5055 Santa Teresa Blvd
Gilroy, CA 95023

Course Outline

COURSE: ENGR 5   DIVISION: 10   ALSO LISTED AS:

TERM EFFECTIVE: Spring 2021   CURRICULUM APPROVAL DATE: 10/13/2020.

SHORT TITLE: ENGR PROG AND PROB SOLVING

LONG TITLE: Engineering Programming and Problem Solving

Units	Number of Weeks	Type	Contact Hours/Week	Total Contact Hours
3	18	Lecture: 2		36
		Lab: 3		54

SCHEDULE TYPES:

    02 - Lecture and/or discussion
    03 - Lecture/Laboratory
    04 - Laboratory/Studio/Activity
    04B - Laboratory - LEH 0.75
    05 - Hybrid
    71 -

20 Hours

TOPIC: Numerical computing.

STUDENT PERFORMANCE OBJECTIVES:

1. Identify and apply the principles of numerical computing using available software to the solution of engineering problems.

2. Identify and solve systems of linear equations.

3. Identify and solve ordinary differential equations.

4. Identify and apply numerical differentiation and integration techniques.

5. Identify and apply least-squares and linearization techniques.