

Ph.D. position in Civil Engineering/Structural Reliability

Posting Date: 24 September 2018

Job Title: Full-time Ph.D. Student

Department: Civil Engineering (<https://www.eng.mcmaster.ca/civil>)

Description of Area: Structural Reliability, Multi-Hazard Risk Assessment, Infrastructure Resilience

Supervision: Dr. Georgios Balomenos

Start Date: January 1, 2019

Duration: 4 years

Project Summary: A Ph.D. researcher is sought in Structural Reliability working under the supervision of Dr. Georgios Balomenos in the Department of Civil Engineering at McMaster University. The successful candidate will conduct research on infrastructure reliability and risk assessment in the face of multiple hazards and climate change. Research will be conducted to examine the structural performance of infrastructure exposed to climate changes that affect both structural demand and capacity. The research program will include risk assessment and resilience quantification using surrogate modeling in conjunction with finite element analysis (FEA).

Required Qualifications: Candidates should have completed a Bachelor and a Master degree, both in Civil/Structural Engineering, at the start date of the appointment. Candidates should demonstrate excellence in research. Knowledge of finite element analysis and computer programming will be an asset. Experience with software such as OpenSees, Matlab and ABAQUS is preferred. Experience of fluid-structure interaction modeling and working knowledge of GIS is also beneficial. The successful candidate will have the opportunity to be appointed also as a Teaching Assistant for undergraduate courses.

Application Procedure: Applicants are encouraged to submit electronically the following: curriculum vitae, academic transcripts, and the names and contact information for at least two referees to Dr. Georgios Balomenos at balomeng@mcmaster.ca.

For further information, please contact Dr. Georgios Balomenos (Email: balomeng@mcmaster.ca, Office: +1 (905) 525-9140 ext. 24215).