Grand Valley State University is seeking a Mechanical or Biomechanical Engineer for a joint tenure-track position in the School of Engineering and the Department of Physical Therapy. This person will be qualified to teach dynamics, and system dynamics and control. The successful applicant will also provide engineering support to a top-quality motion analysis laboratory at the University and develop a research agenda within that laboratory. The person in this position will have the opportunity to work with graduate and/or undergraduate engineering and Doctor of Physical Therapy students working in the motion analysis lab in support of clinical and/or research activities. The expectation is that this candidate will also be able to provide technical support for clinical gait analysis for local hospitals.

The Mechanical Engineering Program offers an ABET-accredited Bachelor of Science in Engineering (BSE) degree as well as a Master of Science in Engineering (MSE) degree. The BSE program includes mandatory co-op education experiences and an extensive experiential learning component. The MSE program emphasizes professional practice as well as applied research. The successful applicant will be expected to support these programs.

The Physical Therapy Department offers a three-year Doctor of Physical Therapy degree within the College of Health Professions. We are located in the rapidly expanding health care corridor of Grand Rapids, MI. This dynamic program is housed in a state of the art facility with access to lab space with motion analysis, balance, ergonomics, biomechanics, and motor performance instrumentation. Opportunities exist for collaboration with faculty from other programs within the University, as well as health professionals from local hospitals and the Michigan State University College of Medicine.

**Required Qualifications and Education:**
- Doctoral degree in mechanical engineering or closely related field
- Familiarity with microprocessor based control systems
- Proficiency with hardware and software commonly used in the field of biomechanics research including, but not limited to, motion capture (e.g. Vicon), force plates, electromyography and pedobarography
- Excellent written and verbal communication skills
- Publications in relevant and reputable peer-reviewed journals

**Preferred Qualifications and Education:**
- Relevant computer programming for the assessment of human biomechanics including programs such as Visual3D
- Inter-institutional research collaboration
- Implementation of microprocessors into control systems as well as Matlab and Simulink
- Functional knowledge of anatomy and/or kinesiology

**Responsibilities – Essential Functions:**
- Teach upper-division mechanical engineering classes, and assist in teaching doctorate level physical therapy courses during a 12-month contract year
  - Teach both lecture and laboratory in areas including dynamics, and system dynamics and control
- Assist in the development of new courses related to biomechanics for undergraduate and graduate students. Support a high-quality motion analysis laboratory
  - Mentor engineering and physical therapy graduate students in conducting and disseminating high quality research
  - Assist in the development of, conduction of, and funding for research in the motion analysis laboratory within and between the University’s physical therapy and engineering programs
- Supervision of an undergraduate engineering co-op student and/or graduate assistant
- Provide support to the mission and vision of the associated units and the University
Application review will begin immediately and continue until the position is filled. The start date for this position is August 6, 2018. Detailed information and the on-line application process are available at jobs.gvsu.edu. Include a letter of interest, curriculum vitae, statement of teaching philosophy, and at least three references with name, address, phone and e-mail address. For questions and/or assistance please contact (616) 331-2215. Grand Valley State University is an EOE which includes protected veterans and individuals with disabilities. See http://www.gvsu.edu/affirmative/. TDD Callers: Call Michigan Relay Center 1-800-649-3777.