Syracuse University invites applications and nominations for the position of Chair of the Department of Mechanical and Aerospace Engineering. The Chair will be a respected scholar and a dynamic leader who will join the Department at an exciting time. In the last six years, the Department has achieved significant growth in enrollments in its undergraduate and graduate programs, and it has hired 10 outstanding faculty members. Now, the Department has exceptional opportunities to elevate its research profile and educational mission via a recent commitment from New York State to revitalize the five-county Central New York region, which is envisioned to include strategic investments relating to research, development and manufacturing of “precision sensing technologies and data analytics” with an initial focus on the testing, innovation, and manufacturing of unmanned aerial systems. The University seeks a visionary and strategic individual who will enable the Department to maximize these potentially transformational opportunities.

Department Description:

Mechanical and Aerospace Engineering is one of four departments within the College of Engineering and Computer Science at Syracuse University. The Department offers two ABET-accredited B.S. programs (aerospace engineering, mechanical engineering), three M.S. programs (mechanical and aerospace engineering, energy systems engineering, engineering management) and one Ph.D. program (mechanical and aerospace engineering).

The programs currently enroll approximately 500 undergraduate students and 260 graduate students. The Department faculty recently has grown to include 24 faculty members, including 19 tenured or tenure-track faculty members. The Department faculty includes one member of the National Academy of Engineering and four individuals who have been elected Fellows of professional societies.

The Department enjoys a vibrant and rapidly growing research environment with a funding portfolio that includes awards from major federal and state agencies, companies, and foundations. The faculty conducts funded research in excess of $3 million in expenditures annually across a broad range of areas. The faculty has
identified three areas to expand on existing research strengths and/or opportunities to grow significantly: 1) energy, thermofluids, and indoor environmental quality; 2) mechanics of advanced materials (including fabrication and processing); and 3) dynamics and control of complex systems. Each of these areas engages interests of several MAE faculty members and each are well aligned with priorities for growth of the college, the university, Central New York region, and New York State.

**Responsibilities and Qualifications**

An earned Ph.D. in mechanical or aerospace engineering (MAE) or related field is required. The successful candidate must be a distinguished scholar and exemplary educator, with an international reputation and strong record of university service.

Candidates must show substantial success in attracting externally funded research and should have a vision for elevating the research mission of the department, including faculty mentoring, corporate partners, interdisciplinary and multi-investigator awards.

Candidates must be committed to high quality education and student success. The Chair will seek to increase the undergraduate and graduate program rankings and will foster innovative teaching and experiential learning that may include undergraduate research, entrepreneurship, competitions, and online and hybrid learning.

Candidates must be committed to creating a diverse and an inclusive environment within the department. The Chair will actively seek ways to diversify the faculty, student body, and staff.

Candidates should have strong communication skills. The Chair will engage corporate partners, work with development to attract gifts, and will advocate for the department across the university and Central New York.

Candidate must have strong leadership skills with the ability to seek creative solutions and synthesize multiple goals. The Chair will create the vision for how the department can continue to grow its research and educational prominence.

Other desired qualities include:

- Background and experience hiring and mentoring junior faculty
- Ability to engage with department advisory board related to improving quality of programs and fundraising
- Ability to work with the students at a high energy level in recruiting and retention
- Demonstrating an active interest in curriculum development and accreditation
- Demonstrated skill in recruiting, mentoring, motivating, and retaining outstanding faculty, students, and staff.
The College of Engineering and Computer Science (E&CS)

The College houses four academic departments in biomedical and chemical engineering, civil and environmental engineering, electrical engineering and computer science, and mechanical and aerospace engineering.

Cross- and multi-disciplinary opportunities are offered through both academic programs and research initiatives. The College has built strategic partnerships with the College of Arts & Sciences, Whitman School of Management, the School of Information Studies, the Maxwell School of Citizenship and Public Affairs, the School of Architecture, the School of Visual and Performing Arts, and the S.I. Newhouse School of Public Communications.

The College has grown its full-time faculty by 35% in the last five years to a total of 99 faculty, teaching more than 1,100 M.S. and Ph.D. students and over 1,500 undergraduate students. The College currently occupies over 150,000 square feet on Syracuse University’s campus.

Established in 1984 as one of the first New York State Centers for Advanced Technology, the Center for Applied Systems and Engineering (CASE) has engaged E&CS faculty members in research projects in collaboration with New York State industries.

Over the last twenty years, several MAE faculty members have provided significant leadership to a regional initiative to foster collaborations and innovations in environmental and energy systems. In 2002, the initiative was designated as one of five statewide "Centers of Excellence" (CoE). To date, the Syracuse Center of Excellence in Environmental and Energy Systems (Syracuse CoE) has secured more than $100 million in state and federal support for collaborative projects and investments in facilities. Through this initiative, MAE faculty have established pioneering new facilities and conducted a wide range of research projects relating to indoor environmental quality and building energy systems.

The Syracuse Biomaterials Institute (SBI) was launched in 2007, through strategic investments by Syracuse University, New York State, and private donations. SBI is a cohesive collection of highly collaborative faculty spanning eight academic units, including faculty from E&CS, College of Arts and Sciences, SUNY Upstate Medical University, and SUNY College of Environmental Science and Forestry.

Vision for the College of Engineering and Computer Science

Dean Teresa A. Dahlberg, who joined the College in August 2015, is focusing the College strategic planning around four key priorities:

- Raise the research profile
Enhance the educational experience
• Enhance distinctiveness
• Increase operational efficiency and revenue streams

These priorities are aligned with the University’s Fast Forward strategic plan.

Key research themes of the College include:
• Unmanned Arial Systems
• Smart materials for medicine and beyond
• Cyber engineering and security
• Intelligent wireless systems
• Smart water systems for sustainability
• Advanced energy sources, conversion, and conservation
• Rehabilitative and regenerative engineering

These established themes are continuously evaluated and help focus the hiring and strategic investments of the College.

About Syracuse University and Syracuse, NY

Syracuse University is a private, coeducational, urban institution with an enrollment of slightly over 20,000 full-time students. There are approximately 1,100 full-time instructional faculty members across 11 academic schools and colleges.

The 200-acre Syracuse University campus overlooks the City of Syracuse, the heart of the scenic Central New York region. Home to around 700,000 people, the city and surrounding areas feature an appealing array of activities. Syracuse’s expansive cultural life includes an opera, nationally-recognized regional theater, an impressive collection of art and history museums, and an increasingly broad mix of dining opportunities, including restaurants in the vibrant Armory Square district located downtown. The University’s 20 Division I men’s and women’s varsity teams include the 2003 NCAA National Championship basketball team, a football team with a historic legacy, and a nine-time national championship lacrosse team.

The search occurs as Kent Syverud, Chancellor since early 2014, is beginning to implement the University’s Fast Forward Syracuse strategic planning initiative. This process will provide the key direction and framework for improving the quality and stature of the University, fostering academic and operational excellence, providing a comprehensive array of high quality integrated learning experiences for students, and positioning the University to address the complex challenges in a highly dynamic, higher education environment. (For more information on Fast Forward Syracuse please see http://fastforward.syr.edu)

In December 2015, Central New York (CNY) was one of three Upstate regions that each was awarded $500 million as part of Governor Cuomo’s Upstate Revitalization
Initiative. The winning proposal titled “Central New York: Rising from the Ground Up” is expected to create nearly 6,000 jobs and generate hundreds of millions of dollars in new economic activity. As a result of the award, Syracuse University will conceptualize, design, and construct the new National Veterans Resource Complex (NVRC).

“This is an extraordinary moment in time for this region, Central New York is truly on the rise,” said CNY Regional Economic Development Council co-chairs Kent Syverud, chancellor of Syracuse University and Robert M. Simpson, president of CenterState CEO. “Through this investment, we now have the opportunity to revolutionize our economic trajectory. Today’s award is a validation of our data-driven process, and affirms our belief that a community-created vision for transformational growth will have the greatest potential impact.

The proposal, which was submitted in October, focuses on the following six core components: next generation technology; veterans; agriculture; transportation; government modernization; and economic opportunity and inclusion.

About Applying

Interested applicants should submit a detailed curriculum vitae, statements of research and teaching interest, and at least five professional references. Applicants must complete an online Dean/Senior/Executive/Faculty Application and attach, electronically, a cover letter, curriculum vitae, and the names of the five references through www.sujobopps.com. Review of applications will start on March 15, 2016 and continue until the position is filled. For additional information, please contact the Chair of the Search Committee, Professor Roger Schmidt, via email at rrschmid@syr.edu.

Syracuse University is an equal opportunity/affirmative action employer with a strong commitment to equality of opportunity and a diverse work force. Women, military veterans, individuals with disabilities, and members of other traditionally underrepresented groups are encouraged to apply.