CENTER FOR INNOVATIVE TECHNOLOGIES MASTER COURSE DOCUMENT

AMT 130 Aircraft Welding Processes

Course Description: A course on welding of magnesium, titanium, aluminum, and steel in aircraft. The course does not prepare students for certification specific to welding.

Prerequisites(s): None Corequisite(s): No corequisite

Lecture Hours: 2	Lab Hours: 2		Credit Hours: 3		
Lab Fee: 100	Supplemental Fee: 0		Purpose:		
☐ Transfer Assurance Guide Course (TAG)		☐ Transfer Modu	☐ Transfer Module Course (TM)		
Course Format: Lec/Lab		Grading: A/B	Grading: A/B/C/D/F/I		
Delivery Method: Classroom					
Semesters Offered: Spring - Days, Spring - Evenings					

Course Primary Text:

Title: Aircraft Maintenance and Repair	Edition: 7 th	
Author(s): Kroes, Watkins, and Delp		
Publisher: Glencoe		

Supplemental Materials:

Advisory Circular (43.13-1B), U.S. Department of Transportation, Federal Aviation Administration

FAA 8083-31A, U.S. Department of Transportation, Federal Aviation Administration

Course Outcomes:

1	The student will learn how to weld aircraft structures using a variety of techniques, methods, and materials.
2	The student will learn the techniques, methods, and materials that include oxyacetylene gas welding, electrical arc welding, and tungsten inert gas welding (TIG/GTAW).
3	The student will learn how to weld various materials including steel, stainless steel, and aluminum. Soldering and brazing metals will also be discussed/demonstrated.
4	The student will learn to demonstrate the capability to properly set-up and operate the welding equipment (including safety precautions.
5	The student will correctly complete a butt-joint weld, tee-joint weld, lap weld (single and double), edge weld, corner weld, and a 5-tube cluster weld.

Course Topics:

Course booklet with FAA approved practical projects and course lectures is located in the AMT Offices at the

CENTER FOR INNOVATIVE TECHNOLOGIES MASTER COURSE DOCUMENT

Methods of Evaluation/Assessment

Tests	
Quizzes	
Lab Projects	
Lab & Class Participation	
Attendance	

Course Keeper: Gary Goodpaster Date Completed: April 01, 2019