

NAVAL POSTGRADUATE SCHOOL  
Monterey, California

*Department of Electrical &  
Computer Engineering*

May 1994

**The Electrical Engineer Degree Program**

**Purpose:** The Department of Electrical and Computer Engineering of the Naval Postgraduate School offers a program leading to the degree of **Electrical Engineer**. The goal of the Engineer's program is to provide the academic background and training necessary to prepare the student to perform at the state of the art in electrical and computer engineering.

**Eligibility:** All students of the Naval Postgraduate School are required to be military officers or government employees sponsored by an element of the US Government. Employees of the Naval Postgraduate School are also eligible to pursue degrees on a part-time basis with the approval of their supervisor and the department chairman.

**Applications:** Students in residence at NPS apply through the curriculum officer. Those applying from outside NPS should contact the Director of Admissions (Code 62) for application procedures.

**Screening Procedures:** Students desiring to be admitted to the program must successfully pass a written screening examination. The examination is offered early in the spring and fall quarters. This examination tests the student's preparation at the undergraduate level and at the level of introductory graduate courses. The examination covers the areas of electromagnetic engineering, circuits and electronics, linear and control systems, computer engineering, and signals and systems. A list of the topics covered by the written examination is available and may be obtained from the ECE department coordinator for the written screening examination. The student chooses four of these five examination areas. An evaluation of the student's academic record and any reference materials are also taken into consideration. Successful students are assigned a departmental advisor for assistance in developing a program of study. The student is officially admitted into the program when the department chairman approves his/her program.

**Degree Requirements:** In order to fulfill the requirements for the degree of **Electrical Engineer**, a student must meet the following requirements:

1. Have a BSEE or equivalent from an accredited school.
2. Credits: Complete a minimum of 96 quarter credit hours. Of these 96 quarter credit hours,
  - (a) a minimum of 72 quarter credit hours of graduate-level course work must be taken.
  - (b) at least 54 quarter credit hours must be in graded, graduate level EC courses.
  - (c) at least 36 quarter credit hours must be in the sequence of advanced courses (4000-4999).
  - (d) at least 24 quarter credit hours of thesis must be taken.
3. Thesis: Submit an acceptable thesis (see next section).

**Thesis Requirement:** An Engineer's thesis, though not necessarily meeting the test of original research and contribution to fundamental knowledge that is applied to Ph.D. dissertations, is nevertheless more extensive and complete in problem scope and solution than a master's thesis. At the conclusion of the research work and thesis preparation, the student will present the results to the faculty and interested students of the department in a formal seminar.

**Degree Nomination:** After completion of degree requirements, the student is nominated to receive the degree by a memo signed by the thesis supervisor, the curricular officer, the academic associate and the department chairman and by the submission of a signed thesis to the Office of the Dean of Academic Administration. (The thesis must meet the format standards of this office to be accepted.) The degree **Electrical Engineer** is granted by vote of the Academic Council and is awarded, along with the degree **Master of Science in Electrical Engineering** (if applicable), by the Superintendent.