

**YEARS 1 AND 2: Associate in Engineering Degree | YEARS 3 AND 4: Bachelor of Science in Civil Engineering**

The suggested pathways included on this document show coursework that fulfills requirements for the Associate in Engineering Degree at MCKC as well as requirements for the Bachelor of Science in Civil Engineering degree at William Jewell College.

For official course, degree, and graduation requirements, students should refer to each institution's catalog which supersedes this document.



SEMESTER 1-FALL			
MCC Requirement Fulfilled	MCC Course	William Jewell College Course	William Jewell Degree Requirement Fulfilled
Science	CHEM 111: General College Chemistry 1 (5)	CHE 121: General Chemistry 1 (4) CHE 121L: General Chemistry 1 Lab (1)	Requirement for Major
Communication	ENGL 101: Composition and Reading 1 (3)	CTI 102: Written Communications	Level 1 Foundations: English Composition Requirement Fulfilled
Required Engineering Course	ENGR 101: Intro to the Engineering Profession (1)	CVE 111: Introduction to Civil Engineering and Design	Requirement for Major
Social and Behavioral Sciences-Civics/American Institutions	HIST 120: US History to 1865 (3) (or) HIST 121: US History Since 1865 (3) (or) POLS 136: Intro to U.S. National Politics	HIS 121: Foundations of US History (or) HIS 122: The Modern United States (or) POL 150: Introduction to American Government	*Level 2: Explorations: Power and Justice (1 of 2 classes required from 2 different disciplines)
Mathematics	MATH 180: Analytic Geometry and Calculus 1 (5)	MAT 109: Calculus I	Level 1 Foundations: Mathematics Requirement Fulfilled
Elective	GEOL 101: Physical Geology (5)	SCI 999: Science Elective	Basic Science Requirement for Major
Total Hours Completed: 22			
SEMESTER 2-SPRING			
Humanities and Fine Arts	ART 108: Survey of Art (3) (or) MUS 108: Music Appreciation (3)	ART 999 MUS 999	*Level 2: Explorations: Culture and Traditions (1 of 2 classes required from 2 different disciplines)
Written Communication	ENGL 102: Composition and Reading 2 (3)	ELE 999	Elective
Mathematics	MATH 190: Analytic Geometry and Calculus II (5)	MAT 200: Calculus II (4)	Requirement for Major
Science	PHYS 220: Engineering Physics I (5)	PHY 213: General Physics (5) PHY 213L: General Physics Lab	Requirement for Major
Total Hours Completed: 16			
SEMESTER 3-SUMMER			
Social Science Elective	ECON 210: Macroeconomics (3) (or) ECON 211: Microeconomics (3)	ECO 202: Principles of Macroeconomics ECO 101: Principles of Microeconomics	*Level 2: Explorations: Power and Justice (2 of 2 classes required from 2 different disciplines)
Mathematics	MATH 230: Differential Equations (3)	MAT 202: Differential Equations (4)	Requirement for Major
Total Hours Completed: 6			
SEMESTER 4-FALL			
Science	PHYS 221: Engineering Physics II (5)	PHY 214: General Physics II (5) PHY 214L: General Physics II Lab	Professional Development Elective Required for Major
Mathematics	MATH 210: Analytic Geometry and Calculus III (5)	MAT 201: Calculus III (4)	Requirement for Major
Required Engineering Course	ENGR 229: Statics (3)	EGR 230: Statics	Requirement for Major
Elective	ENGR 215: Engineering Statistics and Computation (3)	DTS 218: Applied Statistics	Requirement for Major
Total Hours Completed: 16			
SEMESTER 5- SPRING			
Elective	CHEM 112: General College Chemistry II (5)	CHE 122: General Chemistry II (4) CHE 122L: General Chemistry II Lab (1)	Elective
Elective	ENGR 230: Dynamics (3)	EGR 231: Dynamics (3)	Requirement for Major
Elective	ENGR 240: Mechanics of Materials (3)	EGR 233: Mechanics of Solids (4)	Requirement for Major
Elective	EETC 152: Engineering Graphics and CADD 1 (5)	EGR 120: Engineering Graphics (2)	Requirement for Major
Total Hours Completed: 16			
SEMESTER 6-SUMMER			
Humanities Elective	ENGL 268: Women's Literature (3)	ENG 255: Literary Topics	*Level 2: Explorations: Culture and Traditions (2 of 2 classes required from 2 different disciplines)
Elective	CSIS 123: Programming Fundamentals (3)	DTS 190: Introduction to Programming	Elective
Total Hours Completed: 6			

To complete the Critical Thought and Inquiry (CTI) Curriculum, the remaining CTI courses listed below must be taken at William Jewell College:

Level 2 CTI: Sacred Secular (4 Credit Hours)  
CTI 100: The Responsible Self (4 Credit Hours)  
CTI 150: Identity and Society (2 Credit Hours)  
CTI 400 Capstone (4 Credit Hours)

\*Any course designated as a "Level 2 Explorations course" **will transfer as an elective** if the student transfers to Jewell with less than 26 hours completed post-high school graduation OR does not successfully complete the 2 classes required for each category.

To be admitted to Jewell: transfer students must have at minimum transferrable GPA of at least a 2.5 with at least 26 hours completed post-high school graduation.

The courses suggested in this guide are the preferred courses that best prepare students for success at William Jewell College. For a Level 2 Explorations requirement in the William Jewell College core curriculum to be fulfilled using transfer credit, students **MUST** have successfully completed two (2) courses in two (2) different disciplines.

MCKC courses used to fulfill William Jewell College Level 2 Core Curriculum Requirements are as follows:

**Culture and Traditions:**  
ART 108 OR MUS 108 AND ENGL 268

**Power and Justice:**  
HIST 120 OR HIST 121 AND ECON 210 OR ECON 211

*Disclaimer: All statements in this publication concerning course offerings and requirements are subject to constant review and change based on the needs of the college and related department(s). The content on this document is provided for informational purposes and does not substitute for formal academic advising or constitute a contract. Please be aware that all pathways maybe altered to account for course availability and/or to fit the individual needs of students.*

# Bachelor of Science in Civil Engineering

## Suggested Plan

This Suggested Course Advisement Plan is an unofficial publication of William Jewell College.

For official course requirements, students should refer to the institution catalog which supersedes this document.

*\*Students must earn a grade of C- or higher in each of these required courses.*

FALL 1		
CVE 350/L	Structural Analysis & Laboratory	4 Credit Hours
CVE 370/L	Fluid Mechanics & Laboratory	4 Credit Hours
CVE 380/L	Civil Engineering Materials & Laboratory	4 Credit Hours
CTI 100	The Responsible Self	4 Credit Hours
		<b>16 Credit Hours</b>

SPRING 1		
CVE 240/L	Sustainability and Environmental Engineering & Laboratory	4 Credit Hours
CVE 351	Introduction to Structural Design	3 Credit Hours
CVE 360/L	Geotechnical Engineering & Laboratory	4 Credit Hours
CTI 150	Identity and Society	2 Credit Hours
CVE 112	Introduction to Civil Engineering & Design II	2 Credit Hours
		<b>15 Credit Hours</b>

FALL 2		
BUS 202	Principles of Management	4 Credit Hours
CVE 412	Capstone Design I	3 Credit Hours
EGR 414	Senior Engineering	1 Credit Hour
CVE 4XX	In-Depth Civil Engineering Design Elective	3 Credit Hours
Level 2 CTI: Sacred Secular	Course of Student's Choosing	4 Credit Hours
		<b>15 Credit Hours</b>

SPRING 2		
CVE 221/L	Geomatics & Laboratory	3 Credit Hours
CTI 4XX	CTI Capstone	4 Credit Hours
CVE 413	Capstone Design II	3 Credit Hours
CVE 4XX	In-Depth Civil Engineering Design Elective	3 Credit Hours
PHY 490	Physics of Sustainability	4 Credit Hours
		<b>17 Credit Hours</b>

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