

**School of Engineering and Engineering Technology**

**ENGINEERING, B.S.  
CIVIL CONCENTRATION (CVE)**

**2017-18**

**SUGGESTED COURSE SEQUENCE**

**First Semester - Fall**

**17 Hours**

___	CHEM	1111	3	General Chemistry I Lab
___	CHEM	1113	1	General Chemistry I
___	ENGL	1013	3	English Composition I
___	ENGR	1513	3	Intro to Engineering Practice I (Fall only)
___	LETU	1101	1	Cornerstones of Life & Learning
___	MATH	1903	3	Calculus I <sup>(1)</sup>
___	THEO	1043	3	Biblical Theology for the Christian Life

**Second Semester - Spring**

**17 Hours**

___	COMM	1113	3	Intro to Speech Communication
___	CVGR	1523	3	Intro to Civil Engineering (Spring only)
___	ENGL	1023	3	English Composition II
___	ENGR	1311	1	Manufacturing Processes Lab
___	MATH	2013	3	Calculus II <sup>(1)</sup>
___	PHYS	2011	1	University Physics I Lab (Spring only)
___	PHYS	2013	3	University Physics I (Spring only)

**Third Semester - Fall**

**17 Hours**

___	CVGR	2023	3	Civil Engineering Materials (Fall only)
___	MATH	2023	3	Calculus III
___	MATH	2301	1	Linear Algebra Lab
___	MATH	2303	3	Linear Algebra
___	MEGR	2013	3	Statics <sup>(1)</sup>
___			4	Science Elective <sup>(2)</sup>

**Fourth Semester - Spring**

**17 Hours**

___	BIBL	1033	3	Biblical Literature
___	CVGR	2113	3	Introduction to Surveying (Spring only)
___	ENGR	2400	0	Sophomore Design Seminar (Spring only)
___	ENGR	2704	4	Project Mgmt, Design & Entrepreneurship
___	MEGR	3323	3	Mechanics of Materials (Spring only)
___			4	Science Elective <sup>(2,3)</sup>

**Fifth Semester - Fall**

**15 Hours**

___	CVGR	3133	3	Principles of Hydraulic Engineering (Fall only)
___	CVGR	3313	3	Structural Analysis (Fall only)
___	CVGR	3713	3	Construction Engineering (Fall only)
___	MATH	2203	3	Differential Equations
___			3	Civic Engagement Elective

**Sixth Semester - Spring**

**17 Hours**

___	BIBL		3	Biblical Engagement Elective
___	CVGR	3414	4	Geotechnical Engineering (Spring only)
___	CVGR	4403	3	Environmental Engineering (Spring only)
___	CVGR		4	Civil Emphasis Area Elective <sup>(4)</sup>
___	MEGR	2023	3	Dynamics <sup>(1)</sup>

**Seventh Semester - Fall**

**16 Hours**

___	CVGR		4	Civil Emphasis Area Elective <sup>(4)</sup>
___	ENGR	4813	3	Senior Design I (Fall only)
___			3	Civic Engagement Elective
___			3	Ingenuity Elective
___			3	Approved Elective <sup>(5,6)</sup>

**Eighth Semester - Spring**

**14 Hours**

___	CVGR	4121	1	Prof. Practice of Civil Engineering (Spring only)
___	CVGR		4	Civil Emphasis Area Elective <sup>(4)</sup>
___	ENGR	4823	3	Senior Design II (Spring only)
___	THEO		3	Theological Engagement Elective
___			3	Approved Elective <sup>(5,6)</sup>

**TOTAL HOURS 130**

1: Minimum grade of 'C' required.

2: Science Electives may be chosen from BIOL 1111/1113, BIOL 3204, CHEM 1121/1123, ENVT 1114, GEOL 1114, PHYS 2021/2023.

3: May be replaced by MATH 3403 plus MATH 4521.

4: See Civil Emphasis Elective groupings below. Student must select and complete all of the courses listed for one of the emphasis areas.

5: Approved 3000+ Science, Math, Engineering course or EEGR 2053. Requires advisor approval.

6: Approved Electives may include 3 hours of approved 2000+ ACCT, BUSI, ECON, or MGMT credit. Requires advisor approval.

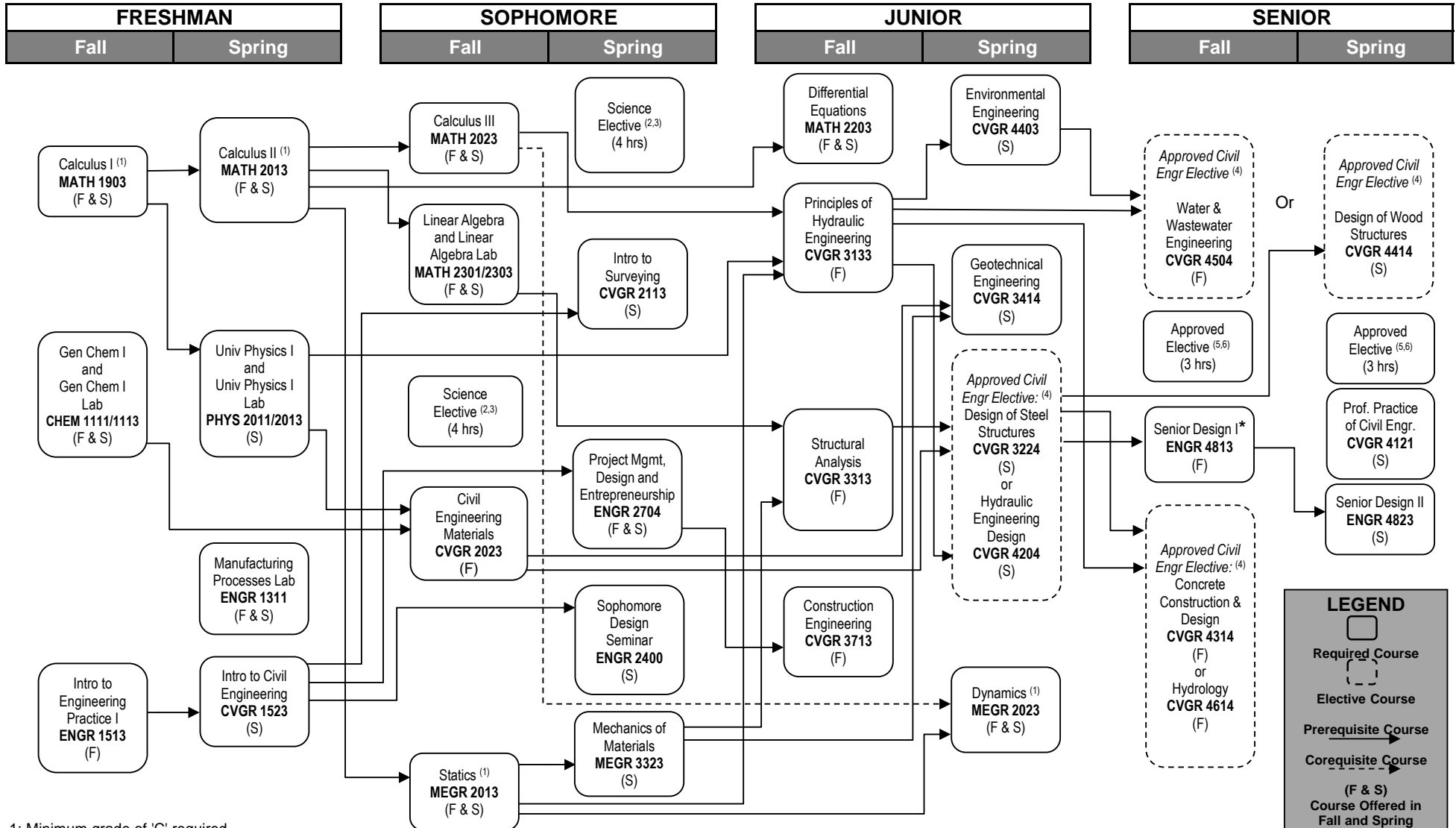
**CIVIL EMPHASIS AREA ELECTIVES**

**STRUCTURAL ENGINEERING EMPHASIS**

CVGR	3224	4	Design of Steel Structures
CVGR	4314	4	Concrete Construction & Design
CVGR	4414	4	Design of Wood Structures
<b>12 TOTAL STRUCTURAL ENGR EMPHASIS</b>			

**WATER RESOURCES ENGINEERING EMPHASIS**

CVGR	4204	4	Hydraulic Engineering Design
CVGR	4504	4	Water and Wastewater Engineering
CVGR	4614	4	Hydrology
<b>12 TOTAL WATER RESOURCES EMPHASIS</b>			



1: Minimum grade of 'C' required.

2: Science Electives may be chosen from BIOL 1111/1113, BIOL 3204, CHEM 1121/1123, ENVT 1114, GEOL 1114, PHYS 2021/2023.

3: May be replaced by MATH 3403 plus MATH 4521.

4: See Civil Emphasis Elective groupings below. Student must select and complete all of the courses listed for one of the emphasis areas.

5: Approved 3000+ Science, Math, Engineering course or EEGR 2053. Requires advisor approval.

6: Approved Electives may include 3 hours of approved 2000+ ACCT, BUSI, ECON, or MGMT credit. Requires advisor approval.

**CIVIL EMPHASIS AREA ELECTIVES**

<b>STRUCTURAL ENGINEERING EMPHASIS</b>				<b>WATER RESOURCES ENGINEERING EMPHASIS</b>			
CVGR	3224	4	Design of Steel Structures	CVGR	4204	4	Hydraulic Engineering Design
CVGR	4314	4	Concrete Construction & Design	CVGR	4504	4	Water and Wastewater Engineering
CVGR	4414	4	Design of Wood Structures	CVGR	4614	4	Hydrology
<b>12 TOTAL STRUCTURAL ENGR EMPHASIS</b>				<b>12 TOTAL WATER RESOURCES EMPHASIS</b>			

**LEGEND**

- Required Course
- Elective Course
- Prerequisite Course
- Corequisite Course
- (F & S) Course Offered in Fall and Spring
- (F) Course Offered in Fall Only
- (S) Course Offered in Spring Only
- Odd = Course Offered in Odd Years Only
- Even = Course Offered

\*Senior standing, completion of junior courses in concentration, and consent of instructor required.