COURSE SYLLABUS

LAST REVIEW	Fall 2022
COURSE TITLE	Project Design and Documentation (Practicum)
COURSE NUMBER	AMFT 0230
DIVISION	Career and Technical Education
DEPARTMENT	AMFT
CIP CODE	15.0406
CREDIT HOURS	3
CONTACT HOURS/WEEK	Class: 1 Lab: 4
PREREQUISITES	AMFT 0115, AMFT 0160, AMFT 0170
COREQUISITES	None
COURSE PLACEMENT	None

COURSE DESCRIPTION

This course will integrate Project design using AutoCAD to create construction specifications and utilize software to implement, monitor and complete the project. Topics covered include creating a project management file in software to set timelines with other teams, task management and coordination, milestone meetings and time management. The course offers real world experience developing a project from a team perspective and assigning different departments to handle different parts of the project and come together to asses the results. The project will be designed in AutoCAD, electrical wired, PLC Programmed, Bracket to be built in the Machine shop and welded to the conveyor and test to see if it meets its intended outcome. The course includes documentation and saving all project CAD files to a CAD Library with a determined naming convention the project team decides. The course will then cover how a 360 degree evaluation can be used to do an analysis of the completed project to build a best practice model for future projects.

PROGRAM ALIGNMENT

This course is part of a program aligned through the Kansas Board of Regents and Technical Education Authority. For more information, please visit: https://kansasregents.org/workforce_development/program-alignment

Program Learning Outcomes

1. The student will be able to assess hazards, mitigate risk, and develop procedures and protocol to create a safe working environment.
2. Student will be able to collaborate with team members in developing a plan to maximize efficiency in a production facility.

3. The student will be able to evaluate implicit tasks and identify necessary resources to install and maintain industrial equipment.
4. Student will be able to troubleshoot and repair industrial equipment in the high stress environment of modern manufacturing.

TEXTBOOKS
http://kckccbookstore.com/

METHODS OF INSTRUCTION
A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

COURSE OUTLINE
I. Principles of Project Management
II. Principles and function of Job Scope
III. Create digital project file and use to complete project
IV. Assign task within group and asses daily progress
V. Design project mechanical, electrical, controls, pneumatics in AutoCAD as first step of group project
VI. Detail specifications for construction
VII. Perform all task needed for the project to specification
VIII. Update all AutoCAD files and documentation in project file
IX. Team evaluation to assess project performances and document best practices

COURSE LEARNING OUTCOMES
Upon successful completion of this course, the student will:

A. The student will be able to utilize project management tools to create digital project file.
B. The student will be able to work as a team and individually to create expected outcomes and specifications.
C. The student will be able to design as a group all AutoCAD electrical, mechanical, controls and pneumatics needed.
D. The student will be able to perform all task such as wiring, welding, machining, pneumatics to complete project construction.
E. The student will be able to perform updates to documentation and submit for client upon project completion.
F. The student will be able to utilize best practice principles to assess project

ASSESSMENT OF COURSE LEARNING OUTCOMES
Student progress is evaluated through both formative and summative assessment methods. Specific details may be found in the instructor's course information document.

COLLEGE POLICIES AND PROCEDURES
Student Handbook
https://www.kckcc.edu/files/docs/student-resources/student-handbook-and-code-of-conduct.pdf

College Catalog
https://www.kckcc.edu/academics/catalog/index.html

College Policies and Statements
https://www.kckcc.edu/about/policies-statements/index.html

Accessibility and Accommodations
https://www.kckcc.edu/academics/resources/student-accessibility-support-services/index.html.