

Posting Title: Nicholas E. Madonna Professorship in Electrical and Computer Engineering, Associate/Full Professor

The Electrical and Computer Engineering (ECE) Department and Eversource Energy Center (EEC) at the University of Connecticut solicits applications for the Nicholas E. Madonna Endowed Professorship, a tenure-track faculty position at the associate or full professor level. The position has an expected start date of August 23, 2020. The successful candidate will advance education and research in the Electrical and Computer Engineering Department with a particular emphasis in power engineering or related specialties and lead Eversource Energy Center's research programs in the area of grid modernization.

The University of Connecticut (UConn) is entering a transformational period of growth supported by the \$1.7B Next Generation Connecticut (<http://nextgenct.uconn.edu/>), the \$1B Bioscience Connecticut (<http://biosciencect.uconn.edu/>) investments, and a bold new Academic Plan: Path to Excellence (http://issuu.com/uconnprovost/docs/academic-plan-single-hi-optimized_1).

As a trusted source for energy expertise, the Eversource Energy Center is a leading energy industry-academia partnership advancing research and cutting-edge technologies to continually improve power grid efficiency and reliability. Leading the way for energy companies across the country, the Center has established its reputation as a leader in predictive analytics and innovative solutions for electric reliability, forest sustainability, grid hardening and grid modernization. With an initial \$9M investment from Eversource Energy and an additional \$2M from other utilities and industrial partners, the center has funded several projects ranging from predictive analytics for storm-based power outages, to grid modernization and cyber-enabled secure power systems. The Center has recently acquired a major RTDS-based grid simulation testbed facility, and plans to invest in research projects that will use this grid simulation system for testing and validation of distributed energy resources in the power grid and grid modernization methods.

The ECE Department (<http://www.ee.uconn.edu>) offers ABET-accredited undergraduate majors in electrical and computer engineering as well as a doctoral program in electrical engineering, which was highly ranked by the National Research Council (NRC) in its latest ranking.

The successful candidate will be expected to develop and sustain an internationally-recognized and externally-funded research program in power engineering preferably either by targeting multi-PI center opportunities or creating such opportunities. The position offers the successful candidate the Nicholas E. Madonna Endowed Professorship. The individual appointed to the Professorship will be a nationally or internationally recognized researcher, scholar, and teacher, and will have made significant contributions to power engineering fields.

The successful candidate must also share a deep commitment to effective instruction at the undergraduate and graduate levels, development of innovative courses and mentoring of students in research, outreach, and professional development. It is the expectation that the candidate will broaden participation among members of under-represented groups; demonstrate through their teaching, research, and/or public engagement the richness of diversity in the learning experience; integrate multicultural experiences into instructional methods and research tools; and provide leadership in developing pedagogical techniques designed to meet the needs of diverse learning styles and intellectual interests.

The successful candidate will:

- Have a research focus on power systems engineering with emphasis on advanced power systems and grid modernization. Specific areas of interest may include but are not limited to:
 - Understanding and analyzing microgrid stability and uncertainty and associated control approaches,
 - Resiliency and control methods in the presence of cyber and other malicious threat actors,

- Smart grid technologies including communications techniques, advanced command and control mechanisms for generation and management, and advanced grid monitoring and management,
- Reliable integration of distributed energy resources including renewable energy and storage technologies with the grid.
- Contribute to the ECE Department academic, research and outreach mission and the mission of Eversource Energy Center.
- Teach undergraduate and graduate courses that meet the curricular needs of the ECE department.
- Advise and mentor undergraduate and graduate students.
- Provide service and leadership to the University of Connecticut, to external academic and scientific communities, and to the general public.

MINIMUM QUALIFICATIONS

1. A Ph.D. in Electrical Engineering or a closely related field. Equivalent foreign degrees are acceptable.
2. Research credentials in Electrical and Computer Engineering specifically power system engineering.
3. A background that provides preparation for teaching excellence in undergraduate and graduate courses in ECE.
4. Excellent oral and written communication skills.
5. Strong interpersonal skills.
6. Demonstrated success in original research, and publication of that work in archival journals.
7. Experience with oral presentations at national or international scientific meetings.
8. Candidates should have established significant research programs with a track record of securing external funding as well as demonstration of a leadership role as the PI of large research grants.

PREFERRED QUALIFICATIONS

1. Research credentials that complements existing faculty expertise.
2. Experience in collaboration with industry.
3. Success in developing research grant applications to federal funding agencies and to power system industries.

APPOINTMENT TERMS

This is a 9-month tenure-track position with an expected start date of August 23, 2020. The successful candidate's primary academic appointment will be at the Storrs campus with the possibility of work at UConn's regional campuses across the state. Salary and rank will be commensurate with qualifications.

TO APPLY

Use this link <https://academicjobsonline.org/ajo/jobs/15020> to be redirected to Academic Jobs Online to complete your application. Please submit the following and include your last name as well as search #2020199 in the document title for each document submitted:

- **A cover letter**
- **Curriculum Vitae**
- A three- to five- page **research plan** (innovative concepts that will form the basis of academic career, experience in proposal development, mentorship of students, etc.)
- A two-to-three page **teaching plan** (including teaching philosophy, teaching experience, commitment to effective learning, concepts for new course development, etc.)
- **Commitment to diversity statement** (including broadening participation, integrating multicultural experiences in instruction and research and pedagogical techniques to meet the needs of diverse learning styles, etc.)

- Additionally, please follow the instructions in Academic Jobs Online to direct **four reference writers** to submit letters of reference on your behalf.

Direct inquiries to Mary P. McCarthy (mary.p.mccarthy@uconn.edu)

Employment of the successful candidate is contingent upon the successful completion of a pre-employment criminal background check. (Search #2020199)

This position will be filled subject to budgetary approval.

All employees are subject to adherence to the State Code of Ethics, which may be found at <http://www.ct.gov/ethics/site/default.asp>.

The University of Connecticut is committed to building and supporting a multicultural and diverse community of students, faculty and staff. The diversity of students, faculty and staff continues to increase, as does the number of honors students, valedictorians and salutatorians who consistently make UConn their top choice. More than 100 research centers and institutes serve the University's teaching, research, diversity, and outreach missions, leading to UConn's ranking as one of the nation's top research universities. UConn's faculty and staff are the critical link to fostering and expanding our vibrant, multicultural and diverse University community. As an Affirmative Action/Equal Employment Opportunity employer, UConn encourages applications from women, veterans, people with disabilities and members of traditionally underrepresented populations.