

## Overview

The MSc in Sustainable Critical Infrastructure is an exciting research-led program, with a wide range of courses and a significant research component that provides an in-depth grounding in the various aspects of the broad field of sustainable critical infrastructure. The program is delivered by experienced international faculty who are actively engaged in cutting-edge research. The Sustainable Critical Infrastructure program provides excellent training for those aiming to pursue a career in industry and academia as well as research and development.

## Content

You will study a set of core courses, as well as elective courses that enable you to deepen your knowledge in specialized areas within the broad field of Sustainable Critical Infrastructure. You will also have the opportunity to contribute to the process of discovery and knowledge creation through the conduct of original research in state-of-the-art facilities.

The M.Sc. in Sustainable Critical Infrastructure program graduates will have:

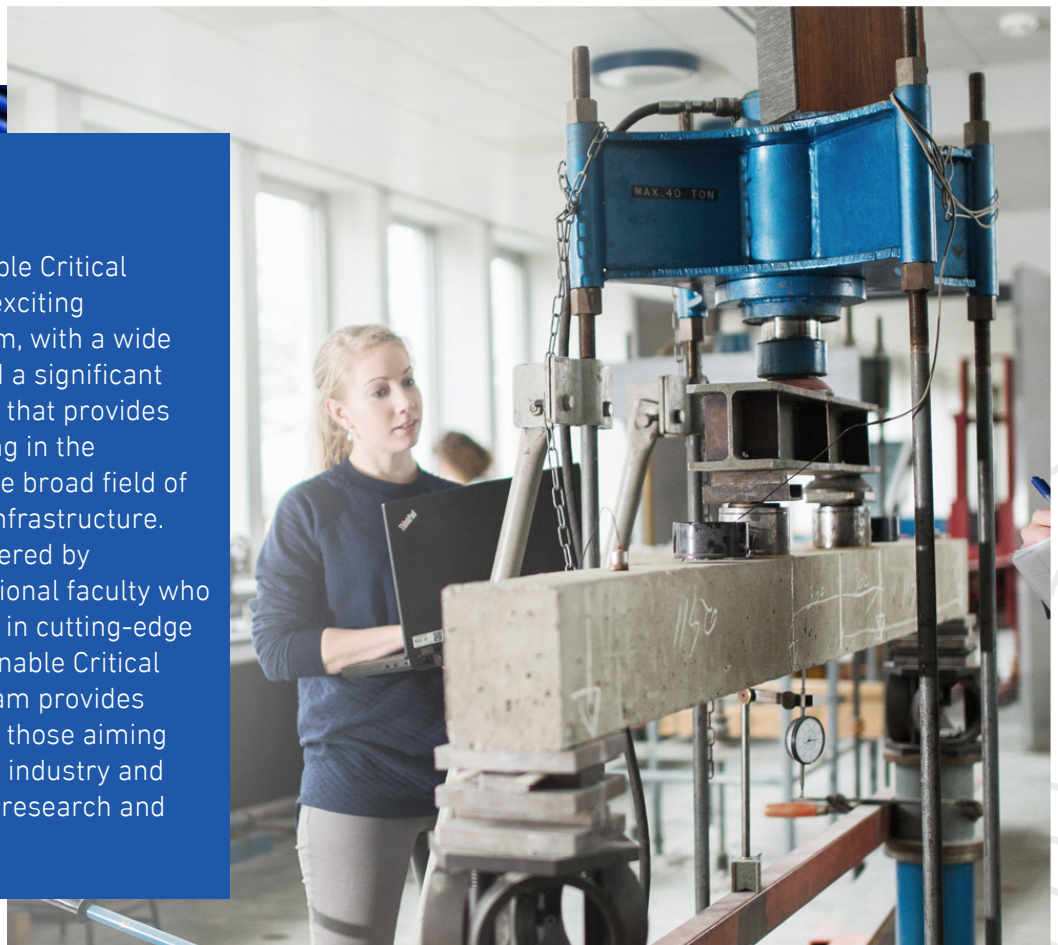
1) Ability to design integrated urban infrastructure systems for new or existing developments with careful examination of environmental, social and financial requirements.

- 2) Ability to apply planning and design tools using multi-disciplinary inputs in order effectively generate and implement solutions to urban infrastructure problems.
- 3) Understanding of the complex interactions between infrastructure systems solutions and their implications on larger scale (regional, national, global) technological, economic, societal and environmental systems with a view on long-term sustainability.
- 4) Understanding of the value of technical and scientific scholarship, service to society, leadership and life-long learning required to further their career aspirations in support of the needs of the community.

## Structure & Duration

The MSc in Sustainable Critical Infrastructure consists of 36 credit hours that include 12 credits of core courses, 12 credits of elective courses and 12 credits of Master's Thesis. Teaching is delivered through a combination of lectures and projects. The courses provide a comprehensive overview of the latest advances in Sustainable Critical Infrastructure.

During the research component of the program, you will have the opportunity to work with experts in the field using state-of-the-art facilities and techniques. The MSc program is typically completed within 2 years for full-time students.



## Courses

Typical courses include:

- Transportation Systems Analysis: Demand and Economics
- Urban Design for Sustainability: Theory and Practice
- Management of Infrastructure Systems
- Sustainable Building Science: Fundamentals, Tools, and Applications
- Infrastructure Finance
- Planning Theory, Practice, and Ethics
- Geographic Information Systems
- Infrastructure and Development
- Urban Planning and Design Studio
- Comparative Land Use and Transportation Planning
- Public Transportation Systems
- Thermal Energy in Buildings

## Admission Requirements

Applicants must meet the following minimum criteria:

- Completion of a Bachelor's degree in a relevant discipline with a minimum CGPA of 3.0 out of 4.0, or equivalent from a reputable accredited institution.
- A minimum level of English proficiency in the form of either: iBT TOEFL score of 91 or overall academic IELTS score of 6.5.
- A minimum quantitative score of 155 in the general Graduate Record Examination (GRE)
- A minimum of two referee recommendations (provided via online form).
- Statement of purpose (500-1,000 words).
- Admission interview.

## Scholarships

Khalifa University offers Graduate Research / Teaching Assistant (GRTA) scholarships to support qualified international students enrolled in graduate programs. The scholarship provides generous remuneration and benefits that include:

- Full coverage of tuition fees.
- Monthly stipend of AED 8,000 (equivalent to USD \$2,200)
- Free textbooks
- Visa processing costs
- Medical insurance coverage for students under the Khalifa University visa.
- Support to attend international research conferences.

## Application & Further Information



### ONLINE APPLICATION

<http://www.ku.ac.ae/pages/graduate-admissions>



### FURTHER INFORMATION

<http://www.ku.ac.ae/pages/graduate-programs->



### ENQUIRIES

[pgadmission@ku.ac.ae](mailto:pgadmission@ku.ac.ae)