



WEBB INSTITUTE
*America's Naval Architecture and
Marine Engineering College*

ELECTRICAL ENGINEERING FACULTY POSITION AT WEBB INSTITUTE

Webb Institute is looking for a permanent faculty candidate to teach basic electrical engineering subjects to highly capable engineering students. The position is for someone with a good knowledge of and understanding of electrical power, power electronics, and control systems. A Navy, Coast Guard, or other suitable marine background is highly desirable in addition to the appropriate academic background. The original contract will be for two years, with a five-year contract to follow if the faculty member fulfills needs and expectations. (Webb does not have a tenure system.) The starting rank will be either Assistant or Associate Professor, depending on background and experience. The projected starting date will be August 2012.

Since Webb Institute is a very small four-year college, the emphasis is on undergraduate teaching. Previous teaching experience is desired though not required. The successful candidate can expect to teach lower and upper level undergraduate courses. The position requires the successful applicant to:

- Be able to teach a standard undergraduate course in Electricity and Magnetism; this course should cover electrostatic and magnetic fields, steady state D/C circuits including Nodal and Mesh analysis; network theorems and transients.
- Be able to teach a two-semester sequence in Electrical Engineering, which is intended to be an intensive, analytical, and practical course of study in electrical circuits, including three-phase power, electronic devices, and electro-mechanical machines and controls. This sequence is to be offered as follows: Electrical Engineering I will cover both single-phase and three-phase circuits with a focus on power calculations and load analysis. Wave shaping circuits, filters, and resonance are to be introduced. Electronics topics will include diodes, transistors, and operational amplifiers. Electronics topics will also include digital electronics such as logic circuits and integrated circuits. Electrical Engineering II will cover electrical machines and controls. Topics will include principles of electro-magnetic devices and steady-state performance of transformers and rotating machines. Both synchronous and asynchronous machines are studied. A discussion of marine electrical systems and marine electrical propulsion concludes the course.

All three of the above courses will emphasize marine applications when possible. Each of the three courses will also include a hands-on two-hour-per-week laboratory experience.

Additional teaching load in the areas of Science and/or Engineering Science will be assigned each semester as needed by the Dean. The typical course load is two classes each semester. In addition, the faculty member will be encouraged and given opportunities to engage in research.

Ideally, applicants should have an appropriate earned doctorate, but a Bachelor's degree in electrical engineering plus a Master's degree in the same or a closely-related engineering discipline is required. Practical experience in the marine industry is desirable.

The selected candidate will be expected to teach undergraduate classes as his/her primary responsibility, but also to serve on faculty committees and to participate actively in the full scope of campus life.

Interested individuals should submit curriculum vitae, statements of research interests and teaching philosophy, and contact information for three references to:

Dr. Richard Harris, Faculty Search Committee Chair
Webb Institute
298 Crescent Beach Road
Glen Cove, NY 11542

Review of applications will begin immediately and will continue until the position is filled.