____	<u>3</u>	ESS 360 GIS and GPS
<u>3-4</u>	BIOL 201 or approved biological science course* _____		
		B. Civil Concentration	
		<u>3</u>	ENGR 210 Thermo-Fluids Engineering
		<u>3</u>	ENGR 213 Statics
		<u>3</u>	ENGR 215 Dynamics
		<u>3</u>	ENGR 216 Mechanics of Materials
		<u>3</u>	ENGR 220 Electrical Circuits & Systems
		<u>3</u>	ENGR 235 Introduction to Environmental Engineering
		<u>3</u>	ENGR 251 Transportation Planning & Analysis
		<u>3</u>	ENGR 351 Structural Analysis
		<u>3</u>	ENGR 352 Structural Steel Design
		<u>3</u>	ENGR 353 Reinforced Concrete Design
		<u>3</u>	ENGR 354 Introduction to Soil Mechanics
		<u>3</u>	ENGR 356 Collection/Pumping of Water/ Wastewater
		<u>3</u>	ENGR 451 Storm Water Hydraulics/Hydrology
		<u>3</u>	ENGR 452 Site Design
		<u>3</u>	ENGR 455 Construction Management
		C. Mechanical Concentration	
		<u>3</u>	ENGR 213 Statics
		<u>3</u>	ENGR 215 Dynamics
		<u>3</u>	ENGR 216 Mechanics of Materials
		<u>3</u>	ENGR 220 Electrical Circuit & Systems
		<u>4</u>	ENGR 311 Material Science
		<u>3</u>	ENGR 312 Thermodynamics
		<u>3</u>	ENGR 314 Computer Aided Engr. w/ Creo
		<u>4</u>	ENGR 315 Fluid Mechanics
		<u>4</u>	ENGR 323 Automatic Controls
		<u>3</u>	ENGR 412 Machine Design & Dynamics
		Plus 2 additional Upper Division (300/400 level) ENGR courses to be approved by Dept. of Engineering	

*See olivet.edu/registrar for approved list of courses

Required Supporting Courses:

- 4 CHEM 103 General Chemistry I
- 4 MATH 147 Calculus I
- 4 MATH 148 Calculus II
- 3-4 MATH 241 Statistics **or**
- MATH 351 Linear Algebra
- 4 MATH 261 Calculus III
- 3 MATH 357 Differential Equations
- 4 PHYS 201 General Physics I
- 4 PHYS 202 General Physics II

Major: 58-64 hours – 2.000 required for major

- 3 ENGR 101 Engineering Design I
- 3 ENGR 102 Engineering Design II
- 3 ENGR 107 Computational Engineering **OR**
- COMP 150 Programming: Control Structures
- 3 ENGR 401 Senior Design Project I/Tech Comm
- 2 ENGR 402 Senior Design Project II/Exprmt Dsgn
- 3 ENGR 403 Engineering Economics

PLUS completion of one of the following concentrations:

All required Engineering and supporting Math and Science courses must be completed with a grade of C or better to be eligible for graduation.