



Al-Ahliyya  
Amman  
University



Faculty of  
Engineering

# Master of Structural Engineering



## Overview:

The structural engineering graduate program at AAU focuses on analytical and experimental research of structural behavior. Students get the technical understanding and problem-solving skills required to design and build complex structures and large-scale structural systems. The Structural Engineering program conducts research and offers courses in structural analysis and design, risk analysis, mechanics, and sustainable materials and structures, among other topics. Professional practice has been greatly influenced by the advancements in hazard and risk analysis, nonlinear dynamic analysis, structural health monitoring, and seismic loss assessment. Our curriculum provides a stimulating and challenging environment in which to study and progress professionally.

## Why study at AAU?

The program has been devised to enhance your knowledge in all areas of structural engineering, as well as to guarantee that your research skills are sharp enough to provide you a competitive advantage when you start your career. This will improve your industrial and research expertise which will boost your professional skills and improve your employability chances.

## Career Pathways:

Master of Structural Engineering graduates will have attained the advanced levels of expertise required to flourish in their chosen field. Professional engineering abilities will be strengthened throughout the program to meet current industry requirements, allowing graduates to glow in their jobs more quickly. After the completion of this course, students will have new options to advance in areas such as research and innovation in their sector. The department will make a substantial contribution to the region's and country's economic and structural growth. Students who graduate with honors from a Master of Engineering degree will be eligible for supervised research in the Doctor of Philosophy.

## Goals:

1. Provide skilled engineers to the industry sector who are experts in structural engineering and its many applications, allowing them to design and oversee various structures as well as conduct research and development in this field.
2. Help in finding solutions for problems in construction and economical solutions for the high prices of the residential buildings in the kingdom by elaborating and conducting research and studies to train engineers on the advance programs that are connected to structures.
3. Have a strong foundation of scientific and technical knowledge, as well as the problem-solving, critical-thinking, and other tools and skills required to be successful civil engineers.
4. Develop superior professional skills in computational analysis and design of steel, and in reinforced, composite, and pre-stressed concrete structures.
5. Investigate the structural integrity of materials and design procedures used in buildings, bridges, dams, tunnels, and other structures when exposed to natural occurrences or hostile environments.
6. Establish a systematic approach to problem solving, as well as essential project planning abilities and the capacity to effectively evaluate, interpret, and communicate results.

For more information

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