



Course Specification

— (Bachelor)

Course Title: Technical installation

Course Code: CE-364

Program: Architecture

Department: Architecture

College: Architecture and Planning

Institution: Qassim University

1. Course Identification

Course general 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(s):

By the end of this course the students will be able to:

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

2. Course Learning Outcomes (CLOs)

Code	Course Learning Outcomes	Code of CLOs aligned with program
1.0	Knowledge and understanding	
1.1	Identify the basic principles of building service systems such as plumbing, electrical systems.	K1
1.2	Select type of the appropriate application and performance of building service systems such as plumbing, electrical, vertical transportation, A.C, and acoustic systems.	K1
1..		
2.0	Skills	
2.1	Design of how to furnishing sanitary devices in bathrooms and toilets and sewage with different drainage systems.	S2
2.2	Design of how to furnishing lighting unites in building.	S3
	Selection of vertical transportation, air conditioning and sound insulation systems suitable for architectural spaces.	S3



Code	Course Learning Outcomes	Code of CLOs aligned with program
3.0	Values, autonomy, and responsibility	
3....		

3. Students Assessment Activities

No	Assessment Activities *
1.	Quizzes, Practical assignments
2.	Mid-term exam
3.	Final Exam

4. Learning Resources and Facilities

Essential 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.).
Supportive References	Plumbing and electrical fixtures, Technical and Vocational Training Corporation, Kingdom of Saudi Arabia, 2013.
Electronic Materials	http://repository.sustech.edu/handle/123456789/12606 .
Other Learning Materials	Illustrated lectures and a scientific material prepared according to the PowerPoint program.

