COURSE INFORMATION FORM

DISCIPLINE               ETEC
COURSE TITLE            Build Project
CR.HR  3            LECT HR.  1            LAB HR.  4            CLIN/INTERN HR.  _____            CLOCK HR.  _____

CATALOG DESCRIPTION

This is a capstone course, and the student should be in the final semester of the program. The student will work with the instructor to build an electronic project, which will require a demonstration of proficiencies in the assembly, testing, and troubleshooting phases of electronics.

PREREQUISITES

ETEC 220

EXPECTED STUDENT OUTCOMES IN THE COURSE

Upon completion of this course, the student will be able to:

1. Assemble, test, and troubleshoot an electronic project
2. Identify the proper test equipment needed to assemble and test the electronic project
3. Describe the function of each section of the electronic project that is assembled
4. Demonstrate learning experiences from the project through the writing of a summary paper at the completion of the project
5. Demonstrate proper safety precautions when using a soldering iron
6. Demonstrate proper soldering techniques
7. Demonstrate an understanding of how to read and interpret a schematic diagram
8. Identify a component failure in a given circuit
CLASS-LEVEL ASSESSMENT MEASURES

Student accomplishment of expected student outcomes will be assessed using the following measures. (Identify which measures are used to assess which outcomes.)

I. Successful Completion of Project (1,2,3,5,6)
II. Troubleshooting Project Exercise (2,7,8)
III. Summary Paper Over Experience Gained During Project (4)
IV. Troubleshooting Circuit Exercises (7,8)
V. Summary Paper Over Circuit Exercises (7,8)

PROGRAM-LEVEL OUTCOMES ADDRESSED

General Education Outcomes
Specify which general education outcomes, if any, are substantially addressed by the course by completing the “Course/Program Assessment Matrix” to show the relationship between course and program outcomes and assessment measures.

Occupational Program Outcomes
Specify which occupational program outcomes, if any, are substantially addressed by the course by completing the “Course/Program Assessment Matrix” to show the relationship between course and program outcomes to assessment measures.

CATALOG NO. ETEC 275
Individual instructors may order this outline as fits the needs of their individual courses. In addition, they may place more emphasis on some areas than on others. What is assured is that this particular list is covered in the course. Other topics may be added to a course as the instructor sees fit, and as time and interest allow. An *asterisk can be used to mark an item as optional.

I. Electronic Project
   A. Construction Methods
   B. Component Testing Techniques
   C. Troubleshooting Techniques
   D. Project Functional Test
   E. Documentation

II. Troubleshooting Skills
   A. Schematic Diagrams
      1. Faulty Component Identification
      2. Faulty Component Replacement
   B. Electronic Troubleshooting Documentation