



Name \_\_\_\_\_

# Architecture & Construction Career Cluster

Pathway	OCCUPATIONS RELATING TO THIS CAREER CLUSTER
<b>Construction</b>	Carpenter • Drywall Installer • Painter • Equipment and Materials Manager • Electrician • Plumber • Specialty Contractor • Project Inspector • Construction Engineer
<b>Design/Pre-Construction</b>	Building Code Official • Architect • Cost Estimator • Specification Writer • Architectural and Civil Drafting Technician • Regional and Urban Planner
<b>Maintenance/Operations</b>	Maintenance Scheduler • Construction Engineer • Estimator • System Installer • Subcontractor • Hazardous Material Remover • Security and Fire Alarm System Manager

HIGH SCHOOL COURSE REQUIREMENTS				
English	Math	Science	Social Studies	Physical Education
Four units required to graduate; including literature, composition, and speech.	Three units required to graduate	Three units required to graduate.	Three units required to graduate.	One unit required to graduate.
Choices may include:	Choices may include:	Required Units:	Required Units:	Required Units:
<input type="checkbox"/> English 9      05071	<input type="checkbox"/> Algebra I      11031	<input type="checkbox"/> Physical Science      13030	<input type="checkbox"/> U.S. History      15085	<input type="checkbox"/> Physical Education 1 unit      08030
<input type="checkbox"/> English 10      05072	<input type="checkbox"/> Geometry      11120	<input type="checkbox"/> Biology      13020	<input type="checkbox"/> American Government ½ unit <b>AND</b> 15111	<b>OR</b>
<input type="checkbox"/> English 11      05073	<input type="checkbox"/> Advanced Algebra      11032	<input type="checkbox"/> One additional unit of Science	<input type="checkbox"/> Economics ½ unit      15060	<input type="checkbox"/> Physical Education ½ unit <b>AND</b> 08030
<input type="checkbox"/> English 12      05074		<b>OR</b>	<b>OR</b>	<input type="checkbox"/> Health ½ unit      18010
		<input type="checkbox"/> Biology      13020	<input type="checkbox"/> Problems of Democracy 1 unit      15201	
		<input type="checkbox"/> Chemistry      13031	<b>Additional units may include:</b>	
		<input type="checkbox"/> Physics      13042	<input type="checkbox"/> Civics	
			<input type="checkbox"/> Geography	
			<input type="checkbox"/> Psychology	
			<input type="checkbox"/> World History	

Career & Technical Education Electives		Extended Learning Opportunities	
Three units of foreign or Native American language, fine arts, or career and technical education are required to graduate.			
Trades, Industry and Technical Education	Family & Consumer Sciences Education	School-Based:	Community Based:
<input type="checkbox"/> Construction Technology I      17100	<input type="checkbox"/> Housing/Living Environments      09133	<input type="checkbox"/> Skills USA	<input type="checkbox"/> Mentorship
<input type="checkbox"/> Construction Technology II      17117		<input type="checkbox"/> TSA	<input type="checkbox"/> Volunteer
<input type="checkbox"/> Residential Plumbing      17120	<b>Technology &amp; Engineering Education</b>	<input type="checkbox"/> FFA	<input type="checkbox"/> Part-time Employment
<input type="checkbox"/> Electrical Technology      17125	<input type="checkbox"/> Construction Technology      10111	<input type="checkbox"/> FCCLA	<input type="checkbox"/> Service Learning Project
<input type="checkbox"/> Facilities Maintenance I      17110	<input type="checkbox"/> Design/Drafting      10259	<input type="checkbox"/> FBLA	<input type="checkbox"/> Job Shadow
<input type="checkbox"/> Facilities Maintenance II      17118	<input type="checkbox"/> PLTW Civil Engineering and Architecture      10514	<input type="checkbox"/> DECA	<input type="checkbox"/> Internship
<input type="checkbox"/> Heating, Ventilating and Air Conditioning      17112	<input type="checkbox"/> PLTW Introduction to Engineering Design      10511	<input type="checkbox"/> Career Research	
<input type="checkbox"/> Sheet Metal Technology      17115	<input type="checkbox"/> Advanced Design Applications      10338	<input type="checkbox"/> Cooperative Work Experience	
<input type="checkbox"/> Drafting Technology I      17130			
<input type="checkbox"/> Drafting Technology II      17131			
<input type="checkbox"/> PLTW – Introduction to Engineering Design      10511			
<input type="checkbox"/> Architecture & Construction Cluster      37020			

### North Dakota Architecture & Construction Related Postsecondary Programs

Pathway	Certificate or Associate's Degree	Bachelor's Degree	Master's Degree or More
<b>Construction</b>	<input type="checkbox"/> Building Construction Technology (BJCC, NDSCS, TMCC) <input type="checkbox"/> Building Trades (SBC) <input type="checkbox"/> Carpentry (BSC, BJCC, CCCC) <input type="checkbox"/> Concrete Technology (TMCC) <input type="checkbox"/> Construction Management/Technology (CCCC, NDSCS, NHSC) <input type="checkbox"/> Electrical Technology (NDSCS, SBC, TMCC) <input type="checkbox"/> Framing (SBC) <input type="checkbox"/> Heating, Ventilation & Air Conditioning (BSC, NDSCS, TMCC) <input type="checkbox"/> Interior Construction (SBC) <input type="checkbox"/> Lineworker (Electrical) (BSC) <input type="checkbox"/> Plumbing (NDSCS) <input type="checkbox"/> Residential Electric (TMCC)	<input type="checkbox"/> Construction Engineering (NDSU) <input type="checkbox"/> Construction Management (NDSU, UM)	<input type="checkbox"/> Construction Management (NDSU)
<b>Design/Pre-Construction</b>	<input type="checkbox"/> Architectural Drafting and Estimating Technology (NDSCS) <input type="checkbox"/> Geomatics (Land Surveying) (BSC) <input type="checkbox"/> Land Surveying and Civil Engineering Technology (NDSCS)	<input type="checkbox"/> Architecture (NDSU) <input type="checkbox"/> Civil Engineering (NDSU) <input type="checkbox"/> Construction Engineering (NDSU) <input type="checkbox"/> Landscape Architecture (NDSU)	<input type="checkbox"/> Architecture (NDSU) <input type="checkbox"/> Civil Engineering (NDSU)
<b>Maintenance/Operations</b>	<input type="checkbox"/> Mechanical Systems (NDSCS) <input type="checkbox"/> Mechanical Maintenance Technology (BSC)		

### North Dakota Postsecondary Institutions Offering Architecture & Construction Related Programs

<b>BSC</b>	Bismarck State College <a href="http://www.bismarckstate.edu">www.bismarckstate.edu</a>	<b>NDSU</b>	ND State University <a href="http://www.ndsu.edu">www.ndsu.edu</a>
<b>BJCC</b>	Burdick Job Corps Center <a href="http://quentinburdick.jobcorps.gov">http://quentinburdick.jobcorps.gov</a>	<b>NHSC</b>	Nueta Hidatsa Sahnish College <a href="http://nhsc.edu">http://nhsc.edu</a>
<b>CCCC</b>	Cankdeska Cikana Community College <a href="http://www.littlehoop.edu">www.littlehoop.edu</a>	<b>SBC</b>	Sitting Bull College <a href="http://www.sittingbull.edu">www.sittingbull.edu</a>
<b>NDSCS</b>	ND State College of Science <a href="http://www.ndscs.edu">www.ndscs.edu</a>	<b>TMCC</b>	Turtle Mountain Community College <a href="http://www.tm.edu">www.tm.edu</a>
		<b>UM</b>	University of Mary <a href="http://www.umary.edu">www.umary.edu</a>