Yarmouk University

Hijjawi Faculty for Engineering Technology

Master's in Computer Engineering

Program Overview

An MS in Computer Engineering can provide advanced knowledge and skills, preparing graduates for specialized and high-demand roles in the tech industry. The program's combination of theoretical foundations and practical applications makes it a valuable credential for those seeking to advance their careers or engage in cutting-edge research and development.

Program Objectives

The objectives of a Master of Science in Computer Engineering program are typically to:

1. Provide students with advanced knowledge and skills in computer engineering, encompassing both theoretical concepts and practical applications.

2. Equip students with expertise in areas such as computer architecture, embedded systems, digital signal processing, networking, VLSI design, operating systems, software engineering, cybersecurity, and machine learning.

3. Foster critical thinking and problem-solving abilities to tackle complex challenges in computer engineering and related fields.

4. Cultivate a strong foundation in research methodologies, enabling students to conduct independent research and contribute to the advancement of the field.

5. Offer opportunities for specialization through elective courses, allowing students to tailor their education to their interests and career goals.

6. Prepare graduates for leadership roles in industry, academia, or research institutions, by providing hands-on experience, industry collaborations, and mentorship opportunities.

7. Promote ethical practices and a commitment to professionalism in the application of computer engineering principles and technologies.

8. Facilitate lifelong learning and professional development to adapt to emerging technologies and evolving industry trends.

Program Importance

A Master of Science in Computer Engineering is important for individual career growth, advancing technology, addressing societal needs, and contributing to economic and academic development. The program equips graduates with the expertise and skills needed to drive innovation and make significant contributions to their fields and society at large.

Targeted Groups and Accepted Majors

Have a bachelor's degree in Computer Engineering, Electrical Engineering (in all its branches), Mechatronics Engineering, Industrial Engineering, Computer Science, Computer Information Systems, or an equivalent degree. Other degrees are subject to Departmental approval.

Job Areas

Graduates with a Master of Science in Computer Engineering can work in various job areas, including Hardware Engineering, Software Development, Network and Security Engineering, Systems Architecture, Research and Development, Robotics and Automation, Data Science and Machine Learning, Consulting, Academia, Startups, Aerospace and Defense, Healthcare Technology, Manufacturing, and IoT and Smart Systems.

Credit Hours and Tuition Fees

Total credit hours: (33) Credit hours

For Jordanian students: 80 JOD/Hour

For international students: 300 USD/Hour

Study Plan Overview

The curriculum typically covers core subjects such as advanced computer architecture, embedded systems, digital signal processing, computer networks, VLSI design, operating systems, software engineering, cybersecurity, and machine learning. Elective courses allow students to specialize in areas like robotics, high-performance computing, computer vision, cloud computing, IoT, and biomedical computing. Students often complete a research project or thesis, preparing them for careers as computer systems engineers, software engineers, network engineers, embedded systems engineers, machine learning engineers, cybersecurity analysts, or research scientists in various industries.

Contact Information

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