



# Architecture & Construction Career Cluster

## PLAN OF STUDY

<http://pages.minot.k12.nd.us/votech/cte.htm>

<https://careertech.org/>

Name \_\_\_\_\_

School \_\_\_\_\_

Date \_\_\_\_\_



SAMPLE OCCUPATIONS RELATING TO THIS CAREER CLUSTER	
Pathway	Occupations
DESIGN-PRE-CONSTRUCTION	Estimator • Architectural Draftsman • Architect • Engineer • Safety Professional • Landscape Architect • Civil Engineer
CONSTRUCTION	Carpenter • Drywall Installer • Painter • Equipment Operator • Electrician • Plumber • Heating/Ventilation/Air Conditioning • Roofer
MAINTENANCE/OPERATIONS	Building Maintenance Technician • Painter • Interior Designer

### MINOT HIGH SCHOOL - SUGGESTED COURSE OF HIGH SCHOOL STUDY

It is suggested that students consider appropriate dual credit, articulation, or advanced placement opportunities for postsecondary credit.

Language Arts (four credits required to graduate)	Math (three credits required to graduate)	Science (three credits required to graduate)	Social Studies (three credits required to graduate)	Physical Education (two credits required to graduate)	Minot Public Schools Career & Technical Education and Other Electives (a total of three credits must be earned in foreign language, fine arts, or career and technical education – required to graduate)	Additional Suggested Learning Opportunities
<input type="checkbox"/> Grade 9 Lang Arts* <input type="checkbox"/> Grade 10 Lang Arts* <input type="checkbox"/> Grade 11 Lang Arts* <input type="checkbox"/> Speech or Debate* <input type="checkbox"/> Read Improvement <input type="checkbox"/> Basic Writing <input type="checkbox"/> Creative Writing <input type="checkbox"/> Humanities <input type="checkbox"/> Media Literacy <input type="checkbox"/> AP English 11 & 12 <input type="checkbox"/> College Composition (D) <input type="checkbox"/> College Speech (D)	<input type="checkbox"/> Intro to Algebra <input type="checkbox"/> Intro to Pre-Algebra <input type="checkbox"/> Conclusions to Pre-Algebra <input type="checkbox"/> Consumer Math I & II <input type="checkbox"/> Algebra* <input type="checkbox"/> Geometry <input type="checkbox"/> Advanced Algebra <input type="checkbox"/> Advanced Math <input type="checkbox"/> Pre-Calculus (D) <input type="checkbox"/> College Algebra (D) <input type="checkbox"/> AP Calculus Prep <input type="checkbox"/> AP Calculus <input type="checkbox"/> Probability & Statistics (D) <input type="checkbox"/> Mathematics Applications  For a complete listing of course offerings/electives at Minot High School, go to our Registration Guide at: <a href="http://pages.minot.k12.nd.us/votech/File/image/RegGuide.pdf">http://pages.minot.k12.nd.us/votech/File/image/RegGuide.pdf</a>	<input type="checkbox"/> Physical Science* <input type="checkbox"/> Biology* <input type="checkbox"/> Physics <input type="checkbox"/> Advanced Physics <input type="checkbox"/> Chemistry <input type="checkbox"/> AP Chemistry <input type="checkbox"/> Geology <input type="checkbox"/> Environmental Science	<input type="checkbox"/> World History* <input type="checkbox"/> U.S. History* <input type="checkbox"/> American Government* <input type="checkbox"/> Sociology <input type="checkbox"/> Economics* <input type="checkbox"/> Criminal Law	<input type="checkbox"/> Physical Education <input type="checkbox"/> Health  *Required Courses (D) – Dual Credit  22 Credits are Required to graduate from Minot High School	<input type="checkbox"/> Construct It <input type="checkbox"/> Construction Technology I <input type="checkbox"/> Construction Technology II <input type="checkbox"/> Exploring Technology <input type="checkbox"/> Impacts of Technology <input type="checkbox"/> Principals of Engineering & Design <input type="checkbox"/> Agriculture & Medical Engineering <input type="checkbox"/> Communications & Entertainment Engineering <input type="checkbox"/> Advanced Engineering <input type="checkbox"/> Energy & Transportation <input type="checkbox"/> Invent It <input type="checkbox"/> How Stuff Works <input type="checkbox"/> Skills for Living <input type="checkbox"/> Introduction to Computer Applications <input type="checkbox"/> World of Work <input type="checkbox"/> Foreign Language <input type="checkbox"/> Current Technologies	<b>School-Based:</b> <input type="checkbox"/> SkillsUSA <input type="checkbox"/> TSA <input type="checkbox"/> Career Research <input type="checkbox"/> Cooperative Education <input type="checkbox"/> Internship <input type="checkbox"/> Job Shadowing <input type="checkbox"/> Service Learning Project  <b>Community-Based:</b> <input type="checkbox"/> Mentorship <input type="checkbox"/> Volunteer <input type="checkbox"/> Part-time Employment

### NORTH DAKOTA APPRENTICESHIP OPPORTUNITIES AND POSTSECONDARY PROGRAMS RELATED TO THIS CAREER CLUSTER

Pathway	Apprenticeship Opportunities	Associate Degree or Less	Bachelors Degree	Masters Degree or More
DESIGN-PRE-CONSTRUCTION		<input type="checkbox"/> Architectural Drafting & Estimating Technology (NDSCS) <input type="checkbox"/> Land Surveying & Civil Engineering Technology (NDSCS) <input type="checkbox"/> Engineering Technology (BSC)	<input type="checkbox"/> Engineer (NDSU, UND) <input type="checkbox"/> Engineering (NDSU, UND) <input type="checkbox"/> Safety Professional (UND) <input type="checkbox"/> Landscape Architecture (NDSU) <input type="checkbox"/> Civil Engineering (NDSU, UND)	<input type="checkbox"/> Architect (NDSU) <input type="checkbox"/> Structural Engineer (NDSU, UND) <input type="checkbox"/> Civil Engineering (NDSU, UND)
CONSTRUCTION	<input type="checkbox"/> Bricklayer (Construction) <input type="checkbox"/> Cabinetmaker <input type="checkbox"/> Carpenter <input type="checkbox"/> Electrician <input type="checkbox"/> Gas-Main Fitter <input type="checkbox"/> Insulation Worker <input type="checkbox"/> Ornamental Iron Worker <input type="checkbox"/> Plumber & Pipe Fitter <input type="checkbox"/> Sheet Metal Worker <input type="checkbox"/> Welder	<input type="checkbox"/> Building Construction Technology (BJCC, FBCC, NDSCS, SBC, TMCC, UTTC) <input type="checkbox"/> Carpentry (BJCC, BSC, CCCC) <input type="checkbox"/> Construction Management Technology (NDSCS) <input type="checkbox"/> Electrical Technology (BSC, NDSCS) <input type="checkbox"/> Plumbing (BJCC, NDSCS) <input type="checkbox"/> Heating Ventilation & Air Conditioning (BSC, NDSCS) <input type="checkbox"/> Architectural Drafting & Estimating (NDSCS) <input type="checkbox"/> Mechanical Systems (NDSCS) <input type="checkbox"/> Welder (BSC, FBCC, NDSCS, TMCC)	<input type="checkbox"/> Construction Management (NDSU)	
MAINTENANCE/OPERATIONS	For more about Apprenticeships: <a href="#">Apprenticeship Opportunities</a>	<input type="checkbox"/> Building Maintenance Technician (BJCC)	<input type="checkbox"/> Interior Design (NDSU)	