

برنامج الهندسة المعمارية Architectural Engineering

الرؤية والرسالة

1- رؤية برنامج الهندسة المعمارية:

الوصول إلى أعلى مستوى للخريجين من حيث الكفاءة والمهارات ليتوافق مع المتطلبات المحلية والإقليمية لسوق العمل في مجال الهندسة المعمارية وفي مجال التطوير والتنمية العمرانية.

Achieving the highest level of graduates in terms of competencies and skills to meet local and regional labor market in the field of Architectural engineering and urban development.

2- رسالة برنامج الهندسة المعمارية:

رسالة قسم الهندسة المعمارية هي إعداد خريج مبدع يتوازن مع التوجهات الحديثة المتغيرة، وقدر على استخدام التكنولوجيا وأدواتها الحديثة ومهارات البحث العلمي ويمكنه التنافس محلياً وإقليمياً وعالمياً وخدمة مجتمعه مع مراعاته للجوانب الأخلاقية والثقافات والبيئة المحلية الأصلية من خلال بيئة تعليمية متغيرة وصحية ومتواقة مع المعايير الأكاديمية وملائمة لاحتياجات سوق العمل المحلي والدولي .

The mission of the Department of Architecture Engineering is to prepare a creative graduate who is up-to-date with the advanced trends; able to use modern technology tools and scientific research skills; and able to compete locally, regionally and globally and serve his community with consideration of ethical aspects, cultures, and the authentic local environment through an advanced scientific and healthy educational environment according to the academic standards and fulfilling to local and regional labor market needs.

Program Aims

- 1) Master full knowledge of mathematical, physical and chemical basics so that it can accommodate the specialized courses and improves their analytical expertise to solve the problems it faces.
- 2) Apply skills of research and analysis, the ability to artistic perfection, and the ability of imagination, creation and innovation in design with respect of local and world architectural trends.
- 3) Show a distinct and professional personality interacting with the community character and identity and cultural characteristics.
- 4) Work within a team and manage architecture projects with the ability to design buildings by construction, environmental and legislative problems.
- 5) Use developed technology in the field of architecture with skills of correlation between the architectural building masses and external and internal spaces and understand construction methods related to architecture.
- 6) Understand the correlation between the buildings, the community, and the surrounding environment, to achieve sustainable designs which provide comfort to users and preserve the environment.
- 7) Practice modern techniques taking the advantage of all knowledge collected by the various scientific aspects in order to keep up with scientific and technological progress and computer programs that help creation and innovation in design.
- 8) Master self-learning and life-long learning strategies to communicate effectively using different modes, tools, and languages to deal with academic/professional challenges in a critical and creative manner.
- 9) Lead, manage, and supervise a range of designers and site engineers using different tools and principles to meet society's requirements of occupational health, safety, and engineering quality standards.

مواصفات الخريج - Program Attributes(NARS2018)

1. Master a wide spectrum of engineering knowledge and specialized skills and can apply acquired knowledge using theories and abstract thinking in real life situations;
2. Apply analytic critical and systemic thinking to identify, diagnose and solve engineering problems with a wide range of complexity and variation;
3. Behave professionally and adhere to engineering ethics and standards;
4. Work in and lead a heterogeneous team of professionals from different engineering specialties and assume responsibility for own and team performance;
5. Recognize his/her role in promoting the engineering field and contribute in the development of the profession and the community;
6. Value the importance of the environment, both physical and natural, and work to promote sustainability principles;
7. Use techniques, skills and modern engineering tools necessary for engineering practice;
8. Assume full responsibility for own learning and self-development, engage in lifelong learning and demonstrate the capacity to engage in post- graduate and research studies;
9. Communicate effectively using different modes, tools and languages with various audiences; to deal with academic/professional challenges in a critical and creative manner;
10. Demonstrate leadership qualities, business administration and entrepreneurial skills.

Matrix: Graduate Attributes with Program Aims

مصفوفة أهداف البرنامج مع مواصفات الخريج

Graduate Attributes	Program Aims
1. Master a wide spectrum of engineering knowledge and specialized skills and can apply acquired knowledge using theories and abstract thinking in real life situations;	1) Master full knowledge of mathematical, physical and chemical basics so that it can accommodate the specialized courses and improves their analytical expertise to solve the problems it faces.
2. Apply analytic critical and systemic thinking to identify, diagnose and solve engineering problems with a wide range of complexity and variation;	2) Apply skills of research and analysis, the ability to artistic perfection, and the ability of imagination, creation and innovation in design with respect of local and world architectural trends.
3. Behave professionally and adhere to engineering ethics and standards;	3) Show a distinct and professional personality interacting with the community character and identity and cultural characteristics.
4. Work in and lead a heterogeneous team of professionals from different engineering specialties and assume responsibility for own and team performance;	4) Work within a team and manage architecture projects with the ability to design buildings by construction, environmental and legislative problems.
5. Recognize his/her role in promoting the engineering field and contribute in the development of the profession and the community;	5) Use developed technology in the field of architecture with skills of correlation between the architectural building masses and external and internal spaces and understand construction methods related to architecture.
6. Value the importance of the environment, both physical and natural, and work to promote sustainability principles;	6) Understand the correlation between the buildings, the community, and the surrounding environment, to achieve sustainable designs which provide comfort to users and preserve the environment.
7. Use techniques, skills and modern engineering tools necessary for engineering practice;	7) Practice modern techniques taking the advantage of all knowledge collected by the various scientific aspects in order to keep up with scientific and technological progress and computer programs that help creation and innovation in design.

8. Assume full responsibility for own learning and self-development, engage in lifelong learning and demonstrate the capacity to engage in post-graduate and research studies;	8) Master self-learning and life-long learning strategies to communicate effectively using different modes, tools, and languages to deal with academic/professional challenges in a critical and creative manner.
9. Communicate effectively using different modes, tools and languages with various audiences; to deal with academic/professional challenges in a critical and creative manner;	
10. Demonstrate leadership qualities, business administration and entrepreneurial skills.	9) Lead, manage, and supervise a range of designers and site engineers using different tools and principles to meet society's requirements of occupational health, safety, and engineering quality standards.