

CUYAMACA COLLEGE
COURSE OUTLINE OF RECORD

Engineering 182 – Work Experience in Engineering Technology

54 hours paid or unpaid work experience per unit, 1-3 units

Catalog Description

Students who are employed in the engineering technology industry full-time or part-time (paid or unpaid) and able to work the minimum required hours during the semester are eligible to enroll in this course. Assessment of student will be performed by instructor in discussion with appropriate supervisor at place of employment. Students will further develop skills attained in the classroom setting. *Preregistration counseling with the instructor is required. Occupational cooperative work experience may accrue at the rate of one to eight units per semester for a total of sixteen units, and students must work 54 paid hours or unpaid hours per unit earned.* 54 hours paid or unpaid work experience per unit, 1-3 units.

Prerequisite

Completion of a minimum of 10 units in an engineering technology program (e.g., CADD Technology, Mechatronics) and recommendation from engineering or CADD instructor. Must meet state guidelines for work experience.

Course Content

Full- or part-time work experience

Course Objectives

Students will be able to:

- 1) Independently demonstrate standardized safety practices.
- 2) Independently apply technical information and skill sets learned in coursework to the actual work environment.
- 3) Develop the ability to work effectively with other technicians in the actual work environment.
- 4) Prepare for eventual full-time employment in the engineering technology industry.

Method of Evaluation

A grading system will be established by the instructor and implemented uniformly. Grades will be based on demonstrated proficiency in subject matter determined by multiple measurements for evaluation, one of which must be essay exams, skills demonstration or, where appropriate, the symbol system.

- 1) Evaluation of hands-on work performance that measures the student's ability to safely identify necessary action or repair, diagnose relevant engineering technology systems, and perform necessary tasks related to the system that he/she works with.
- 2) Supervisor evaluation of the student's progress while working on necessary tasks related to diagnosis, replacement, repair, testing, and adjustment of systems and components at his/her workplace.
- 3) Observation of the student's performance in areas of attitude, skill development, absenteeism, and quality of work will be assessed by appropriate business personnel in conjunction with work experience coordinator based on a minimum of two site visits.

Special Materials Required of Student

Approved safety glasses/boots

Minimum Instructional Facilities

Relevant engineering or advanced technology facility

Method of Instruction

- 1) Individual assistance by experienced personnel at place of employment
- 2) Interview discussions with work experience coordinator

Out-of-Class Assignments

Not applicable; this is a credit course for working in a related engineering or advanced technology facility

Texts and References

- 1) Required (representative example): Various technical references provided by employer
- 2) Supplemental: None

Student Learning Outcomes

Upon successful completion of this course, students will be able to:

- 1) Independently demonstrate standardized safety and handling tools and measuring instruments as given by a supervisor.
- 2) Independently apply technical information and skill sets learned at school to the actual work environment as determined by a supervisor.