

CB431 Technical Installations In Buildings

COURSE INFORMATION

Prerequisites	Academic Year & Level		Teaching Methods			Credit Hrs.
	Year	Semester	Lecture	Tutorial	Laborator y	
CB322	4	8	4	2	0	3

COURSE AIM

The course aims at understanding of the physical requirements of buildings, the different technical installations in buildings, and the equipment required for building control systems.

COURSE WEEKLY CONTENTS

- 1 Human comfort and health requirements.
- 2 Human comfort and health requirements. Continued
- 3 Thermodynamics Principles.
- 4 Active HVAC systems – Heating systems
- 5 Active HVAC systems – Cooling systems.
- 6 Thermal insulation in buildings
- 7 Water proofing and moisture problems in buildings. + Midterm Exam
- 8 Lighting systems.
- 9 Vertical circulation.
- 10 Execution of electrical systems in buildings.
- 11 Plumbing systems (1,2).
- 12 Plumbing systems (1,2). Continued
- 13 Fire protection systems.
- 14 Architectural acoustics in buildings (1,2).
- 15 Architectural acoustics in buildings (1,2). Continued

STUDENT GRADING & ASSESSMENT

Weeks	Exams	Assign.	Quizzes	Reports	Present.	Lab.	Total
1 to 7	20 Midterm	←	10	MARKS		→	30
To be freely distributed among possible assessments							
8 to 12	←		20	MARKS		→	20
13 to 15	←		10	MARKS		→	10
16 or 17	40 Final						40
Total	Exams	Assign.	Quizzes	Reports	Present.	Lab.	100

REFERENCES

Textbook The Building Environment: Active and Passive Control Systems, Vaughn Bradshaw, John Wiley & Sons, 2006.

Other Design and Construction Hand Book, MERRITT F. S., RICKETTS J.T., McGraw Hill, Inc, New York, Latest Edition.