| Onondaga Community College |   |         | SUNY Polytechnic |  |                         |
|----------------------------|---|---------|------------------|--|-------------------------|
| Engineering Science        |   |         |                  | Civil Engineering  |                         |
| Course #                   | Course Title                                      | Credits | Course #         | Equivalent Course Title  | Credits<br>Accepte<br>d |
| Year One- Fall             |   |         | Year One- Fall   |  |                         |
| ENG 103                    | Freshman Composition                              | 3       | ENG 101          | Freshman Composition   | 3                       |
| MAT 161                    | Calculus 1  | 4       | MAT 151          | Calculus I   | 4                       |
| CHE 171                    | General Chemistry                                 | 3       | CHE 130          | General Chemistry  | 3                       |
| CHE 171L                   | General Chemistry Lab                             | 1       | CHE 130L         | General Chemistry Lab  | 1                       |
| PHY 105                    | Physics 1 - Mechanics                             | 4       | PHY 201          | Calc-Based Physics I   | 4                       |
| Year One-Spring            |   |         |                  |  |                         |
| ENG 104                    | Freshman Composition and Literature               | 3       | HUM 001          | Humanities - General Education Elective                              | 3                       |
| MAT 162                    | Calculus 2  | 4       | MAT 152          | Calculus II  | 4                       |
| PHY 205                    | Physics 2 - E&M                                   | 4       | PHY 202          | Calc-Based Physics II  | 4                       |
| ENS 150                    | Introduction to Engineering                       | 3       | ESC 110          | Introduction to Engineering  | 3                       |
| MET 260                    | Technical Elective - Introduction to CAD          | 4       | ESC 120          | Design tools and process ( <b>possibly, need academic petition</b> ) | 4                       |
| Year Two- Fall             |   |         | 200 120          | Besign tools and process (possibly) need academic period)            |                         |
| MAT 263                    | Calculus 3  | 4       | MAT 253          | Calculus III (Math Elective)   | 4                       |
| PHY 206                    | Physics 3 - Thermo and Waves                      | 4       | PHY 203          | Calc-Based Physics III (Science Elective)                            | 4                       |
| ENS 207                    | Engineering Mechanics - Statics                   | 3       | ESC 210          | Engineering Mechanics - Statics                                      | 3                       |
| COM 210                    | Public Speaking                                   | 3       | COM 200          | Public Speaking (N/A to Program Requirements)                        | 3                       |
| ENS 210                    | Technical Elective - Electrical Circuits Analysis | 4       | ECE 260          | Electrical Circuits (Eng. Elective)                                  | 4                       |
| Year Two- Spring           | reeninear Elective - Electrical Circuits Analysis | 4       | ECE 200          | Electrical Circuits (Elig. Elective)                                 | 4                       |
| MAT 264                    | Differential Equations                            | 4       | MAT 260          | Ordinary Differential Equations and Series Solns                     | 4                       |
| ENS 208                    | Engineering Mechanics - Dynamics                  | 3       | ESC 240          | Engineering Mechanics - Dynamics (Eng. Elective)                     |                         |
| CSC 111                    |   |         | CS 108           |  | 3                       |
| CSCIII                     | Higher Programming Language - Fund of Computing   | 4       | CS 108           | Introduction to Programming (N/A to Program Requirements)            |                         |
| ENG ALA                    | General Education                                 | -       | 500.000          | General Education  | 3                       |
| ENS 212                    | Technical Elective - Mechanics of Materials       | 4       | ESC 230          | Strength of Materials  | 4                       |
| Year Three-Fall            |   |         | CTE 201          | 0 1 <b>T</b>   |                         |
|                            |   |         | CE 301           | Structural Engineering   | 4                       |
|                            |   |         | CE 302           | Transportation Engineering   | 3                       |
|                            |   |         | CE 303           | Environmental Engineering  | 4                       |
|                            |   |         | CE 304           | Geotechnical Engineering   | 3                       |
|                            |   |         | CE 230           | Civil Engineering Materials  | 3                       |
| Year Three-Spring          |   |         |                  |  |                         |
|                            |   |         | CE 335           | Water Resource Engineering   | 3                       |
|                            |   |         |                  | CE Emphasis 1  | 3                       |
|                            |   |         | BIO XXX          | General Ed. Biology  | 4                       |
|                            |   |         | CE 220           | Professionalism  | 2                       |
|                            |   |         | CE 330           | Fluid Mechanics  | 3                       |
| Year Four- Fall            |   |         |                  |  |                         |
|                            |   |         | CE 480           | Capstone Design 1  | 3                       |
|                            |   |         | COM 306          | Upper Division Writing   | 4                       |
|                            |   |         |                  | CE Emphasis 2  | 3                       |
|                            |   |         | CE 210           | Elementary Surveying   | 3                       |
|                            |   |         |                  | Gen Ed Elective  | 4                       |
| Year Four-Spring           |   |         |                  |  |                         |
|                            |   |         | CE 481           | Capstone Design 2  | 3                       |
|                            |   |         |                  | CE Upper Elective  | 3                       |
|                            |   |         |                  | Gen Ed Elective  | 4                       |
|                            |   | 60      |                  | Total Tage for A - 11-1  | <i>c</i> 0              |
|                            |   | 69      |                  | Total Transfer Applied   | 69                      |
|                            | 1   |         |                  | Total Remaining at SUNY POLY   | 59                      |
| 1                          |   |         |                  | Total for Bachelors  | 128                     |
|                            |   |         |                  |  | 1                       |