

# CONSTRUCTION ENGINEERING

Curriculum Guide ~ **Effective Fall 2021** ~ North Dakota State University

(F) Fall only classes - (S) Spring only classes

**Minimum 2.50 CGPA required (external/internal transfer students)**

Name: \_\_\_\_\_ ID #: \_\_\_\_\_ Adviser: \_\_\_\_\_

| FALL SEMESTER          |        |                       |           |    | SPRING SEMESTER        |        |                       |            |    | General Education (Gen Ed) Requirements                |        |      |  |
|------------------------|--------|-----------------------|-----------|----|------------------------|--------|-----------------------|------------|----|--|--------|------|--|
| Course                 | Gen Ed | Title                 | Crdt      | Gr | Course                 | Gen Ed | Title                 | Crdt       | Gr | Category   | Gen Ed | Crdt |  |
| CM&E 111 (F)           |        | Intro to CM&E         | 1         |    | CM&E 212               |        | Const Graphic Comm    | 3          |    | <b>A Humanities/ Fine Arts (6 credits)</b>             |        |      |  |
| CM&E 200               |        | Const Doc & Codes     | 3         |    | MATH 166               |        | Calculus II           | 4          |    |  | A&D    | 3    |  |
| MATH 165               | R      | Calculus I            | 4         |    | ENGL 120               | C      | College Comp II       | 3          |    |  | A      | 3    |  |
| ENGL 110               | C      | College Comp I        | 4         |    | CHEM 122               | S      | Gen Chemistry II      | 3          |    | <b>B Social/ Behavior Sciences (6 credits)</b>         |        |      |  |
| CHEM 121               | S      | Gen Chemistry I       | 3         |    | ME 221                 |        | Engr Mechanics I      | 3          |    | ECON**   | B/G    | 3    |  |
| CHEM 121 L             | L      | Chem I Lab            | 1         |    | ECON**                 | B/G    | Economics             | 3          |    |  | B      | 3    |  |
|                        |        |                       |           |    |                        |        |                       |            |    | <b>D Cultural Diversity</b>                            |        |      |  |
| Semester Total         |        |                       | <b>16</b> |    | Semester Total         |        |                       | <b>19</b>  |    |  | D      |      |  |
| CM&E 204 (F)           |        | Constr Surveying      | 3         |    | CM&E 240 (S)           |        | Constr Fin/Cost       | 3          |    | <b>G Global Perspectives</b>                           |        |      |  |
| Soc. Behav. Elect**    | B      |                       | 3         |    | PHYS 252               | S      | Univ Physics II       | 4          |    | ECON**   | G      |      |  |
| MATH 128               |        | Intro Linear Algebra  | 1         |    | COMM 110               | C      | Fund Public Speak     | 3          |    | <b>L Co-Requisite Lab</b>                              |        |      |  |
| MATH 259               |        | Multivariate Calculus | 3         |    | MATH 266               |        | Diff Equations        | 3          |    |  | L      | 1    |  |
| ME 222                 |        | Eng Mechanics II      | 3         |    | ME 223                 |        | Mech of Materials     | 3          |    | <b>W - Wellness</b>                                    |        |      |  |
| Geol 105 or 106        | S      | Geology               | 3         |    | Wellness               | W      |                       | 2          |    |  | L      | 2    |  |
| Semester Total         |        |                       | <b>16</b> |    | Semester Total         |        |                       | <b>18</b>  |    | <b>KEY</b>   |        |      |  |
| CM&E 305 (F)           |        | Pre-Construct. Mgmt.  | 3         |    | CM&E 301 (S)           |        | Constr Tech & Equip   | 3          |    | <b>General Education Categories:</b>                   |        |      |  |
| CM&E 380 (F)           |        | Constr Estimating     | 3         |    | CM&E 315 (S) or 715*** |        | Specs & Contracts     | 3          |    | <b>A - Humanities/ Fine Arts</b>                       |        |      |  |
| CE 309                 |        | Fluid Mechanics       | 3         |    | CE 303 (S)             |        | CE Materials          | 2          |    | <b>B - Social/ Behavioral Sciences</b>                 |        |      |  |
| CE 316 (F)             |        | Soil Mechanics        | 3         |    | CE 303L (S)            |        | CE Materials Lab      | 1          |    | <b>C - Communications</b>                              |        |      |  |
| STAT 330               | R      | Intro to Statistics   | 3         |    | CE 343 (S)             |        | Structural Analysis   | 4          |    | <b>D - Cultural Diversity # (take as a Humanities)</b> |        |      |  |
|                        |        |                       |           |    | CM&E 405 (S) or 605*** |        | Support Operations    | 3          |    | <b>F - First Year Experience</b>                       |        |      |  |
| Semester Total         |        |                       | <b>15</b> |    | Semester Total         |        |                       | <b>16</b>  |    | <b>G - Global Perspectives</b>                         |        |      |  |
| CM&E 403 (F) or 603*** |        | Scheduling            | 3         |    | CM&E 489               |        | Const Design Capstone | 3          |    | <b>L - Co-Requisite Lab</b>                            |        |      |  |
| 4XX *                  |        | Technical Elective    | 3         |    | 4XX *                  |        | Technical Elective    | 3          |    | <b>R - Quantitative Reasoning</b>                      |        |      |  |
| 4XX *                  |        | Technical Elective    | 3         |    | 4XX *                  |        | Technical Elective    | 3          |    | <b>S - Science &amp; Technology</b>                    |        |      |  |
| ENGL 320 or 321        |        | Writing (Busn/Tech)   | 3         |    | Humanities Elect       | A      |                       | 3          |    | <b>W - Wellness (Minimum 2 credits)</b>                |        |      |  |
| Hum & Diversity        | A&D    |                       | 3         |    | BUSN 431               |        | Business Law          | 3          |    |  |        |      |  |
| ENGR 402               |        | Engr. Ethics/Soc Res  | 1         |    |                        |        |                       |            |    |  |        |      |  |
| Semester Total         |        |                       | <b>16</b> |    | Semester Total         |        |                       | <b>15</b>  |    |  |        |      |  |
| <b>TOTAL CREDITS</b>   |        |                       |           |    |                        |        |                       | <b>131</b> |    |  |        |      |  |

\* Refer to list of Construction Engineering Technical Electives (minimum 12 credits)

\*\*To satisfy the Gen Ed Category B requirements, a student can choose between two options: ECON 105 plus an additional course within Category B OR ECON 201 and ECON 202. Both options satisfy the Gen Ed Category G requirement.

\*\*\* Accelerated Master's (4+1) program will allow students to take up to 9 credits of graduate-level courses that can be used to fulfill both the undergraduate-level and graduate-level curriculum requirements. A separate application of 4+1 program applies.