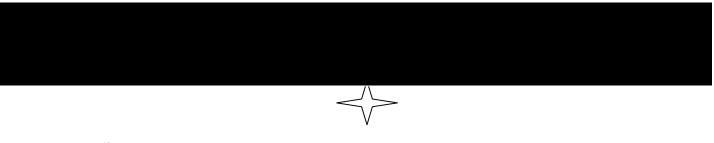


# Salt Lake Technical College

# **Department of Electronics Technologies**



Prefix: TEET Number: 1020

Course Title: Mechanical Assembly

**Course Description:** This course will cover the mechanical assembly skills required by industry. Identification of different types of hardware, metals, bolts/nuts/washers, wires, wire terminals/connectors and proper installation sequence as per IPC industry standards. Proper use and identification of common hand-tools, torque wrenches, drills, screw drivers, wire cutters/strippers, wrenches and crimping tools

Credits: 1

Course Hours: 30 Clock-Hours

Prerequisites: None.

Semester/Term: All Semesters

**Course Textbook:** Course text, lab manuals and other materials. All items are available in the SLCC Bookstore, as well as other on-line resources or local stores. Any custom text or labs manuals are special order and available only thru the bookstore. Course books/materials/e-subscriptions listed are a course requirement. The program main web page has a Books/Materials link to a PDF file that lists all program required items. Lab manuals are consumables, and the student is expected to use it fully.

# Course Competencies/Outcomes/Objectives:

## **Objectives**:

- Perform mechanical assembly of common hardware and meet torque requirements.
- Follow various procedures to complete an assembly.
- Identify and use common hand and power tools.
- Perform wire crimping with various hardware.
- Identify different types of metal and hardware.

### COLLEGE-WIDE STUDENT LEARNING OUTCOMES:

Acquired substantive knowledge and demonstrate competencies required by employers to be hired & succeed in the workplace.

## **Canvas Course Content Modifications:**

The Electronics department reserves the rights to make minor changes that will remove errors, improve delivery, ensure accuracy, and support student learning outcomes. This effects mainly new courses as they go thru a debug process during the first year.

- Quiz questions
- Assessments requirements
- Learning resources
- Lab Projects

As these changes may occur at any time and point in course modules, the understanding is as such: A student will not be required to backtrack to complete any changed page, assignment, or assessment. A student will be required to complete any changed page, assignment, or assessment. The course module "Progress Tracker" will be used to determine that point of study. As listed in the course, students must complete all items before checking on the "Tracker". Students are also required to follow instructions and complete work in the sequence of Modules, etc. Modules 1, Modules 2, etc. **Course Outline:** Specific course outlines are listed on the Canvas Course site and /or in the student learning plans.

. Module 0 - Course Introduction - Approximately 2 Hours

: Module 1 - Types of metal and hardware - Approximately 6 Hours

. Moule 2 - Common hand and power tools - Approximately 6 Hours

. Module 3 - Wire crimping with various hardware - Approximately 8 Hours

: Module 4 - Mechanical assembly using common hardware and torque requirements - Approximately 8 Hours

**Department Course Outcomes Assessments/Examinations:** Each course will have specific assessments listed, from module quizzes to department final theory examinations and hands-on demonstrations. Most tests are computer based and are delivered and graded by some type of LMS type software, which is usually part of the learning systems as well.

**Assignments:** All assignments are clearly listed and are usually part of a Module, which is addressing a particular competency. The Course Canvas site will list all assignment specifics.

**Participation:** You should consider this time of your life a very valuable opportunity in learning about Electronics, and the skills to enter into a new or better occupation. Your involvement in the classroom and campus should be something that results in a lasting positive experience. "Get involved", utilize the resources, pick the instructors brains, and learn as much as you can.

Engaging with the student is what faculty look forward to.

**Evaluation and Grading Scale:** The department adheres to all SLTC policies and procedures.

**Course Completion Requirements/Course Mastery:** Course Proficiency is based upon progress and completion of required course material, such as department summative and formative assessments. These will include theoretical and practical hands-on application projects. Not completing the required materials will result in a grade of "NM".

The department will evaluate your completion level to determine if you satisfied the course requirements.

## **Formative Assessments:**

These must be completed at 80% or higher level for each assignment, and a minimum of 80% completion of all assignments listed.

## Summative Assessments:

These must be completed at 80% or higher level *for each* assignment, and 100% completion of all assignments listed.

## The above are for each, not an average.

### **Grading System**

Grades for SLTC are based on mastery of competency within the published course hours. The mastery criteria for each course will be outlined in the syllabus and/or in each canvas course site for the specifics of each course within the program(s).

- MC Mastered Competency
- NM Competencies Not Mastered or withdrawn from a course after 61% of the scheduled time.
- TC Transfer Competency (see Previous Competency Attainment section)
- W Withdrawn (see Withdrawal and Refund section above)
- P Pass grade for a co-requisite non-credit course
- F Fail grade for a co-requisite non-credit course

The department takes pride in our programs, and its mission is to fully support you in your endeavor to acquire skills in order to enter the fascinating field of Electronics Technologies. Please do not hesitate to approach the department with any questions at any time! When issues arise, please always follow the process of addressing it with the main faculty or staff that assist you on a regular basis, if you feel the problem or issue still exists, and there is no satisfactory solution; then approach the Full-time faculty and/or the department coordinator.

## **Academic Progress:**

Every effort has been made to ensure that the coursework for an SLTC course can be completed within 100% of the published hours. As a student you will be provided a copy of you course expectation dues dates and course completion points. This is in an effort to ensure that the "Student", is proficient and acquires the required "Skills-Set".

*Homework:* As a student you should expect to plan on about at least the course hours as out-side learning time. So a 96 hour course may require 96 hours of home-work.

**Cheating:** Plagiarism & Academic Dishonesty: \*Plagiarism is stealing or passing off as one's own, ideas or words of another, whether or not copyrighted. Plagiarism will be penalized by the instructor according to the degree of dishonesty the instructor judges is involved. Students guilty of academic dishonesty are subject to disciplinary action. Disciplinary action may include, but is not limited to: reduction of a grade on an assignment or examination, reduction of a grade for the class, suspension or expulsion from the course and or program. Students may appeal disciplinary action taken against them by filing a grievance.

NOTE: It is YOUR responsibility to keep a copy of ALL your work. Also, keep a backup copy of any course work completed on a computer. Will not be responsible for any loss of materials, you have a student drive that you can use when you log-on to the PC's.

Allowed materials at the Assessment System is clearly listed, no notes or references, except those listed in the Canvas course site.

## **Students with Disabilities**

Students with medical, psychological, learning or other disabilities desiring accommodations or services under ADA, should contact the Disability Resource Center (DRC). The DRC determines eligibility for and authorizes the provision of these accommodations and services for the college. Please contact the DRC at the Student Center, Suite 244, Redwood Campus, 4600 So. Redwood Rd, 84123. Phone: (801) 957-4659, TTY: 957-4646, Fax: 957- 4947 or by drc@slcc.edu.

## **Emergency Evacuation**

The building must be evacuated if the fire alarm sounds or if you are instructed to evacuate by an authorized Public Safety, Facilities, or administrative representative. Students in our class exit to nearest exit, and move 20 feet away from the building. The instructor/lab aide will be happy to help you evacuate if you need assistance. Never ignore the fire alarm. Do not re-enter the building until directed to do so by an authorized Public Safety, Facilities, or administrative representative.

# STUDENT CODE OF CONDUCT

Students with medical, psychological, learning or other disabilities desiring accommodations or services under ADA, must contact the Disability Resource Center (DRC). The DRC determines eligibility for and authorizes the provision of these accommodations and services for the college.