



## Engineering and Technology Faculty - Building Engineering Department

### Course OUTLINE

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Water systems and sanitary installations in buildings (12310462) أنظمة المياه والتمديدات الصحية للمباني

Instructor: Eng. Wala' OMAR (mail : wala\_omar@hotmail.com) م. ولاء عمر

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#### **Course description:**

This course is intended to equip the student with basic knowledge of the various utilities services, which constitute a vital part of modern building planning and design.

The course also considers the design and installation of services in multi-storey buildings in terms of the relation of services to environmental structural and general architectural requirements.

#### **Course objectives:**

- Ability to design water and sanitary system in buildings
- Ability to distinguish type of system for fire protection and choose the suitable one for each cases
- Ability to design elevators

#### **Topical outline:** (Note: Sequence of topics below may be modified as the semester proceeds)

1. Vertical Transportation in buildings which will include elevators and escalators
2. Water supply which will include main water supply, cold water storage, distribution and management of rain water
3. Waste disposal which will include disposal of sewage, garbage and bacteriological wastes and recycling of waste
4. Fire and buildings which will include fire impact on different types of structures and fire protection of buildings

#### **Course evaluation**

- 25% First exam
- 25% Second exam
- 40% Final exam
- 10% Participation

#### **Textbook and references**

Benjamin Stein and John S. Reynolds, Mechanical and Electrical Equipment for Buildings, 11th Edition, 2010, John Wiley & Sons.