



# Architecture and Construction Career Pathway

Education Planning Guide for Middle School and Beyond



This Career Pathway, along with other career planning materials, serves as a guide to assist students in the Auburn School District in developing a relevant middle-to-high school plan that will prepare them for further education and/or employment in the **Skilled and Technical Career Cluster**. The career pathway outlined below can be individualized to meet each learner’s education and career goals. It allows students to earn high school credits while completing coursework in middle school, earn college credits while completing coursework within high school, and apply those credits toward attainment of a college certificate and/or degree. It is important to share and review this plan with a parent/guardian and school counselor.

EDUCATION LEVELS	GRADE	English/ Language Arts	Social Studies	Science	Math	Other Required Courses Other Electives Recommended Electives Learner Activities Leadership Activities	Career & Technical Courses And/or Degree Major Courses	Auburn School District Graduation Requirements	
								<u>Credit Requirements</u> <u>(24.0 credits total):</u>  4.0 credits - English 3.0 credits - Social Studies 3.0 credits – Math 3.0 credits - Science 1.5 credits – Fitness 0.5 credits – Health 2.0 credits – Arts ** 2.0 credits – World Language **  1.0 credits – Career and Technical 4.0 credits - Electives  <u>Additional Requirements:</u>  • High School and Beyond Plan • Culminating Project/Portfolio • Certificate of Academic Achievement or Approved Alternative	
<b>Interest Inventory Administered and Plan of Study Initiated for all Learners</b>									
<b>MS</b>	8	Successfully complete required coursework for 6th, 7th and 8th grade, and these electives →				STEM Robotics STEM Mechatronics 1 and 2 or STEM Construction 1 and 2, STEM Visual Communication			
	<b>SECONDARY</b>	9	Language Arts	(.5) World Studies or AP Human Geography	Science (1.0) Next Gen or Biology	Algebra I	(2.0) Credit from Fine Arts or Course Equivalencies  Minimum of two years of the same world language are required for students planning to enroll at a four-year university	Orientation or Career Choices	<b>Engineering Design 1 &amp; 2</b> <b>Woodworking Design 1 &amp; 2</b>
		10	Language Arts	Global Issues (.5) or AP Euro	Science (1.0) Next Gen or Chemistry	Geometry		(.5) 10th Grade Health	<b>Engineering Design 3 &amp; 4</b> <b>Woodworking Design 3 &amp; 4</b>
		11	American Literature 1, 2	U. S. History or AP U. S. History	Chemistry	Advanced Algebra and Trig		(1.5) Credits From Fitness Courses	<b>Above Courses or Engineering 5 &amp; 6</b> <b>Electronics 1 &amp; 2</b> <b>Woodworking 5 &amp; 6</b>
		<b>College Placement Assessments-Academic/Career Advisement Provided</b>							<b>Drafting Engineering Technology 5, 6 or Woodworking and Design 5 &amp; 6</b>
12	Senior English Electives	Civics (.5) and Elective (.5) or AP American Government (1.0)	Physics or AP Biology or AP Chemistry	AP Statistics or Pre-Calculus					

\*Students who earn a “C” or better in the above (\*) courses may be eligible for college credit. See page 3 for more information. \*\*Credits may be applied in a chosen career pathway.





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<b>POST SECONDARY</b>	<p>The Post-High School program options listed below for this Career Pathway represents just some examples of options available within the Puget Sound area, including programs where agreements for dual credit exist between the college and school district. For other options available related to this program of study, <b>visit your career center or the websites of local colleges.</b></p>	
	<b>Apprenticeship Opportunities</b>	<p>To learn more about apprenticeships in this program, go to: <a href="#">Apprenticeship Registration &amp; Tracking</a>            Examples: Brick Layer, Bridge Carpenter, Cabinet Maker, Construction Equipment Operator, Drywall Finisher, Roofer.</p>
	<b>Earn Certificate and Enter Workforce</b>	<p>To learn more about certificate programs, go to: <a href="#">Renton Technical College</a> , <a href="#">Green River College</a>            Examples: Commercial Building Engineering, Computer Aided Drafting, Construction Management, Engineering Design Technology, Carpentry Technology, Design Drafting Technology.</p>
	<b>Military</b>	<p>To learn more about Military education and training programs, go to: <a href="#">todaysmilitary.com</a> , <a href="#">defense.gov</a></p>
	<b>Associate Degree Transitions</b>	<p>To learn more about Associate degrees, go to: <a href="#">Green River College</a> , <a href="#">Highline College</a>            Examples: Science, Engineering.</p>
	<b>4 year University</b>	<p>To learn more about Bachelor and beyond degrees, go to: <a href="#">University of Washington</a>, <a href="#">Washington State University</a> , <a href="#">Central Washington University</a>            Examples: Engineering, Engineering Technology, Safety and Construction, Construction Management.</p>

Students intending to earn an Associate Degree and transition to a 4-year University can use the below section to list appropriate classes.

COURSE CODE	CREDIT	COURSE NAME	COURSE CODE	CREDIT	COURSE NAME



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The Architecture and Construction Career Pathway prepares students for the highly technical and rewarding careers within engineering, architecture, construction, design, or animation fields. Students learn to develop skills in designing and drafting using the latest technology, including 3-D modeling and computer aided design (CAD).

## Occupational Information

The following represent occupations within this field and their average annual earnings and openings based on data from the Washington State Employment Security Department. For more information about these and other occupations within this field, go to [www.workforceexplorer.com](http://www.workforceexplorer.com)

<u>Occupation</u>	<u>Washington State Projected Openings</u>		<u>Earnings</u>
	<u>2016-2026</u>		
Construction Manager 1	44,800		\$106,292
Civil Engineer 1	32,200		\$84,770
Architect 1	5,500		\$78,470
Drafter 1	14,600		\$54,170
Landscape Architect 4	1600		\$65,760
CAD Drafter	14,600		\$54,170
Architecture and Engineering Managers	9,900		\$137,720
Construction Laborers	180,500		\$38,500

## Post-High School Connections

The following courses within this program of study may be eligible for college credit at several local colleges if students earn a "C" or better:

<u>High School Course</u>	<u>Credits Possible</u>	<u>College</u>	<u>College Course</u>
Woodworking and Design 1	3	Green River Community College	CARP 101.2
Woodworking and Design 2	2	Green River Community College	CARP 102.1
Woodworking and Design 3, 4	3	Green River Community College	CARP 102.2
Woodworking and Design 5, 6	4	Green River Community College	CARP 146
Engineering Design & Architecture 1, 2, 3	5	Highline Community College	DRAFT 224
	17	Green River Community College	DT101, DT110, DT141, DT142
	19	Renton Technical College	DFT101, DFT106, DFT113, DFT121

## Industry Certification Options

Woodwork Career Alliance

## Student Leadership Development



Skills USA serves high school and college students enrolled in training programs in trade, technical and skilled service occupations. Programs include local, state and national competitions in which students demonstrate occupational skills, leadership, teamwork, citizenship, and promotes involvement in community service activities.

## Scholarship Opportunities

For local, state, and national scholarship opportunities, please visit your counseling and/or career center, Career Cruising [www.CareerCruising.com](http://www.CareerCruising.com), WOIS [www.wois.org](http://www.wois.org), [mapyourcareer.org](http://mapyourcareer.org), Fast Web [www.FastWeb.com](http://www.FastWeb.com) or [www.mapyourcareer.com](http://www.mapyourcareer.com).

For more information about this Career Pathway, contact an instructor, a school counselor or a career specialist.

