  
1800 Bronson Blvd., Fennimore, WI 53809 | 608.822.3262 | Toll Free: 800.362.3322 | www.swtc.edu

**Construction Electrician Apprenticeship Program**

**Course Curriculum**

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| **Semester 01**   (Tuition: $2,530) | | |
| **Course #** | **Course Title** | **Credits** |
| 50-413-521 | Construction Electrician I | 2 |
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| Credits: 2 Lecture Hours: 72 Students practice basic and electrical safety, choose and properly utilize hand and power tools of the trade, and begin to use the National Electric Code and basic math. | | |
| 50-413-522 | Construction Electrician II | 2 |
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| Credits: 2 Lecture Hours: 72 Students apply basic electrical theory and test equipment, look up and apply the National Electric Code covering devices of the trade beginning with commercial and residential wiring. | | |
| 50-413-523 | Construction Electrician III | 2 |
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| Credits: 2 Lecture Hours: 72 Students apply electrical AC theory while using DC-AC motors to explore grounding, conduit bending, boxes and fitting. | | |
| 50-413-524 | Construction Electrician IV | 2 |
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| Credits: 2 Lecture Hours: 72 Students examine conductor installation, cable traps, conductor termination and splices to be used in the installation of electrical services, circuit breakers and fuses, motor control devices, and electric lighting. | | |
| 50-413-525 | Construction Electrician V | 2 |
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| Credits: 2 Lecture Hours: 72 Students gain knowledge in loading calculations, conductor selection, over current protection, raceways and boxes, wiring devices, and distribution equipment. | | |
| 50-413-526 | Construction Electrician VI | 2 |
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| Credits: 2 Lecture Hours: 72 Students work with distribution system transformers, basic lighting, motor calculations, motor maintenance, motor controls, electricity in HVAC, and hazardous locations. | | |
| 50-413-527 | Construction Electrician VII | 2 |
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| Credits: 2 Lecture Hours: 72 Students gain knowledge in load calculations, commercial/industrial lighting, specialty lighting, standby and emergency systems, and basic electronic theory. | | |
| 50-413-528 | Construction Electrician VIII | 2 |
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| Credits: 2 Lecture Hours: 72 Students work with fire alarm systems, specialty transformers, advanced solid state controls, HVAC controls, welding machinery, heat tracing, and freeze protection. | | |
| 50-413-535 | Construction Safety/Health OSHA | 1 |
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| Credits: 1 Lecture Hours: 36 The students develop a safety consciousness for working on construction sites. This is accomplished by studying the OSHA Code of Federal Regulations for the construction industry. Students gain knowledge through instructor presentations, class discussions, video presentations, and learning exercises. Students receive an OSHA card upon successful completion of this course. | | |
|  |  | **17** |
| **Total Credits: 17** | | |
| **Estimated Total Tuition: $2,530** | | |