

Course name: TECHINCAL INSTALLATIONS

Course code: CE 364

Course hours: Credit hours 2, Contact hours 2

Course Pre-requisites: None

Course Description

This course aims to study the engineering systems of environmental control, as well as the technical installations of the buildings such as sanitary installations, sewage systems, drainage of water in buildings, water feeding systems, etc. The course also deals with the study of air conditioning systems, audio processing and other indoor systems.

Course Main Objective

In this course, the students will be to:

- Know the basic principles of building services and applications in the field of water supply to buildings.
- Know the drainage systems and sewage works in general.
- Know the environmental basics and methods of water treatment and sanitation.
- Know the methods of water transport, storage and inspection.
- Know the air conditioning systems in buildings.
- Know the acoustic insulation systems in buildings.

Course Learning Outcomes

After the completion of this course, the students will be able to;

- Understanding of the basic principles of building service systems such as plumbing, electrical systems.
- Select type of the appropriate application and performance of building service systems such as plumbing, electrical, vertical transportation, A.C, and acoustic systems.
- Design of how to furnish sanitary devices in bathrooms and toilets and sewage with different drainage systems.
- Design of how-to furnishing lighting unites in building.
- Selection of vertical transportation, air conditioning and sound insulation systems suitable for architectural spaces.

Course evaluation

- Quizzes, practical assignments
- Weekly/biweekly reviews
- Midterm examination
- Attendance
- Final examination

Course recommended books

- Water and Wastewater Technology, (7th Edition), Mark J. Hammer Sr. and Mark J. Hammer Jr., 2011.

Course References

- Water and Wastewater Calculations Manual, 2nd Ed., Shun Lin and C. Lee, 2007.
- Scientific journals: (Alam Al Bena, Al Bena Magazine, Design, Umran Magazine, etc.).
- <http://repository.sustech.edu/handle/123456789/12606>.
- Illustrated lectures and a scientific material prepared according to the PowerPoint program.