



Architecture & Construction Career Cluster

Pathway	OCCUPATIONS RELATING TO THIS CAREER CLUSTER
Construction	Carpenter • Drywall Installer • Painter • Equipment and Materials Manager • Electrician • Plumber • Specialty Contractor • Project Inspector • Construction Engineer
Design/Pre-Construction	Building Code Official • Interior Designer • Architect • Surveying and Mapping Technician • Specification Writer • Drafter • Regional and Urban Planner
Maintenance/Operations	Code Official • 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 AND 15111	OR
<input type="checkbox"/> English 11 05073	<input type="checkbox"/> Advanced Algebra 11032		<input type="checkbox"/> Economics ½ unit 15060	<input type="checkbox"/> Physical Education ½ unit AND 08030
<input type="checkbox"/> English 12 05074		Additional units may include:	OR	<input type="checkbox"/> Health ½ unit 18010
		<input type="checkbox"/> Botany	<input type="checkbox"/> Problems of Democracy 1 unit 15201	
		<input type="checkbox"/> Chemistry	Additional units may include:	
		<input type="checkbox"/> Environmental Science	<input type="checkbox"/> Civics	
		<input type="checkbox"/> Physics	<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	Technology & Engineering Education	<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
Construction	<input type="checkbox"/> Building Construction Technology (NDSCS, TMCC) <input type="checkbox"/> Building Trades (SBC) <input type="checkbox"/> Carpentry (BSC, BJCC, CCCC) <input type="checkbox"/> Concrete (SBC, 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, CCCC, NDSCS, TMCC) <input type="checkbox"/> Interior Construction (SBC) <input type="checkbox"/> Land Surveying and Civil Engineering Technology (NDSCS) <input type="checkbox"/> Plumbing (NDSCS) <input type="checkbox"/> Sustainable Construction Technology (BSC)	<input type="checkbox"/> Construction Engineering (NDSU) <input type="checkbox"/> Construction Management (NDSU)	<input type="checkbox"/> Construction Management (NDSU)
Design/Pre-Construction	<input type="checkbox"/> Architectural Drafting and Estimating Technology (NDSCS) <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)
Maintenance/Operations	<input type="checkbox"/> Facilities Maintenance (BJCC) <input type="checkbox"/> Mechanical Systems (NDSCS) <input type="checkbox"/> Mechanical Maintenance Technology (BSC)		

North Dakota Postsecondary Institutions Offering Architecture & Construction Related Programs

BSC Bismarck State College www.bismarckstate.edu	NDSU ND State University www.ndsu.edu
BJCC Burdick Job Corps Center http://quentinnburdick.jobcorps.gov	NHSC Nueta Hidatsa Sahnish College http://nhsc.edu
CCCC Cankdeska Cikana Community College www.littlehoop.edu	SBC Sitting Bull College www.sittingbull.edu
NDSCS ND State College of Science www.ndscs.edu	TMCC Turtle Mountain Community College www.tm.edu