

**School of Engineering and Engineering Technology**

**Civil Engineering, B.S.**

**CIVIL ENGINEERING**

**(CEGR/BSCE)**

**2025-26**

**SUGGESTED COURSE SEQUENCE**

| <b>First Semester - Fall</b> |           |                 |   |  |
|------------------------------|-----------|-----------------|---|--|
|                              |           | <b>17 Hours</b> |   |  |
| _____                        | BIBL 1033 | 3               | Biblical Literature                         |  |
| _____                        | CHEM 1111 | 1               | General Chemistry I Lab                     |  |
| _____                        | CHEM 1113 | 3               | 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>                   |  |

| <b>Second Semester - Spring</b> |           |                 |  |  |
|---------------------------------|-----------|-----------------|--|--|
|                                 |           | <b>17 Hours</b> |  |  |
| _____                           | COSC 1303 | 3               | Computer Science I                     |  |
| _____                           | CEGR 1523 | 3               | Introduction to CEE (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)     |  |

| <b>Third Semester - Fall</b> |           |                 |   |  |
|------------------------------|-----------|-----------------|---|--|
|                              |           | <b>16 Hours</b> |   |  |
| _____                        | CEGR 2013 | 3               | Civil Engineering Materials (Fall only) |  |
| _____                        | COMM 1113 | 3               | Intro to Speech Communication           |  |
| _____                        | MATH 2023 | 3               | Calculus III                            |  |
| _____                        | MEGR 2013 | 3               | Statics <sup>(1)</sup>                  |  |
| _____                        |           | 4               | Science Elective <sup>(2)</sup>         |  |

| <b>Fourth Semester - Spring</b> |           |                 |  |  |
|---------------------------------|-----------|-----------------|--|--|
|                                 |           | <b>17 Hours</b> |  |  |
| _____                           | CEGR 2502 | 2               | CEE Project Management (Spring only)     |  |
| _____                           | ENGR 2400 | 0               | Sophomore Design Seminar (Spring only)   |  |
| _____                           | MATH 2203 | 3               | Differential Equations                   |  |
| _____                           | MEGR 3323 | 3               | Mechanics of Materials <sup>(1)</sup>    |  |
| _____                           | THEO 2043 | 3               | Biblical Theology for the Christian Life |  |
| _____                           |           | 3               | CEE Skills Elective (Spring only)        |  |
| _____                           |           | 3               | Civic Engagement Elective                |  |

| <b>Fifth Semester - Fall</b> |           |                 |  |  |
|------------------------------|-----------|-----------------|--|--|
|                              |           | <b>17 Hours</b> |  |  |
| _____                        | CEGR 3213 | 3               | Hydraulic Analysis (Fall only)             |  |
| _____                        | CEGR 3313 | 3               | Structural Analysis (Fall only)            |  |
| _____                        | EVGR 3002 | 2               | Sustainability and Stewardship (Fall only) |  |
| _____                        | EVGR 3113 | 3               | Environmental Engineering (Fall only)      |  |
| _____                        |           | 3               | Biblical Engagement Elective               |  |
| _____                        |           | 3               | Civic Engagement Elective                  |  |

| <b>Sixth Semester - Spring</b> |           |                 |  |  |
|--------------------------------|-----------|-----------------|--|--|
|                                |           | <b>16 Hours</b> |  |  |
| _____                          | CEGR 3913 | 3               | Geotechnical Engineering (Spring only) |  |
| _____                          | MATH 3403 | 3               | Statistics                             |  |
| _____                          |           | 3               | CEE Skills Elective (Spring only)      |  |
| _____                          |           | 3               | CEE Engineering Science Elective       |  |
| _____                          |           | 4               | CEE Design Elective                    |  |

| <b>Seventh Semester - Fall</b> |           |                 |   |  |
|--------------------------------|-----------|-----------------|---|--|
|                                |           | <b>14 Hours</b> |   |  |
| _____                          | CEGR 4001 | 1               | Professional Licensing Prep (Fall only) |  |
| _____                          | ENGR 4813 | 3               | Senior Design I (Fall only)             |  |
| _____                          |           | 4               | CEE Design Elective                     |  |
| _____                          |           | 3               | Humanities & Fine Arts Elective         |  |
| _____                          |           | 3               | Math or Science Elective <sup>(3)</sup> |  |

| <b>Eighth Semester - Spring</b> |           |                 |   |  |
|---------------------------------|-----------|-----------------|---|--|
|                                 |           | <b>14 Hours</b> |   |  |
| _____                           | CEGR 4501 | 1               | CEE Professional Practice (Spring only) |  |
| _____                           | ENGR 4823 | 3               | Senior Design II (Spring only)          |  |
| _____                           |           | 3               | CEE Engineering Science Elective        |  |
| _____                           |           | 4               | CEE Design Elective                     |  |
| _____                           |           | 3               | Theological Engagement Elective         |  |

**TOTAL HOURS 128**

1: Minimum grade of 'C' required.

2: See approved electives sheet for list of acceptable 4-hour basic science courses.

3: See approved electives sheet for list of acceptable 3-hour basic science or college-level mathematics courses.

**CEE Design Elective Requirements for Optional Civil Focus Areas**

| <b>STRUCTURAL ENGINEERING FOCUS</b> |      |   |                                  |  |
|-------------------------------------|------|---|----------------------------------|--|
| CEGR                                | 4324 | 4 | Reinforced Concrete Design       |  |
| CEGR                                | 4834 | 4 | Structural Steel Design          |  |
| CEGR                                | 4944 | 4 | Advanced Loading and Wood Design |  |

| <b>WATER RESOURCES ENGINEERING FOCUS</b> |      |   |                             |  |
|--|------|---|-----------------------------|--|
| CEGR                                     | 4224 | 4 | Hydraulic Design            |  |
| EVGR                                     | 4634 | 4 | Water and Wastewater Design |  |
| CEGR                                     | 4744 | 4 | Surface Water Hydrology     |  |

