



Purpose: It is the intention of this Administrative-Master Syllabus to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by the faculty of Wharton County Junior College, regardless of who teaches the course, the timeframe by which it is instructed, or the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in the improvement of instruction.

Course Title - Final Project

Course Prefix and Number - CETT 2370

Department – Electronics Engineering Tech.

Division – Technology and Business

Course Type: (check one)

- Academic General Education Course (from ACGM – but not in WCJC Core)
- Academic WCJC Core Course
- WECM course (This course is a Special Topics or Unique Needs Course: Y or N)

Semester Credit Hours # : Lecture hours# : Lab/other hours # 3:2:2

Equated Pay hours for course - 3

List Lab/ Other Hours
Lab Hours 2
Clinical Hours
Practicum Hours
Other (list)

Course Catalog Description - Principles of electrical/electronic design encompassing schematics wiring diagrams, materials lists, operating characteristics, completion schedules, and cost estimates. The student will be required to plan and develop a project consisting of research, design, layout, construction and operation of an electrical-mechanical project. A formal written report and a demonstration and presentation of process and results is required. This course is intended to provide a Capstone experience for graduating Electronics Engineering Technology students.

Prerequisites/Co requisites - Electronics Engineering Technology major expecting completion of all Electronics courses in the current semester.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by David Kucera	Signature 	Date 05/20/2010
Department Head David Kucera	Signature 	Date 05/20/2010
Division Chair Stephanie Dees	Signature 	Date 7/23/2010
Vice President of Instruction or Dean of Vocational Instruction Leigh Ann Collins	Signature 	Date 9/29/10



I. Topical Outline – Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, clinical or other non-lecture instruction):

The following performance will be expected of any student completing this course with a passing grade. There is no absolute time limit on the performance of these objectives, unless noted, but the grade received by the student will depend, in part, on the relative speed and precision of the student's performance in these tasks. Where subjective evaluations are indicated, the instructor will make these judgments based on his or her knowledge of the skills required to place a graduate with the expectation of successful on-job performance.

The student will be expected to perform the following tasks in written examination or laboratory demonstration:

Week 1 : Introductions and Project consideration

Week 2 : Begin project design

Week 3 : Complete design with all documentation and schedules.

Week 4 : Preliminary design..

Week 5 : Obtain parts/assemble on breadboard.

Week 6 : Obtain parts/assemble prototype

Week 7 : Prototype testing

Week 8 : Design refinement

Week 9-13: Build hardware and test assembly

Week 14-15: Final functionality tests and documentation collection

Week 16 : Project and all documentation Due.

II. Course Learning Outcomes

Course Learning Outcome	Method of Assessment
1. Critical thinking and life long learning. 2. Verbal and Written communication 3. Teamwork 4. Project management 5. Responsibility and ethical work habits 6. Technical knowledge and skills *See attached Rubric and Learning outcomes	Rubric : See attachment

III. Required Text(s), Optional Text(s) and/or Materials to be Supplied by Student.

Departmental handouts, Internet, library, and data book references.

IV. Suggested Course Maximum - 30 lecture, 15 laboratory

V. List any specific spatial or physical requirements beyond a typical classroom required to teach the course.

Lecture facilities for 30 students. Laboratory facilities for 18 students must include 9 bench positions each with a digital meter, logic probe, 50 MHz oscilloscope and probes, breadboarding facility with power supply and signal generator, a comprehensive stock of electronic components, soldering irons, cutting, and drilling equipment..

VI. Course Requirements/Grading System – Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course This course is intended to provide a capstone experience to electronics majors expecting to graduate in the current year. Individual grades are determined by the quality of final project, individual contributions to the project, and journal submissions.

Rubric: Grade total 100%

80% - Project
Group/Teamwork
Documentation
Presentations
Communication
Attendance

20% - Individual
Journal Entries
Work Ethic
Attendance
Personal contributions

VII. Curriculum Checklist

- **Academic General Education Course** (from ACGM – but not in WCJC Core)
No additional documentation needed

- **Academic WCJC Core Course**
Attach the Core Curriculum Checklist, including the following:
 - Basic Intellectual Competencies
 - Perspectives
 - Exemplary Educational Objectives

- **WECM Courses**
If needed, revise the Program SCANS Matrix & Competencies Checklist.