

# Mitchell Technical Institute Articulation

Articulation is a cooperative effort between South Dakota's high schools, the Department of Education's Office of Curriculum, Career and Technical Education (OCCTE), and technical institutes. It links high schools with certificate, diploma, and associate degree programs and provides students with an opportunity to receive credit for skills previously learned. The courses listed below in the Science, Technology, Engineering & Mathematics career cluster are currently articulated from OCCTE approved programs to the Architectural Design & Building Construction, Electrical Construction & Maintenance, Heating & Cooling Technology, Power Line Construction & Maintenance, Propane & Natural Gas Technologies, Satellite Communications, Automation Controls/SCADA, Telecommunications, Utilities Technology, Utilities Heating & Cooling Technology, and Wind Turbine Technology programs at Mitchell Technical Institute.

## Articulation Guidelines

1. To receive articulated credit, the student must have completed the high school course within the last three years.
2. A minimum of a "B" in the course(s) to be articulated is required.
3. Tuition is not charged for the articulated credit(s).
4. Articulated courses will be honored by all post-secondary institutes for those course(s) that have common course names and numbers.
5. If the curriculum of the technical institute course changes, the terms of the agreement may also change.
6. All articulation agreements between secondary schools and the technical institutes reflect only the transfer ability of credit between these agencies and not with state universities.

## ***Science, Technology, Engineering & Mathematics***

### High School STEM Courses

21107 Computer Aided Drafting (CAD)  
21106 Technical Drafting  
21106 Technical Drafting

### High School STEM Courses

17106 Electronics  
21009 Mechatronics/Robotics

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### MTI Architecture Design & Building Construction Courses

AD 152 – Architectural Drafting Lab II (1 of 4 credits)  
AD 101 – Principles of Drafting I (1 of 3 credits)  
AD 151 – Principles of Drafting Lab I (1 of 4 credits)

### MTI Automation Controls/SCADA Courses

EC 121 – DC/AC Circuit (1 of 3 credits)  
SD 270 – SCADA Testing & Control Lab (1 of 7 credits)

### MTI Electrical Construction & Maintenance Courses

ECM 101 – Electrical Fundamentals (1 of 4 credits)  
ECM 231 – Electrical Circuits (1 of 3 credits)  
ECM 101 – Electrical Fundamentals (1 of 4 credits)  
ECM 252 – Industrial Controls (1 of 3 credits)

### MTI Heating & Cooling Technology Courses

HV 101 – Electrical Fundamentals (1 of 3 credits)  
HV 142 – HV Controls & Heat Pumps (1 of 3 credits)

### MTI Power Line Construction & Maintenance Courses

PL 111 – Characteristics of DC/AC (1 of 4 credits)

### MTI Propane & Natural Gas Technologies Courses

NG 110 – Gas Operations & Maintenance Lab (1 of 4 credits)  
NG 110 – Gas Operations & Maintenance Lab (1 of 4 credits)

### MTI Satellite Communications Courses

EC 121 – DC/AC Circuit (1 of 3 credits)

### MTI Telecommunications Courses

EC 121 – DC/AC Circuit (1 of 3 credits)

### MTI Utilities Technology Courses

PL 111 – Characteristics of DC/AC (1 of 4 credits)  
NG 110 – Gas Operations & Maintenance Lab (1 of 4 credits)  
NG 110 – Gas Operations & Maintenance Lab (1 of 4 credits)

### MTI Utilities Heating & Cooling Technology Courses

HV 101 – Electrical Fundamentals (1 of 3 credits)  
HV 142 – HV Controls & Heat Pumps (1 of 3 credits)  
NG 110 – Gas Operations & Maintenance Lab (1 of 4 credits)  
NG 110 – Gas Operations & Maintenance Lab (1 of 4 credits)

### MTI Wind Turbine Technology Courses

WTT 105 – DC/AC Circuits (1 of 4 credits)  
WTT 120 – Industrial Motor Controls (1 of 4 credits)

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Questions or clarifications? Please contact Scott Fossum, Central Area Tech Prep Coordinator. 605-995-3072;  
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