

Name \_\_\_\_\_

Student ID \_\_\_\_\_

Date \_\_\_\_\_

## 2024-25 Civil Engineering Checklist

### TRANSFORMATIONAL JOURNEY PROGRAM (TJP)

#### First Year Experience (3 credits)

\_\_\_\_ FYS 110 First Year Seminar

#### Faith and Ethics (9 credits)

\_\_\_\_ THL 105 Introduction to Theology

\_\_\_\_ PHL 130 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)

\_\_\_\_ ENG 112 Writing and Community

\_\_\_\_ COM 101 Public Speaking

#### Cultural and Global Awareness (6 credits)

\_\_\_\_ World Language (determined by placement)

One of the following courses:

\_\_\_\_ GLS 101 Global Perspectives

\_\_\_\_ HUM 210 Meaning Through Culture

#### Health and Well-Being (6 credits)

\_\_\_\_ HWB 110 Holistic Health: Mind, Body, and Spirit

One of the following courses:

\_\_\_\_ PSY 101 General Psychology

\_\_\_\_ PSY 220 Human Growth and Development

\_\_\_\_ SOC 101 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 Core Reqs (30 hours)

\_\_\_\_ MAT 230 Calculus I 4

\_\_\_\_ MAT 231 Calculus II 4

\_\_\_\_ MAT 305 Calculus III 4

\_\_\_\_ EGR 210 Engineering Computation and Modeling 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

\_\_\_\_ Science Elective (Non CHE or PHY) 3

### Engineering Core Requirements (24 hours)

\_\_\_\_ EGR 101 Introduction to Engineering 3

\_\_\_\_ EGR 151 Programming for Engineers 3

\_\_\_\_ EGR 156 Intro Computer Aided Design 3

\_\_\_\_ EGR 221 Engineering Mechanics: Statics 3

\_\_\_\_ EGR 242 Linear Circuit Analysis 3

\_\_\_\_ EGR 301 Global Engineering 3

\_\_\_\_ EGR 317 Engineering Economics 3

\_\_\_\_ EGR 491 Engineering Senior Design 3

### Civil Engineering Major Requirements (45 hours)

\_\_\_\_ 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 330 Structural Analysis 3

\_\_\_\_ CVE 332 Hydraulics with lab 3

\_\_\_\_ CVE 338 Soil Mechanics 3

\_\_\_\_ CVE 411 Environmental Engineering 3

\_\_\_\_ CVE 430 Reinforced Concrete Design 3

\_\_\_\_ CVE 440 Foundation Engineering 3

\_\_\_\_ CVE 492 Senior Design Project II 3

\_\_\_\_ Civil Engineering Elective 3

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**Total Earned**  
**Hours** 129

# MARIAN UNIVERSITY

Indianapolis®

## 2024-25 B.S. Civil Engineering Major Sample Four-Year Plan

Year One					
Fall Semester			Spring Semester		
Requirement Category	Course	Credit Hrs	Requirement Category	Course	Credit 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: University Physics I	PHY 201	4
CORE: Programming for Engineers	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: Intro Computer Aided Design	EGR 156	3
			TJP: Holistic Health	HWB 110	3
<b>Semester Hours</b>		<b>16</b>	<b>Semester Hours</b>		<b>18</b>
<b>Cumulative Hours</b>		<b>16</b>	<b>Cumulative Hours</b>		<b>34</b>
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: Comp & Modeling	EGR 210	3
Gen Math & Sci: University Physics II	PHY 202	4	CORE: Lin Circuit Analysis	EGR 242	3
CORE: Engr Mechanics: Statics	EGR 221	3	MAJ: Engr Mechanics: Dynamics	EGR 222	3
MAJ: Surveying w/ Lab	CVE 301	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: Public Speaking	COM 101	3
<b>Semester Hours</b>		<b>17</b>	<b>Semester Hours</b>		<b>18</b>
<b>Cumulative Hours</b>		<b>51</b>	<b>Cumulative Hours</b>		<b>69</b>
Year Three					
Fall Semester			Spring Semester		
Requirement Category	Course	Credit Hrs	Requirement Category	Course	Credit Hrs
CORE: Global Engineering	EGR 301	3	CORE: Engineering Economics	EGR 317	3
MAJ: Fluid Mechanics	EGR 365	3	MAJ: Engr Statistics	EGR 326	3
MAJ: Civil Engineering Materials	CVE 327	3	MAJ: Soil Mechanics w/Lab	CVE 338	3
MAJ: Structural Analysis	CVE 330	3	MAJ: Hydraulics and Hydrology	CVE 332	3
MAJ: Environmental Engr w/ Lab	CVE411	3	MAJ: Reinforced Concrete Design	CVE 430	3
<b>Semester Hours</b>		<b>15</b>	<b>Semester Hours</b>		<b>15</b>
<b>Cumulative Hours</b>		<b>84</b>	<b>Cumulative Hours</b>		<b>99</b>
Year Four					
Fall Semester			Spring Semester		
Requirement Category	Course	Credit Hrs	Requirement Category	Course	Credit Hrs
CORE: Senior Design I	EGR 491	3	MAJ: Senior Design II	CVE 492	3
MAJ: CVE Program Elective	CVE XXX	3	MAJ: CVE Program Elective	CVE XXX	3
MAJ: Foundation Engineering	CVE 440	3	TJP: Faith & Ethics #2	2 <sup>nd</sup> THL	3
TJP: World Language	World Lang.	3	TJP: Health and Well-Being	PSY/SOC	3
TJP: Cultural/Global	HUM/GLS	3	TJP: Human Nature and Person	PHL 130	3
<b>Semester Hours</b>		<b>15</b>	<b>Semester Hours</b>		<b>15</b>
<b>Cumulative Hours</b>		<b>114</b>	<b>Cumulative Hours</b>		<b>129</b>

\*A minimum 2.0 cumulative GPA and a minimum 2.0 major GPA are required for graduation, so monitor your GPA closely. 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.