

# Sheet Metal and Plastics Technology

Honolulu Community College's Sheet Metal and Plastics Technology Program (SMP) curriculum has been designed to provide students with the knowledge and practical skills for entry into the industry as advanced apprentices.

## Program Entry Requirements

### English Requirements:

None

### Math Requirements:

None

## Recommended Preparation

Pre-algebra, applied mathematics, basic geometry, English and blueprint reading

### Costs (not including tuition)

Tools, instruments, and books: \$450 - \$600 (depending on tool quality)

## Program Technical Standards



Our program technical standards have been developed to help students understand the minimum essential mental, physical, and behavioral skills necessary for participation in and completion of all core aspects of our curriculum.

As an SMP student, you will be expected to do the following:

- General: Apply standard principles and practices to solve sheet metal shop problems.
- Specific: Read textbooks, handouts, diagrams and charts.
  - Visualize three-dimensional objects.
  - Distinguish shapes, forms, and patterns.
  - Take accurate measurements and do conversions.
  - Identify names and uses of tools and machines.
  - Identify safety concerns.
  - Explain characteristics and uses of sheet metal and related supplies.
  - Perform standard fabrication and installation practices.
  - Follow safety procedures.
  - Formulate fabrication plans.
  - Perform procedures according to proper specifications.
  - Distinguish indicators of poor vs. quality construction.



SMP students read textbooks, handouts, diagrams and charts.



- General: Use sensory cues to maintain standards of quality fabrication and installation.
- Specific: Take precise measurements to 1/16 of an inch and to 1 degree of an angle.
  - Recognize and compare shapes and forms of objects.
  - Detect fabrication problems.
  - Survey and select appropriate materials, tools and equipment for sheet metal work.



SMP student takes precise measurements.

## Sheet Metal and Plastics Technology



3 SMP students work at varying heights.



3 SMP students operate the necessary tools.



4 SMP students listen to their instructor's directions.

### 3 Motor skills

General: Possess sufficient physical strength, flexibility, and dexterity to safely perform sheet metal work.

Specific: Operate necessary tools, equipment, and machinery.  
Remove, repair, and replace sheet metal components.

Work at varying heights.

Position and maneuver in confined spaces.

Lift and transport tools, equipment and materials as necessary.

### 4 Communication skills

General: Communicate effectively to gather and convey information.

Specific: Obtain necessary information from oral and written sources.

Express information coherently.

### 5 Behavioral skills

General: Behave appropriately and safely in a cooperative learning environment.

Specific: Fulfill personal and shared responsibilities.

Work cooperatively with partners and groups.

Exercise good judgement.

Follow safety procedures.

### 6 Environmental tolerance

General: Function safely in a sheet metal shop environment.

Specific: Work for prolonged periods exposed to:

Extreme noise

Moderate heat

Sharp tools and materials

Electrical powered tools and equipment

Chemicals and toxins (using proper safety equipment)

Dust and fumes (using proper safety equipment)

Machinery with moving parts

Slippery or uneven surfaces

Variations in lighting

### For More Information

If you are interested in our program, we encourage you to meet with our SMP counselor (phone: 845-9129) and refer to the information at <http://tech.honolulu.hawaii.edu/smp/index.html> to decide whether the SMP program is right for you.

Please keep in mind that you will have to fulfill additional requirements to be eligible for certification exams or licensure in the field. For more information go to <http://www.bls.gov/oco/ocos214.htm> or <http://www.contractors-license.org/hi/Hawaii.html>

### Disability Accommodations

We have developed our technical standards in compliance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973. We will provide reasonable accommodations to qualified students with disabilities. If you are interested in our program, we encourage you to review the program technical standards and course information at <http://tech.honolulu.hawaii.edu/smp/index.html> to decide whether the SMP program is right for you.

If you have questions about the SMP program, please call the HCC Counseling Office at 845-9129. Individuals with hearing impairments may call 845-9270 (v/t) or use the Telecommunication Relay Service at 1-877-447-5990.

If you have questions about disability access and accommodations, please direct them to HCC's Services for Students with Disabilities (SSD) at 845-9282 (v/t), 845-9272 (v/t), or e-mail [access@hcc.hawaii.edu](mailto:access@hcc.hawaii.edu). SSD will be happy to meet with you, evaluate your disability documentation, and, as appropriate, recommend reasonable accommodations consistent with your documented limitations and the technical standards of the program. We will keep your disability information confidential within the parameters of the accommodation process.



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*SMP students work cooperatively with partners and groups.*



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*SMP student works with electrical equipment.*