

## Master Syllabus

### AVT 1136 - Sheet Metal

**Division:** Science, Mathematics and Engineering

**Department:** Aviation Technology

**Credit Hour Total:** 4.0

**Lecture Hrs:** 2.0 **Lab Hrs:** 6.0

**Date Revised:** October 2012

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### Course Description:

Identification and selection of sheet metal types; inspection, cleaning, preparation, forming, layout, bending, cutting, dimpling, countersinking, drilling, installing special fasteners and rivets in sheet metal. Fabrication of sheet metal projects is required. Two classroom, six lab hours per week.

### General Education Outcomes:

- ❑ Oral Communication Competency
- ❑ Written Communication Competency
- ❑ Critical Thinking/Problem Solving Competency
- ❑ Values/Citizenship/Community Competency
- ❑ Computer Literacy Competency
- ❑ Information Literacy Competency

### Course Outcomes:

#### Sheet metal types

Demonstrate a basic knowledge of the composition of materials, the forming of metallic structures used in aircraft construction and repair, materials and processes, corrosion control, and inspection methods of those materials.

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% or higher on exams

#### Forming, layout, and bending calculations

Demonstrate the proper calculations required for the forming and layout of parts for each type of sheet metal .

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% or higher on exams

#### Permanent and temporary fasteners

Demonstrate the ability to perform proper calculations for correct installation of permanent and temporary fasteners in aircraft structures; demonstrate the correct installation techniques of these fasteners.

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% or higher on exams

### Outline:

Sheet metal types and selection  
Sheet metal forming, layout, and bending calculations  
Permanent and temporary fasteners  
FAA Advisory Circular 43-13-1A & 2B  
Manufacturers' maintenance manuals  
Sheet metal fabrication