UC San Diego
Electrical and Computer Engineering

ECE 190

ENGINEERING DESIGN
COURSE ENROLLMENT FORM

Specifications for the Design Course:
Engineering design is the process of devising a system, component, or process to meet desired needs. It is a decision-making process (often iterative), in which the basic sciences and mathematics and engineering sciences are applied to convert resources optimally to meet a stated objective. Among the fundamental elements of the design process are the establishment of objectives and criteria, synthesis, analysis, construction, testing, and evaluation. The engineering design component must include most of the following features: development of student creativity, use of open-ended problems, development and use of modern design theory and methodology, formulation of design problem statements and specifications, consideration of alternative solutions, feasibility considerations, production processes, concurrent engineering design, and detailed system descriptions. Further, it is essential to include a variety of realistic constraints, such as economic factors, safety, reliability, aesthetics, ethics, and social impact.

I. TO BE COMPLETED BY STUDENT:

_____ _____ ☐ FA ☐ WI ☐ SP _____
Name (Last, First, Middle) PID Quarter Year

_____ ☐ EE ☐ EP ☐CE ☐ EE&Soc
College Major

II. TO BE COMPLETED BY STUDENT AND INSTRUCTOR:
Prerequisite course work or knowledge for this project: (All the breadth courses and at least one depth course). Please indicate the depth course(s) you are using as prerequisite(s): _____.
Proposed plan (please be specific and make sure the plan satisfies the design specifications listed above):

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_____
_____

III. TO BE COMPLETED BY INSTRUCTOR:

Name of Instructor (Please print): _____

Teaching Title (Please print): _____

Nature and Frequency of Contact: _____

_____ _____
Signature of Student Date E-mail Address

_____
Signature of Instructor Date