## **Position Summary and Qualifications**

Position Title: Assistant/Associate/Full Professor of Mechanical Engineering – Multiple Positions

Index Number: 210426

Position Number: 133070 and 133270

Salary and Rank: Salary and rank commensurate with qualifications and experience

Nature of Positions: Nine (9) month tenure-track or tenured, expected start date August 2020

Required Qualifications: An earned doctorate from an accredited institution in mechanical engineering or a closely related field by the start date of employment. The ability to perform the essential functions. The ability to communicate effectively and to develop and maintain an effective working relationship with faculty, students, administrators, staff and public.

Preferred Qualifications: A bachelor's degree from an accredited institution in mechanical engineering. Prior teaching and or post-doc experience.

Essential Functions: Teach undergraduate and graduate courses and labs in support of the Mechanical Engineering Department curricula. Ability to teach in a variety of platforms, including face-to-face and online. Develop an externally funded research program. We are seeking qualified candidates in all areas of mechanical engineering, with particular interest in the following areas:

- Vehicle Systems with emphasis on areas such as: electric vehicles, connected vehicles, intelligence in vehicles
  including autonomous functions, vehicle communications, vehicle sensors, haptics/human interface,
  engine/motor/battery/powertrain monitoring, data collection, building data sets appropriate for neural network
  training, mechatronics applications in vehicle systems
- Advanced Manufacturing with emphasis on areas such as: additive manufacturing, sensing, monitoring, data collection, building data sets appropriate for neural network training, robotics, mechatronic applications in manufacturing
- Other cutting-edge research areas supporting the mission of the Mechanical Engineering Department and College
  of Engineering.

Direct student research, leading to publications in refereed journals and other peer reviewed media. Advise undergraduate and graduate students. Serve on department, college, and university committees. Participate in professional and public service activities. The ideal candidate is one who shares the mission and vision of the Department, College, and University and helps the university grow. More information about the department's academic programs and research can be found at <a href="http://www.tntech.edu/me">http://www.tntech.edu/me</a>.

About Tennessee Tech: As a comprehensive public university with over 10,000 students, Tennessee Tech is a leading university in the south. As one of the eight schools and colleges at the University, the College of Engineering is home to three Research Centers of Excellence and eight academic programs offering B.S., M.S., and Ph.D. degrees. The Department of Mechanical Engineering is housed within the College and is the largest undergraduate program by enrollment at the University. The University is on a growth trajectory in science and engineering with several exciting initiatives including 1) new buildings in science and engineering, 2) new recurring annual investment from the State of Tennessee in excess of \$3.5M, and 3) 8 new faculty positions expected to be added to the College of Engineering in the upcoming year.

Application Procedure: Applicants must submit all of the following electronically through <a href="https://jobs.tntech.edu">https://jobs.tntech.edu</a>: 1) Cover letter that includes discussion of candidate's philosophy of education, candidate's experience, why the candidate is

interested in the position, and any special attributes the candidate would bring to the department and the college. 2) One page statement of teaching philosophy. 3) Statement of Research Interests, including potential funding sources. 4) Curriculum Vitae. 5) Unofficial transcripts for all degrees (official transcripts sent directly from the degree granting institutions will be required later, prior to hiring). 6) Names of three professional references with e-mail and telephone contact information.

Questions can be directed to Ms. Michelle Holm, Mechanical Engineering Department Staff, Box 5014, Tennessee Technological University, Cookeville, TN 38505 (<a href="mailto:mholm@tntech.edu">mholm@tntech.edu</a>, 931-372-3255). TTU will only hire U.S. citizens and aliens lawfully authorized to work in the U.S. All new employees will be required to complete an employer's verification form, I-9, on or before the date of hire.

Application Screening Date: January 20, 2020. Applications will be accepted until the position is filled.

Tennessee Tech University is an AA/EEO employer and does not discriminate on the basis of race, color, religion, ethnic or national origin, sex, disability, age (40 and over), status as a protected veteran, genetic information or any other category protected by federal or state law. Inquiries regarding the nondiscrimination policies should be directed to equity@tntech.edu.