

# Aerospace Manufacturing Pathway



The Aerospace Manufacturing pathway is a great program for students interested in high demand, high wage jobs in the Manufacturing industry. **Students who complete 2 credits in this pathway will meet state ELA and Math testing requirements, and...**

- Obtain Core Plus certification using the Boeing Company's manufacturing curriculum.
- Have opportunity to interview with Boeing for entry-level jobs and internships.
- Earn college credits which can be applied directly into partner college programs.
- Meet English, 3<sup>rd</sup> Year Math and Science requirements through their Pathway courses.

## This CTE Pathway is a great fit for students who...

- ✓ Enjoy projects where they work with their hands and use tools.
- ✓ Enjoy learning by designing, assembling and fixing things.
- ✓ Feel comfortable in a shop environment.
- ✓ Have an attention to detail and precision in their work.
- ✓ Are interested in getting a manufacturing job right after high school or continuing training in a related field.

Start Your Pathway with 2 or more credits of Pathway courses

Then, After You Have Finished High School...

Finally, Begin Your Career!

Sample Plan for Career and College Readiness in this Pathway	
<b>Grade 9</b>	
English	
Math	
Science	
World History 9	Health
PE	Art
Elective	Elective
<b>Grade 10</b>	
English	
Math	
Social Studies	
Science	
PE	Art
<b>Manufacturing Innovations (If Available)</b>	
<b>Grade 11</b>	
English	
Math	
US History	
Science	
<b>Applied Engineering and Manufacturing</b>	
<b>Applied Engineering and Manufacturing</b>	
<b>Grade 12</b>	
English	
Sr. Social Studies	
Personal Finance	PE
Elective	Elective
Elective	Elective
<b>Adv. Applied Engineering/Manuf.</b>	

### Continue your training on the job by starting your career right out of high school:

- Entry level Aircraft Assemblers or Machinist

### Apply college credits earned in this Pathway directly into these partner college programs:

Edmonds Community College or Lake Washington Institute of Technology

- Engineering Technology certificate and degree programs.

### Continue your training in another college program such as:

Everett Community College

- Aerospace and Advanced Manufacturing certificate and degree programs
- Mechatronics certificate and degree programs.

University of Washington or Washington State University

- Engineering (multiple areas)

### Jobs you can get after graduation with this High School training:

Aircraft Assemblers  
Machinists

### Jobs you can get with 2-Years Post-High School Training:

Aircraft Mechanics and Service Technicians  
Avionics Technicians  
Engineering Technicians  
Mechatronics Technician

### Jobs you can get with 4 or more Years Post-High School Training:

Engineers (multiple areas)

For more information on these and other occupations related to this pathway, visit

<http://careerbridge.wa.gov/>



Edmonds SD Career and Technical Education

# Pathway Courses and Descriptions

Pathway Courses	Grades	Length	Equivalencies	EWHS	MHS	LHS	MTHS	SLHS
Manufacturing Innovations <sup>^</sup>	9-12	1 credit, Full year	1 credit Art					✓
Applied Engineering and Manufacturing*	10-12	2 credits, Full year	1 credit English, Science <u>and/or</u> Third Year Math	ID	ID	✓	ID	ID
Advanced Applied Engineering and Manufacturing	11-12	1 credit, Full year	None			✓		

✓ *Course is available at this school*    ID = Intra-District Course    \* College Credit Available    ^ Recommended but not required

## MANUFACTURING INNOVATIONS

IAR121/122 (Year)

Grades 9-12

Equivalency: 1.0 credit Art

Students will be introduced to manufacturing and fabrication careers and skills through a variety of innovative projects. Students will learn and apply various design and manufacturing methods including casting, 3-D printing, multi-part mold-making, metal and plastics fabrication, soldering, and welding to produce a variety of products including sculptures, jewelry, machine parts, and packaging.

## APPLIED ENGINEERING AND MANUFACTURING (Intra-District)

VOC147/148 (Yearlong, 2 period block)

Grades 10-12

Intra-District Program: Located at Lynnwood HS, period 5/6 block class. Students from all District high schools may attend this program. District bus transportation is provided. Shared Student Form required for registration.

Equivalency: 1 credit English, 1 credit Third Year Math, and/or 1 credit Science

Recommendation: While not required, it is recommended that students take Design/CAD 1 or Introduction to Engineering Design as part of their preparation in this Pathway.

Learn to work with various manufacturing materials, safely operate aerospace machinery, use precision measurement tools, read blueprints, and apply accurate riveting practices by completing the Boeing Company's industry recognized **Core Plus** manufacturing curriculum. Students will gain an understanding of aerospace and other manufacturing careers, and develop a competitive edge in interviewing and applying for manufacturing jobs in our region. **Students may earn college credit through this course.**



## ADVANCED APPLIED ENGINEERING AND MANUFACTURING

VOC151/152 (Year)

Grades 11-12

Prerequisite: Applied Engineering and Manufacturing

This class builds upon the skills learned in Applied Engineering and Manufacturing and provides students additional Core Plus training and certifications desired by Manufacturing employers in our region.

