



المعهد التكنولوجي العالي
بالعاشر من رمضان
وحدة ضمان الجودة

Chemical Engineering Program's Mission and Objectives

Program Mission

The program aims to prepare scientifically and professionally qualified cadres in various fields of chemical engineering to keep pace with the requirements of the labor market locally and regionally through a technological environment and integrated educational and research performance that supports innovation and achieving sustainable development in solving societal problems.

Program Objectives

1. Developing the program and courses considering the National Academic Reference Standards (NARS) for the engineering sector as well as for chemical engineering.
 2. Updating teaching, learning and evaluation strategies to effectively contribute to achieving graduates' outcomes.
 3. Preparing for an academically and professionally distinguished graduate capable of self-learning and creative thinking.
 4. Integrating knowledge and skills for graduates through various courses, field training, and graduation projects.
- and others in the fields of chemical engineering considering the national trends for development and problem solving.
5. Activating the areas of community participation between the community and the program by conducting applied research to solve the problems of the community
 6. Enhancing the capabilities and skills of the faculty members, the supporting staff, and the members of the administrative staff in the program.
 7. Providing professional development and continuing education programs for graduates according to the needs and developments of the labor market.



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Medical Engineering Program's Mission and Objectives

Program Mission

The program aims to prepare a specialized engineer with a high scientific and professional standard who is capable of continuous learning, competing locally, regionally and internationally, and contributing to scientific research and development in service of society and the achievement of sustainable development goals.

Program Objectives

- ١- Developing the administrative performance of the program and the optimal use of resources.
- ٢- Promoting the concepts and practices of quality, accreditation, and continuous improvement of the program.
- ٣- Improving laboratories and technological infrastructure that support the educational process and digital transformation.
- ٤- Supporting scientific research and innovation and linking it to the needs of society and the environment
- ٥- Updating the program and courses to keep pace with technological developments and the requirements of the labor market.
- ٦- Applying modern learning strategies based on the integration of knowledge and skills.
- ٧- Encouraging student activities and participation and their diversity inside and outside the Institute.
- ٨- Strengthening the field training system for students in healthcare institutions and medical industries.
- ٩- Providing professional development and continuing education programs for graduates.



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Mechatronics Engineering Program's Mission and Objectives

Program Mission

Preparing distinguished professionals in the field of Mechatronics who can compete in the local, regional, and international labor markets, and conducting applied research to creatively solve societal problems through an integrated educational and technological environment that adopts modern teaching and learning methods.

Program Objectives

1. Improving the performance of the program by improving academic and administrative processes and rationalizing the use of available resources.
2. Strengthening the quality system through continuous self-assessment and applying the standards of the Quality Assurance Unit.
3. Updating the infrastructure and technology of the program to support digital education and smart transformation in teaching and training.
4. Developing the capabilities of faculty members and assistant staff through training on the latest trends in mechatronics and technological education.
5. Applying modern learning strategies such as project-based learning and interactive learning to develop students' thinking and design skills.
6. Encouraging scientific research and innovation in the fields of robotics, intelligent systems and control, while linking research to industry and society.
7. Developing the program and courses continuously in accordance with academic standards and the requirements of the Fourth Industrial Revolution and the labor market.
8. Enhancing the role of the program in serving the community through student projects that apply effective technological solutions to serve the environment and the local community.
9. Supporting student activities to discover and develop students' talents in innovation, teamwork, and leadership.
10. Providing training programs and continuous professional development for graduates to raise their competitive readiness in the local and regional market.



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Mechanical Engineering Program's Mission and Objectives

Program Mission

The program aims to prepare a distinguished mechanical engineer who is scientifically and professionally qualified, capable of analyzing, designing, operating and developing mechanical systems and their various applications according to solid scientific and engineering foundations in a way that meets the needs of the engineering labor market, promotes innovation and responsible professional practices that contributes to applied scientific research in service of society and sustainable development.

Program Objectives

The Mechanical Program aims to:

- 1- Develop the educational process to ensure that students acquire engineering knowledge and skills in the fields of analysis, design, and operation of mechanical, thermal, and energy systems and their various applications, in accordance with National Academic Reference Standards (NARS).
- 2- Update curricula and teaching methods through the implementation of modern teaching and learning strategies, as well as the use of engineering software, modeling, simulation, and modern manufacturing technologies.
- 3- Support practical training and applied activities by developing laboratories and workshops and encouraging graduation projects and applied engineering activities that contribute to providing innovative solutions to industrial challenges.
- 4- Strengthen partnerships with the industrial sector to provide effective field training opportunities and align program outcomes with labor market requirements, thereby enhancing graduates' employability and professional competitiveness.
- 5- Develop professional values and personal skills, including commitment to professional ethics, teamwork, and quality and safety standards in engineering practices.
- 6- Support community service and sustainable development by directing educational activities and engineering projects toward contributing to solving environmental and industrial problems.
- 7- Ensure quality assurance and continuous improvement through the implementation of an effective system for evaluating learning outcomes and measuring stakeholder satisfaction, in support of the academic performance development of the program.
- 8- Promote applied scientific research and innovation in the fields of mechanical engineering by directing innovative graduation projects and research activities toward addressing industrial challenges and serving the community.



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Architectural Engineering Program's Mission and Objectives

Program Mission

The program aims to provide a high-quality educational program to prepare scientifically, and professionally qualified cadres specialized in architecture engineering in line with the requirements of the local, regional and international labor market. In addition to enhancing research and creative capabilities through a technological and scientific environment that supports innovation, originality and modernity to achieve sustainable development and community service.

Program Objectives

1. Integrating theoretical foundations with applied skills using the latest technological strategies in the field of architecture.
2. Meeting the requirements of the labor markets at the local, regional, and global levels by preparing an academically and professionally distinguished graduate.
3. Promoting scientific research, innovation, and participation in applied research and student activities and linking them to societal and environmental challenges.
4. Providing a stimulating learning environment that supports experiential learning, hands-on training, and creative design.
5. Supporting the values of social responsibility and belonging through projects that serve the community and the local environment and promote the exchange of experiences and the development of skills.



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Electrical Engineering Program's Mission and Objectives

Program Mission

The Electrical Engineering program seeks to provide high-quality engineering education that combines theoretical foundations with practical applications, in order to ensure the preparation of highly qualified graduates capable of meeting the needs of the labor market in the fields of electronics, communications and information technology locally, regionally and internationally, supporting applied scientific research and promoting community service and sustainable development, within the framework of national values and governance .

Program Objectives

1. Applying the basic concepts in mathematics and engineering sciences to analyze the problems of electronics and communication engineering and designing appropriate solutions for them.
2. Developing of the courses and the content of the program in line with the technological development and meet the requirements of the labor market.
3. Developing teamwork and effective communication skills to enable graduates to work efficiently in multidisciplinary teams.
4. Enhancing the integration between theoretical and applied aspects through the development of laboratories and linking them to modern engineering applications and industry requirements.
5. Supporting digital transformation in the educational process using modern educational technologies and platforms to develop students' digital skills.
6. Developing the professional and leadership skills of the graduates, including project management and the ability to adapt to the changes of the work environment.
7. Providing outstanding field training opportunities for students in competitive-level institutions and companies to enhance their practical skills.
8. Developing the capabilities of the faculty members, the supporting staff and the administrative staff of the electrical engineering program during training programs and workshops to develop the educational process.
9. Promoting scientific research, innovation, and knowledge economy to serve society and support sustainable development.
10. Supporting students' scientific and professional activities to develop students' innovation, creativity and leadership skills.
11. Providing specialized vocational training programs for graduates that support the needs of the labor market and enhance employment opportunities.



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Civil Engineering Program's Mission and Objectives

Program Mission

The Civil Engineering Program is committed to delivering a high-quality educational program that prepares qualified engineering professionals to meet the demands of the local, regional and international labor markets. The program also seeks to enhance research capabilities, foster creative thinking, and strengthen community partnerships within an academic environment characterized by authenticity, modernity, and innovation.

Program Objectives

The Civil Engineering Program at the Higher Technological Institute (HTI), 10th of Ramadan City, aims to achieve the following objectives:

- 1. Preparing Highly Qualified Engineering Graduates :**Provide advanced engineering education that equips students with up-to-date technical knowledge and practical skills across various disciplines of civil engineering, including structural engineering, public works, water resources, and geotechnical engineering, enabling them to compete effectively in the local, regional, and global labor markets.
- 2. Developing Innovation, Leadership, and Applied Research Skills :**Promote creativity, leadership, and teamwork among students while enabling them to utilize modern technological tools effectively. The program also encourages students to direct their research and graduation projects toward developing innovative solutions to infrastructure challenges.
- 3. Promoting Social Responsibility, Professional Ethics, and Environmental Sustainability:** Instill the values of integrity, transparency, and professional ethics, while reinforcing the principles of sustainable development and responsible citizenship to ensure graduates contribute effectively to community service and environmental sustainability.
- 4. Supporting Lifelong Learning and Professional and Academic Development:** Provide a dynamic learning environment that engages students and graduates in professional training, continuing education, and research activities. The program encourages lifelong learning and pursuit of postgraduate studies to ensure sustainable professional growth.
- 5. Empowering Students with Digital Transformation and Smart Technology Skills :**Implement advanced teaching strategies based on smart learning platforms and integrate modern engineering methodologies—such as Building Information Modeling (BIM), Geographic Information Systems (GIS), and Digital Twins—into academic courses and practical projects, preparing graduates for the evolving digital engineering environment.