





Yarmouk University

Hijjawi Faculty for Engineering Technology

Department of Civil Engineering

Bachelor of Smart and Sustainable Cities Engineering

Program Overview

Brief introduction

he Smart and Sustainable Cities Engineering Program aims to prepare engineers specialized in designing and developing modern cities using smart technologies and sustainable practices. The program combines principles of civil engineering, advanced technology, and urban planning to provide innovative solutions to contemporary urban challenges. It focuses on improving quality of life through technologies such as the Internet of Things (IoT), Artificial Intelligence (AI), and renewable energy to enhance efficiency and reduce environmental impact.

Academic and practical goals

- **PEO1:** Graduates will enhance their skills and knowledge through education and training to excel in their Civil Engineering careers, contributing to infrastructure development and societal needs with high standards of ethics and professionalism
- PEO2: Graduates will have the ability to engage in advanced learning and self-development, including conducting impactful scientific research to enrich the scientific community, contribute to the economy, and actively participate in local and international postgraduate studies
- PEO3: Graduates will continuously demonstrate their effectiveness and leadership in multidisciplinary and diverse professional environments through innovative contributions, professional consultation, and dedicated community service while upholding ethical standards.
- **PEO4:** Graduates will strive for lifelong growth, continuously enhancing their decision-making abilities and professional integrity to achieve leadership roles and drive development in local, regional, and global industries.

Importance of the program and its role in the job market

The field of Smart and Sustainable Cities Engineering is a modern discipline that integrates civil engineering and smart technology. It focuses on addressing the growing needs for sustainable infrastructure development and improving the quality of life in cities. This field is witnessing an increasing demand for qualified engineers due to rapid urban growth and environmental challenges

Career Opportunities

Available job opportunities

- Urban Planner
- Sustainable Development Consultant
- Smart Systems Engineer
- Renewable Energy Engineer
- Urban Data Analyst

Sectors where graduates can work

- · Urban planning and sustainable development
- Civil engineering and infrastructure
- · Renewable energy and efficiency technologies
- · Smart technology and data analysis
- Scientific research

Learning Environment and Facilities

Laboratories and facilities

The program offers an advanced learning environment through laboratories equipped with the latest technologies in civil engineering and smart technology, along with facilities to support innovation and research.

Overview of the Study Plan

The study plan consists of 167 credit hours distributed across various fields, including civil engineering, urban planning, renewable energy, and smart technology.





