

2022-23 Civil Engineering Checklist

TRANSFORMATIONAL JOURNEY PROGRAM (TJP)

First Year Experience (3 credits)

____ FYS110 First Year Seminar

Faith and Ethics (9 credits)

____ THL105 Introduction to Theology

____ PHL130 Human Nature & Person

____ Second THL*

Scientific Problem Solving

Fulfilled by major requirements

Quantitative Problem Solving

Fulfilled by major requirements

Civics Problem Solving

Fulfilled by major requirements (EGR 317)

Communication (6 credits)

____ ENG112 Writing and Community

____ COM101 Public Speaking

Cultural and Global Awareness (6 credits)

____ World Language (determined by placement)

One of the following courses:

____ GLS101 Global Perspectives

____ HUM210 Meaning Through Culture

Health and Well-Being (6 credits)

____ HWB110 Holistic Health: Mind, Body, and Spirit

One of the following courses:

____ PSY101 General Psychology

____ PSY220 Human Growth and Development

____ SOC101 Introduction to Sociology

Broad Integrative Knowledge Outside Major**

- Completion of a minor
- Completion of a second major
- Completion of a Pathway

*Please refer to catalog or MUHUB Progress tab for a complete list of courses that meet these requirements.

**Please refer to catalog or MUHUB Progress tab for a description of acceptable major/minor options.

General Math and Science Requirements (30 hours)

____ MAT 230 Calculus I 4

____ MAT 231 Calculus II 4

____ MAT 305 Calculus III 4

____ MAT 310 Linear Algebra 3

____ MAT 315 Differential Equations 3

____ CHE 140 General Chemistry I 3

____ CHE 141L General Chemistry I Lab 1

____ PHY 201 University Physics I 4

____ PHY 202 University Physics II 4

Engineering Core Requirements (27 hours)

____ EGR 101 Introduction to Engineering 3

____ EGR 151 Programming for Engineers 3

____ EGR 155 Intro Computer Aided Design 3

____ EGR 221 Engineering Mechanics: Statics 3

____ EGR 241 Linear Circuit Analysis 3

____ EGR 261 Engineering Thermodynamics 3

____ EGR 301 Global Engineering 3

____ EGR 317 Engineering Economics 3

____ EGR 490 Engineering Senior Design 3

Civil Engineering Major Requirements (45 hours)

____ SCI XXX Science Elective (Non CHE or PHY) 3

____ EGR 222 Engineering Mechanics: Dynamics 3

____ EGR 226 Mechanics of Materials 3

____ EGR 326 Engineering Statistics 3

____ EGR 365 Fluid Mechanics 3

____ CVE 301 Surveying with Lab 3

____ CVE 327 Civil Engineering Materials 3

____ CVE 328 Structural Design I: Steel and Concrete 3

____ CVE 338 Soil Mechanics 3

____ CVE 3XX Civil Engineering Elective I 3

(CVE 330 Analysis of Structures with Lab OR
 CVE 332 Hydraulics with Lab)

____ CVE 411 Environmental Engineering 3

____ CVE 492 Senior Design Project II 3

____ CVE 4XX Civil Engineering Elective II 3

____ CVE 4XX Civil Engineering Elective III 3

____ CVE 4XX Civil Engineering Elective IV 3

Total Earned Hours__132__

MARIAN UNIVERSITY

Indianapolis®

2022-23 B.S. Civil Engineering Major Sample Four-Year Plan

Year One					
Fall Semester			Spring Semester		
Requirement Category	Course	Crd Hrs	Requirement Category	Course	Crd Hrs
Gen Math & Sci: Calculus I	MAT 230	4	Gen Math & Sci: Calculus II	MAT 231	4
CORE-Intro Engineering	EGR 101	3	Gen Math & Sci: Univ Physics I	PHY 201	4
CORE-Egr Programming	EGR 151	3	Gen Math & Sci: Gen Chem I	CHE 140	3
TJP: First Year Seminar	FYS 110	3	Gen Math & Sci: Gen Chem I Lab	CHE 141L	1
TJP: Intro Theology	THL 105	3	CORE- Comp Aided Design	EGR 155	3
			TJP: Holistic Health	HWB 110	3
Semester Hours		16	Semester Hours		18
Cumulative Hours		16	Cumulative Hours		34
Year Two					
Fall Semester			Spring Semester		
Requirement Category	Course	Credit Hrs	Requirement Category	Course	Credit Hrs
Gen Math & Sci: Calculus III	MAT 305	4	Gen Math & Sci: Differential Eqns	MAT 315	3
Gen Math & Sci: Univ Physics II	PHY 202	4	CORE- Lin Circuit Analysis	EGR 241	3
CORE-Engr Mechanics: Statics	EGR 221	3	MAJ: Engr Mechanics: Dynamics	EGR 222	3
CORE-Thermodynamics	EGR 261	3	MAJ: Mechanics of Materials	EGR 226	3
TJP: Writing and Community	ENG 112	3	MAJ: Science Elective (non-CHE or PHY)	SCI xxx	3
			TJP: Human Nature & Person	PHL 130	3
Semester Hours		17	Semester Hours		18
Cumulative Hours		51	Cumulative Hours		69
Year Three					
Fall Semester			Spring Semester		
Requirement Category	Course	Credit Hrs	Requirement Category	Course	Credit Hrs
Gen Math & Sci: Linear Algebra	MAT 310	3	TJP: Health & Well-Being	PSY/SOC	3
TJP: Public Speaking	COM 101	3	CORE-Global Engineering	EGR 301	3
MAJ: Surveying w/Lab	CVE 301	3	MAJ: Soil Mechanics w/Lab	CVE 338	3
MAJ: Fluid Mechanics	EGR 365	3	MAJ: Civil Engineering Elective (Analysis Structures or Hydraulics)	CVE 330 OR CVE 332	3
MAJ: Civil Engineering Materials	CVE 327	3	MAJ: Engineering Statistics	EGR 326	3
Semester Hours		15	Semester Hours		15
Cumulative Hours		84	Cumulative Hours		99
Year Four					
Fall Semester			Spring Semester		
Requirement Category	Course	Credit Hrs	Requirement Category	Course	Credit Hrs
TJP: Cultural/Global	HUM/GLS	3	TJP: Faith & Ethics #2	2 nd THL	3
TJP: World Language	World Lang.	3	CORE: Engineering Economics	EGR 317	3
CORE: Senior Design I	EGR 490	3	MAJ: Senior Design II	CVE 492	3
MAJ: Environmental EGR w/ Lab	CVE411	3	MAJ: CVE Program Elective III	CVE 4xx	3
MAJ: CVE Program Elective II	CVE 4xx	3	MAJ: CVE Program Elective IV	CVE 4xx	3
MAJ: Struct Design I-Steel/Concrete	CVE 328	3			
Semester Hours		18	Semester Hours		15
Cumulative Hours		117	Cumulative Hours		132

*A minimum 2.0 cumulative GPA and a minimum 2.0 major GPA are required for graduation. To meet degree requirements, some disciplines require higher grades in each course or a higher cumulative GPA

This plan is only a sample and will vary by student and course availability.