

# Construction Engineering Technology HCON

## Two Year Certificate

**Program Description:** The two-year Construction Engineering Technology Certificate focuses on software and equipment job skills required for careers in the Heavy Civil and Site Work Construction Industry. The two-year certificate greatly increases placement and career progression opportunities over the baseline one-year certificate. Hands on coursework includes construction law, construction project documentation, construction project controls, construction surveying, construction safety, permitting, construction standards and codes.

| TWO YEAR CERTIFICATE REQUIREMENTS |     |  |           |
|-----------------------------------|-----|--|-----------|
| MATH                              | 101 | Pre-Algebra (Entrance Exam Score)                  | *         |
| COMP                              | 101 | Basic Computer Hardware & OS (Entrance Exam Score) | *         |
| <b>First Quarter</b>              |     |  |           |
| CAD                               | 111 | CAD I - 2D Drawings                                | 5         |
| MATH                              | 111 | Precalculus I - Algebra                            | 5         |
| SURV                              | 131 | Traditional Surveying Equipment                    | 5         |
|                                   |     |  | <b>15</b> |
| <b>Second Quarter</b>             |     |  |           |
| CAD                               | 112 | CAD II - 3D Drawings                               | 5         |
| MATH                              | 111 | Precalculus II - Trigonometry                      | 5         |
| PLAN                              | 123 | Zoning, Permitting, and Government Agencies        | 5         |
|                                   |     |  | <b>15</b> |
| <b>Third Quarter</b>              |     |  |           |
| CAD                               | 113 | CAD III - Customization                            | 5         |
| HCON                              | 121 | Construction Estimation                            | 5         |
| SURV                              | 132 | Robotic and GPS Surveying Equipment                | 5         |
|                                   |     |  | <b>15</b> |
| <b>Fourth Quarter</b>             |     |  |           |
| HCON                              | 201 | Contracts and Construction Law                     | 5         |
| HCON                              | 222 | Earthmoving Fundamentals                           | 5         |
| HCON                              | 231 | Construction Resource Accounting                   | 5         |
|                                   |     |  | <b>15</b> |
| <b>Fifth Quarter</b>              |     |  |           |
| HCON                              | 202 | Construction Project Documentation                 | 5         |
| HCON                              | 221 | Construction Scheduling                            | 5         |
| HCON                              | 232 | Construction Project Controls                      | 5         |
|                                   |     |  | <b>15</b> |
| <b>Sixth Quarter</b>              |     |  |           |
| HCON                              | 203 | Construction Safety                                | 5         |
| HCON                              | 223 | Construction Materials                             | 5         |
| SURV                              | 234 | Construction Surveying                             | 5         |
|                                   |     |  | <b>15</b> |
| <b>Certificate Total =</b>        |     |  | <b>90</b> |