

Sample Course Schedule

Civil Engineering with Co-op

revised 12-21-05

| Year   |                     | Total ch   | * Tri-C   | Equivalent courses<br>* Lakeland | * Lorain           |          |
|--------|---------------------|--|-----------|----------------------------------|--------------------|----------|
| Year 1 | Fall                |  |           |                                  |                    |          |
|        |                     | ESC 120 Into to Engineering Design                       | 2         |                                  |                    |          |
|        |                     | CHM 261/266 lab General Chemistry I, lab                 | 5         | CHEM 1300/130L                   | CHEM 1500          | CHMY 171 |
|        |                     | MTH 181 Calculus I                                       | 4         | MATH 1610                        | MATH 2500          | MTHM 181 |
|        |                     | ENG 101 English I  | 4         | ENG 1010                         | ENGL 1110 or 1111  | ENGL 161 |
|        |                     | ASC 101 Orientation                                      | 1         |                                  |                    |          |
|        |                     |  | <u>16</u> |                                  |                    |          |
|        |                     | 16   |           |                                  |                    |          |
| Spring |                     |  |           |                                  |                    |          |
|        |                     | PHY 241 University Physics I                             | 5         | PHYS 2310                        | PHYS 2410          | PHYC 251 |
|        |                     | ESC 151 C programming                                    | 3         | ITMP 2670                        | CPET 1100 and 2100 |          |
|        |                     | ENG 102 English II                                       | 3         | ENG 1020 or 2151                 | ENGL 1120 or 1121  | ENGL 162 |
|        |                     | CVE 211 Surveying  | 3         |                                  |                    |          |
|        |                     | CSC 121 Career Orientation Optional (required for co-op) | 1         |                                  |                    |          |
|        | MTH 182 Calculus II | 4  | MATH 1620 | MATH 2600                        | MTHM 182           |          |
|        |                     | <u>19</u>  |           |                                  |                    |          |
|        |                     | 35   |           |                                  |                    |          |
| Summer |                     |  |           |                                  |                    |          |
|        | Work or school      |  |           |                                  |                    |          |
| Year 2 | Fall                |  |           |                                  |                    |          |
|        |                     | MTH 283 Multivariable Calculus                           | 2         | MATH 2310                        | MATH 2700          | MTHM 281 |
|        |                     | ESC 250 Differential Equations for Engineers             | 3         | MATH 2520                        | MATH 2850          | MTHM 283 |
|        |                     | PHY 242 University Physics II                            | 5         | PHYS 2320                        | PHYS 2420          | PHYC 252 |
|        |                     | CVE 212 Surveying Lab                                    | 2         |                                  |                    |          |
|        |                     | ESC 210 Statics  | 3         |                                  |                    |          |
|        |                     | Gen Ed Elective  | 3         |                                  |                    |          |
|        |                     | <u>18</u>  |           |                                  |                    |          |
|        |                     | 53   |           |                                  |                    |          |
| Spring |                     |  |           |                                  |                    |          |
|        |                     | ESC 211 Strength of Materials                            | 3         |                                  |                    |          |
|        |                     | ESC 301 Fluid Mechanics                                  | 3         |                                  |                    |          |
|        |                     | ESC 310 Engr. Statistics and Probability                 | 3         |                                  |                    |          |
|        |                     | ESC 315 or 321 EE Concepts or Thermo.                    | 3         |                                  |                    |          |
|        |                     | ESC 350 Linear Alg. Numer. Meth. Engr.                   | 3         |                                  |                    |          |
|        | Gen Ed Elective     | 3  |           |                                  |                    |          |
|        |                     | <u>18</u>  |           |                                  |                    |          |
|        |                     | 71   |           |                                  |                    |          |
| Summer |                     |  |           |                                  |                    |          |
|        |                     | Co-op or School:<br>CSC 300 or CSC 400                   | 1         |                                  |                    |          |
|        |                     | <u>1</u>   |           |                                  |                    |          |
|        |                     | 1  |           |                                  |                    |          |
| Year 3 | Fall                |  |           |                                  |                    |          |
|        |                     | CVE 310 Strength of Materials Lab                        | 2         |                                  |                    |          |
|        |                     | CVE 312 Structural Analysis I                            | 3         |                                  |                    |          |
|        |                     | CVE 361/362 Hydraulic Engineering, lab                   | 4         |                                  |                    |          |
|        |                     | CVE 371 Environmental Engineering I                      | 3         |                                  |                    |          |
|        |                     | ESC 202 Dynamics   | 3         |                                  |                    |          |
|        |                     | PHL 215 Engineering Ethics (writing)                     | 3         |                                  |                    |          |
|        |                     | <u>18</u>  |           |                                  |                    |          |
|        |                     | 90   |           |                                  |                    |          |
| Spring |                     |  |           |                                  |                    |          |
|        |                     | Co-op or School:<br>CSC 300 or CSC 400                   | 1         |                                  |                    |          |
|        |                     | <u>1</u>   |           |                                  |                    |          |
|        |                     | 1  |           |                                  |                    |          |
| Summer |                     |  |           |                                  |                    |          |
|        |                     | ESC 282 Engr. Economy                                    | 3         |                                  |                    |          |
|        | Gen Ed. Elective    | 3  |           |                                  |                    |          |
|        |                     | <u>6</u>   |           |                                  |                    |          |
|        |                     | 97   |           |                                  |                    |          |
| Year 4 | Fall                |  |           |                                  |                    |          |
|        |                     | Co-op:<br>CSC 300 or CSC 400                             | 1         |                                  |                    |          |
|        |                     | <u>1</u>   |           |                                  |                    |          |
|        |                     | 1  |           |                                  |                    |          |
| Spring |                     |  |           |                                  |                    |          |
|        |                     | CVE 322 Structural Steel Design                          | 3         |                                  |                    |          |
|        |                     | CVE 331/332 Intro. To Geotechnical Engr., lab (writing)  | 5         |                                  |                    |          |
|        |                     | CVE 412 Structural Analysis II                           | 3         |                                  |                    |          |
|        |                     | CVE 473/474 Environmental Engineering II, lab            | 5         |                                  |                    |          |
|        |                     | <u>16</u>  |           |                                  |                    |          |
|        |                     | 114  |           |                                  |                    |          |
| Summer |                     |  |           |                                  |                    |          |
|        |                     | Co-op:<br>CSC 300 or CSC 400                             | 1         |                                  |                    |          |
|        |                     | <u>1</u>   |           |                                  |                    |          |
|        |                     | 1  |           |                                  |                    |          |
| Year 5 | Fall                |  |           |                                  |                    |          |
|        |                     | CVE 422 Reinforced Concrete Design                       | 3         |                                  |                    |          |
|        |                     | CVE 426 Senior Design (writing)                          | 1         |                                  |                    |          |
|        |                     | CVE 429 Foundation Engineering                           | 3         |                                  |                    |          |
|        |                     | CVE Elective   | 3         |                                  |                    |          |
|        |                     | Gen Ed Elective  | 3         |                                  |                    |          |
|        |                     | <u>13</u>  |           |                                  |                    |          |
|        |                     | 128  |           |                                  |                    |          |
| Spring |                     |  |           |                                  |                    |          |
|        |                     | CVE Senior Design (writing)                              | 2         |                                  |                    |          |
|        |                     | CVE 403 Construction Planning and Estimating             | 3         |                                  |                    |          |
|        |                     | CVE 446 Transportation Engineering                       | 3         |                                  |                    |          |
|        |                     | CVE Elective   | 3         |                                  |                    |          |
|        |                     | Gen Ed Elective  | 3         |                                  |                    |          |
|        |                     | <u>14</u>  |           |                                  |                    |          |
|        |                     | 142  |           |                                  |                    |          |

\*All equivalent community college course work must be completed before transferring to CSU. Talk to your advisor for further details.