

**Aviation Maintenance & Technology**  
Program Outcomes

1. Pass FAA exams. (SLO 1.2, 4.1 & 7.2)
2. Diagnose, repair, place and overhaul aircraft and power plants. (SLO 4.1)
3. Locate and interpret data in manufacturers' technical manuals. (SLO 7.1)
4. Demonstrate ability to run-up, taxi and tie-down an aircraft. (SLO 5.1)
5. Calculate measurements, weights, temperatures, and speeds. (SLO 2.2 & 2.3)
6. Demonstrate ability to follow correct troubleshooting procedures. (SLO 7.2)
7. Explain terms, processes and systems related to aircraft. (SLO 1.2)
8. Consistently follow EPA guidelines, shop and personal safety standards set by industry. (SLO 6.4, 6.5 & 7.2)
9. Demonstrate work ethic and responsibility appropriate to the industry. (SLO 6.4)
10. Demonstrate ability to use standard tools and materials common for structural repairs including composites. (SLO 5.1 & 6.5)
11. Form, heat-treat and fabricate metal and composite structures and install common fasteners in metal and composites. (SLO 5.1)
12. Solder, braze and weld metal aircraft structures. (SLO 5.1)
13. Inspect aircraft for conformity and airworthiness in accordance with FAA and manufacturer's documentation. (SLO 4.1 & 7.2)
14. Apply electrical and magnetic theories including interpreting schematics, using meters and testing equipment for troubleshooting airframe and power plant electrical systems. (SLO 5.1 & 7.1)
15. Repair generators, alternators, motors, magnetos, and other aircraft units. (SLO 5.1 & 7.2)
16. Operate and maintain internal combustion reciprocating engines and gas turbine engines. (SLO 7.1)
17. Inspect and troubleshoot aircraft power plants. (SLO 4.1 & 7.1)
18. Demonstrate ability to effectively work independently and in groups. (SLO 3.1)

## Aviation Maintenance & Technology

### Student Learning Outcomes (SLO)

STUDENT LEARNING OUTCOMES are the knowledge and abilities every student graduating with a certificate or degree from South Seattle Community College will have. Students will achieve these outcomes as well as the specific curriculum outcomes for their academic or technical area of study.

#### **1. Communication**

- 1.1 Read and listen actively to learn and communicate.
- 1.2 Speak and write effectively for personal, academic and career purposes.

#### **2. Computation**

- 2.1 Use arithmetic and other basic mathematical operations as required by program of study.
- 2.2 Apply quantitative skills for personal, academic, and career purposes.
- 2.3 Identify, interpret and utilize higher level mathematical and cognitive skills (for those students who choose to move beyond the minimum requirements are stated above).

#### **3. Human Relations**

- 3.1 Use social interactive skills to work in groups effectively.
- 3.2 Recognize the diversity of cultural influences and values.

#### **4. Critical Thinking and Problem-Solving**

- 4.1 Think critically in evaluating information, solving problems and making decisions.

#### **5. Technology**

- 5.1 Select and use appropriate technological tools for personal, academic and career tasks.

#### **6. Personal Responsibility**

- 6.1 Be motivated and able to continue learning and adapt to change.
- 6.2 Value one's own skills, abilities, ideas and art.
- 6.3 Manage personal health and safety.
- 6.4 Be aware of civic and environmental issues.

#### **7. Information Literacy**

- 7.1 Access and evaluate information from a variety of sources and contexts, including technology.
- 7.2 Use information to achieve personal, academic, and career goals, as well as to participate in a democratic society.