

Jobs in this career cluster focus on designing, building, and maintaining homes, industrial buildings, streets, and bridges. Many skilled tradespeople pursue career and technical education (CTE) in addition to on-the-job training, though education requirements vary. People who are passionate about design and home improvement tend to choose these careers.

INTERESTS & ABILITIES

Activities that describe what I like to do:

- ☐ Read and follow blueprints and/or instructions
- ☐ Picture in my mind what a finished product looks like

Personal qualities that describe me:

- ☐ Curious
- ☐ Good at following directions
- ☐ Pay attention to detail
- ☐ Interdisciplinary interests
- ☐ Good at visualizing possibilities Patient and persistent

Work with my hands.

- ☐ Perform work that requires precise results
- ☐ Solve technical problems
- ☐ Visit and learn from beautiful, historic, or interesting buildings
- ☐ Follow logical, step-by-step procedures

School subjects that I like:

- ☐ Math
- ☐ Drafting
- ☐ Physical Sciences
- ☐ Construction Trades
- ☐ Electrical Trades/Heat, Air Conditioning and
- ☐ Refrigeration/Technical Education

PATHWAYS IN THIS CLUSTER

- Design/Pre-Construction
- Construction
- Maintenance/Operations



**Sun Prairie Area
School District**

Futures depend on us...every child, every day.

Architecture & Construction

Potential Career Options with Post Secondary Education Requirements

CAREER OPTIONS FROM HIGH SCHOOL *On-the-job training and/or minimal experience*

- Construction Laborer
- Bricklayer apprentice
- Concrete Installer apprentice
- Masonry
- Highway Maintenance Worker
- Roofer
- Tile Setter
- Iron Worker
- Grading & Leveling Machine Operator
- Heavy Equipment Operator
- Groundskeeper and Gardener
- Heating and Air Conditioning

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE *Technical college/ Junior College*

- HVAC Technician
- Architectural Drafter
- Interior Design
- Bricklayer
- Civil Engineering Technician
- Carpenter
- Cement Mason
- Landscaper
- Drywall Installer
- Electrician
- Pipefitter
- Surveying
- Tile Setter
- Electrical Engineering Technician
- Plasterer
- Plumber
- Construction

BACHELORS, PRE-PROFESSIONAL OR HIGHER DEGREE *4 Year Colleges/University and Selective 4 Year Colleges/University*

- Architect
- Building Contractor
- C.A.D. Designer
- Project manager
- Civil Engineer
- Cost Estimator
- Electrical Engineer
- Construction Management
- Grounds Supervisor
- Interior Design
- Landscape Architect
- Environmental Design



CAREER CLUSTER COURSE PATHWAYS

SPASD Department Offerings: Architecture and Construction Electives Blueprints

Introduction	Intermediate	Intermediate	Advanced
BioMedical Engineering			
Exploring Technology Course 8300TED Course Guide p.115	Exploring Engineering Graphics Course 8303TED Course Guide p.115	Biotechnology Work Based Learning / YOUTH APPRENTICESHIP Course: 5831YAP Course Guide p.116	Biomedical Engineering Course 8305TED Course Guide p.116
			*BioTechnology Work Based Learning/YOUTH APPRENTICESHIP Course 5831YAP Course Guide p.26
Manufacturing/Welding			
Exploring Technology Course 8300TED Course Guide p.115	Manufacturing Metals Fabrication I Course 8031TED Course Guide p.124	Manufacturing Metals Fabrication II Course 8032TED Course Guide p.124	*Manufacturing / Welding Work Based Learning / YOUTH APPRENTICESHIP Course: 5815YAP Course Guide p.124
Woodworking			
Exploring Technology Course 8300TED Course Guide p.115	General Woodworking Course 8403TED Course Guide p.120	Cabinetry and Advanced Woodworking Course 8404TED Course Guide p.120	*Construction Work Based Learning / YOUTH APPRENTICESHIP Course: 5822YAP Course Guide p.121
Construction			
Exploring Technology Course 8300TED Course Guide p.115	Construction Skills: Interior Course 8428TED Course Guide p.120	Construction Skills: Exterior Course 8429TED Course Guide p.120	**Home Construction HFH Course 8409TED Semester 1 Course 8410TED Semester 2 Course Guide p.121

			*Construction Work Based Learning / YOUTH APPRENTICESHIP <u>Course: 5822YAP</u> Course Guide p.121
Automotive			
Exploring Technology <u>Course 8300TED</u> Course Guide p.115	**Automotive Technology 1 and 2 Compacted <u>Course: 8851COMPTED</u> Semester 1 <u>Course: 8852COMPTED</u> Semester 2 Course Guide p.122	**Automotive Technology 3 and 4 Compacted <u>Course: 8853COMPTED</u> Semester 1 <u>Course: 8854COMPTED</u> Semester 2 Course Guide p.123	**Advanced Automotive Certification Year Long Course <u>Course 8826TED Semester 1</u> <u>Course 8827TED Semester 2</u> Course Guide p.123
Consumer Auto <u>Course 8806TED</u> Course Guide p.122	Power Mechanics <u>Course 8801TED</u> Course Guide p.122		Transportation Work Based Learning / YOUTH APPRENTICESHIP <u>Course:8840YAP</u> Course Guide p.26
Architecture			
Drawing I <u>Course 7325 ART</u> Course Guide p.41	Architecture <u>Course 7336 ART</u> Course Guide p.39	Digital Media Art 1 <u>Course 7340 ART</u> Course Guide p.43	**Civil Engineering and Architecture (CEA) – Project Lead the Way <u>Course 8311TED Semester 1</u> <u>Course 8312TED Semester 2</u> Course Guide p.117
	3-D Art Course: Art Medals <u>Course 7440ART</u> Course Guide p.39	3-D Art Course: Sculpture <u>Course 7316ART</u> Course Guide p.39	Architecture / Construction Work Based Learning/YOUTH APPRENTICESHIP <u>Course 5822YAP</u> Course Guide p.25
**Introduction to Engineering Design (IED) – Project Lead the Way <u>Course 8307TED</u> Semester 1 <u>Course 8308TED</u> Semester 2 Course Guide p.117	**Principles of Engineering (POE) – Project Lead the Way <u>Course 8309TED Semester 1</u> <u>Course 8310TED Semester 2</u> Course Guide p.117	**Digital Electronics (DE) – Project Lead the Way <u>Course 8313TED</u> Semester 1 <u>Course 8314TED</u> Semester 2 Course Guide p.118	**Engineering Design and Development (EDD) – Project Lead the Way <u>Course 8315TED Semester 1</u> <u>Course 8316TED Semester 2</u> Course Guide p.118
Exploring Technology Course 8300 TED Course Guide p.115		**Civil Engineering and Architecture (CEA) – Project Lead the Way <u>Course 8311TED</u> Semester 1 <u>Course 8312 TED</u> Semester 2 Course Guide p.117	*Engineering Work Based Learning / YOUTH APPRENTICESHIP <u>Course: 5833YAP</u> Course Guide p.117

The course number and the page number (course guide) are included in the chart above.

*Students requesting a Work Based Learning / Youth Apprenticeship course need to request a complete (full) course load. A student's schedule will be changed after the student is accepted into the program and has secured a job in the field. For additional information regarding this program, please contact your College, Career, and Life Readiness Coordinator or School Counselor.

**Year long courses-Need to include both course numbers when requesting your class!

CAREER CLUSTER SUPPORT COURSES

English Comp I
US Government and Politics (AP)
Chemistry/AP Chemistry
Business and Marketing Courses
World Language

Physics I & II (AP)
Algebra 2
Micro-Economics
Statistics (AP)
Environmental Science (AP)

Art Courses
Band/Orchestra Courses
Choir Courses

