

## Aerospace Assembly Program of Study



## **Education Planning Guide for Middle School and Beyond**

This program of study, 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 Science, Technology, Engineering and Math career cluster. The program of study 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.

	Grade	English	Social Studies	Science	Math	Health/ Fitness	Arts	Career and Technical	Related Electives	Auburn School District Graduation Requirements
Auburn SD Component of Program of Study	Middle School	Successfully complete required coursework for 6th, 7th and 8th grade and these electives $ imes$					STEM Robotics, STEM Mechatronics 1 and 2 and/or STEM Construction 1 and 2		Credit Requirements (24.0 credits	
		Language Arts	World Studies (.5) or AP Human Geography	Science (1.0) Next Gen or Biology	Algebra I			Power, Energy and Transportation 1 and Advanced*	Orientation or Career Choices	total): 4.0 credits - English 3.0 credits - Social Studies 3.0 credits - Math 3.0 credits - Fitness 0.5 credits - Fitness 0.5 credits - Health 2.0 credits - Arts ** 2.0 credits - Arts ** 1.0 credits - Career and Technical 4.0 credits - Electives Additional Requirements: High School and Beyond Plan • Culminating Project/Portfolio • Certificate of Academic Achievement or Approved Alternative
	10	Language Arts	Global Issues (.5) or AP Euro	Science (1.0) Next Gen or Chemistry	Geometry	10 <sup>th</sup> Grade Health (.5)	2.0 Credit	Electronics 1 and 2* or Welding 1 and 2*	Minimum of two	
		American Literature 1, 2	U. S. History or AP U. S. History	Chemistry	Advanced Algebra and Trig	1.5 Credits From Fitness	from Fine Arts or Course Equivalencies	Aerospace Assembly 1*	years of the same world language are required for students planning to enroll at a four-	
	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	Courses		Aerospace Assembly 2*	year university	

\*Students who earn a "B" or better in these courses may be eligible for college credit. See page 2 for more information. \*\*Credits may be applied in a chosen career pathway

Post - High Program of Study	Apprenticeship Opportunities	Earn a Certificate and Enter the Workforce	Earn an Associate's Degree and transition to a 4-year university or enter the workforce	Earn a 4-year college degree, and then enter the workforce
	To learn more about apprenticeships in this	Renton Technical College	Green River Community College	Central Washington University
	program, go to:	Air Washington	Associate in Science	Aviation
	Apprenticeship Registration & Tracking Aircraft Interiors Assembly Mechanic (1828) Aircraft Mechanic Airframe (1828) Assembly Machinist (173) Composite Manufacturing Specialist (1828) Industrial Electronics Maintenance Technician (154)	Green River Community College Aerospace and Advanced Manufacturing Technology	Highline Community College Engineering	

The Post-High School program options listed above for this Program of Study represent 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, visit your career center or the websites of local college.



# Aerospace Assembly Program of Study

### **Education Planning Guide for Middle School and Beyond**

The Aerospace Assembly program prepares students for the highly technical and rewarding careers within aerospace manufacturing field. Students learn aircraft familiarization, aircraft drawings and work instructions, assembly hand tools, precision measuring and aviation materials and processes.

#### **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 <a href="https://esd.wa.gov/labormarketinfo">https://esd.wa.gov/labormarketinfo</a>

	Washington State Projected Openings	
<u>Occupation</u>	2016-2026	<u>Earnings</u>
Validation Engineers	44,800	\$90,580 yr.
Electronics Engineering Technicians	16,800	\$58,670 yr.
Manufacturing Engineering Technologists	16,800	\$58,670 yr.
Materials Engineer	8,100	\$84,550 yr.
Robotics Technicians	3,200	\$51,220 yr.
Aerospace Engineering and Operations Technician	1,700	\$61,460 yr.

#### **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 "B" or better:

High School Course Welding 1, 2	Credits Possible	College Renton Technical College Green River Community College	College Course WELD 102 WELD 141, WELD 194
Aerospace Assembly 1, 2	15 13	Renton Technical College Green River Community College	MTEC 121, MTEC 123 MFG 101
Electronics 1-2	4	Renton Technical College	CNT 111

#### **Industry Certification Options**

Tooling U

#### 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 <u>www.CareerCruising.com</u>, WOIS <u>www.wois.org</u>, <u>mapyourcareer.org</u> or Fast Web <u>www.FastWeb.com</u> or <u>www.mapyourcareer.org</u>.

For more information about this Program of Study, contact an instructor, a school counselor or a career specialist.