

# Construction Technology

Winona Campus

## OVERVIEW

**MSC Southeast's Construction Technology program graduates can look forward to an outstanding job market as the construction industry continues to grow.**

Construction tradesmen and women make up the largest group of building-trade workers. They work quickly, accurately, and efficiently to maximize use of time and materials. With a shortage of these qualified professionals in today's job market, graduates of MSC Southeast's Construction Technology program can expect to find many employment opportunities in Southeast Minnesota and beyond.

At MSC Southeast in Winona, our students gain hands-on skills in the construction lab and on-site in a real-world environment. In addition to gaining experience with the tools, materials, methods, and standard practices of the trade, our students learn:

- Planning, designing, estimating, and blueprint reading
- GPS geosystems, solar, and green building
- Building, finishing, and installing custom cabinets

## MAJORS WITHIN

Construction Technology	AAS	60 credits
Construction Technology	Diploma	37 credits

See back for program plan

## PROGRAM OUTCOMES

1. Produce quality carpentry labor working safely under the direction of a construction foreman.
2. Understand basic carpentry theory and apply the use of hand and power tools of the carpentry trade.
3. Communicate efficiently with the construction company and its employees.
4. Produce adequate math skills to be able to solve math related construction problems on site.

## INSTRUCTOR

Jonathan Powell has been working in the construction trade for almost 20 years. He graduated from Western Technical College in La Crosse in 2001 with a diploma in Wood Technology. Jon worked as a carpenter for three years before becoming a job site superintendent with a large commercial construction company. Jon gained proficiency in large residential construction, commercial office spaces, and restaurants. After 13 years, Jon advanced into a role bidding and managing projects for a large residential contractor, where his main focus was building commercial properties and multi-million dollar custom homes. Jon enjoys all aspects of the building process and has built a solid foundation of knowledge in the construction industry.



## PROGRAM HIGHLIGHTS

- MSC Southeast program has excellent placement history
- There is a huge demand for quality trades men and women
- Learn new technologies such as geosystems, solar, and geothermal
- Curriculum integrates BPI standards for energy efficiency
- Work hands-on with non-profit organizations to better the community
- Opportunities are almost endless -- you can take your training in several different directions.

## CAREER OPPORTUNITIES

Commercial & Residential Carpentry  
 Construction Management  
 Small Business Owner  
 Cabinet Making  
 Concrete Finisher  
 Insulator  
 Lumberyard

## JOB PLACEMENT

100%

## PROGRAM COSTS - estimated cost including tuition, books and supplies

Construction Technology - AAS  
 \$13,349

Construction Technology - Diploma  
 \$8,514

[www.southeastmn.edu](http://www.southeastmn.edu)

# Construction Technology

## Sample Full-time Program Plan

### Construction Technologies - AAS

Course No.	Course Name	Credits
<b>First Semester (Fall)</b>		
CARP 1100	Cabinetry 1	2
CARP 1105	Residential Construction 1	2
CARP 1110	Concrete Construction	2
CARP 1115	Emerging Construction Technologies	2
CARP 1120	Architectural Drawings	1
CARP 1125	Carpentry Lab	5
MATH 1230	Introduction to Statistics	3
WELD 1455	Welding for Diesel Maintenance	3
<b>Semester total</b>		<b>20</b>

### Second Semester (Spring)

CARP 1200	Cabinetry 2	3
CARP 1205	Residential Construction 2	1
CARP 1210	Commercial Construction 1	1
CARP 1215	Construction Estimating	2
CARP 1220	Architectural Drawings 2	1
CARP 1225	Carpentry Lab 2	4
ENGL 1215	College Writing 1 <i>or</i>	
COMM 1228	Interpersonal Communications	3
TRDR 1300	Straight Truck Proficiency	2
<b>Semester total</b>		<b>17</b>

### Third Semester (Fall)

CARP2110	Commercial Construction 2	1
CARP2105	Residential Construction 3	1
ECON1405	Personal Finance	3
SPAN1230	Intro to Hispanic Culture	3
<b>Semester total</b>		<b>8</b>

### Fourth Semester (Spring)

Any elective		1
CARP2210	Commercial Construction 3	2
CARP2215	Emerging Construction Technologies 2	2
BIOL1120	Environmental Science <i>or</i>	
CHEM1122	Environmental Chemistry	3
CARP2230	Carpentry Internship	7
<b>Semester total</b>		<b>15</b>

**Total Required Credits - 60**

### Construction Technologies - Diploma

Course No.	Course Name	Credits
<b>First Semester (Fall)</b>		
CARP 1100	Cabinetry 1	2
CARP 1105	Residential Construction 1	2
CARP 1110	Concrete Construction	2
CARP 1115	Emerging Construction Technologies	2
CARP 1120	Architectural Drawings	1
CARP 1125	Carpentry Lab	5
MATH 1015	Geometry	2
WELD 1455	Welding for Diesel Maintenance	3
<b>Semester total</b>		<b>19</b>

### Second Semester (Spring)

CARP 1200	Cabinetry 2	3
CARP 1205	Residential Construction 2	1
CARP 1210	Commercial Construction 1	1
CARP 1215	Construction Estimating	2
CARP 1220	Architectural Drawings 2	1
CARP 1225	Carpentry Lab 2	4
ENGL 1215	College Writing 1 <i>or</i>	
COMM 1228	Interpersonal Communications	3
TRDR 1300	Straight Truck Proficiency	2
COMP 1135	Spreadsheet Applications	
<b>Semester total</b>		<b>18</b>

**Total Required Credits - 37**