



ARE 202 ARCHITECTURAL DESIGN I

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Location:19-325 A
Course Timings: Saturday &
Monday, 1.10 PM to 5.00 PM

1. Course Description

Three credit course with nine hours of studio interaction with the instructor per week. The course focuses on the understanding of the design process and the methodology for achieving functionally and aesthetically optimal design for buildings.

The course exposes students to general design elements and guidelines that allow identification of a design problem and seek alternative solutions for the same problem in a systematic and scientific manner keeping in mind the aesthetic and creative requirements. Creative and graphical skills are the soul of this course which is stepwise enhances within the practical limitations involved with every design project.

Design problems of complete but simple buildings are introduced to the students with emphasis provided on considerations of building function, construction, material and system, cultural, environmental constraints and climatic influences. Three projects are dealt by the students in this course, two of which are minor projects (3 weeks) and the third project is a complex design problem (9 weeks). The course schedule describes the outline of the course calendar.

2. Textbook:

The handbook of building types, Neufert, Architects' Data, 2nd edition, Garanda Publishing, 1980.

3. Course Objective

Course Objective(s)	Related To Program Objective
• Introduce and practice the design process in Architecture.	#1
• Exposes students to general design elements and guidelines that allow identification of a design problem and seek alternative solutions for the same problem in a systematic and scientific manner.	#2
• Introduce the methodology of integrating building systems in the design.	#2
• To further enhance, in general, the students' graphics and oral presentation and model making skills.	#2

4. Course Outcomes

Relationship of Course to Program Outcomes	Program Outcome
<ul style="list-style-type: none"> Be able to apply knowledge of science & engineering principles in the design of buildings. 	1.1
<ul style="list-style-type: none"> Be able to design and analyze data & interpret results related to building requirements. 	2.1
<ul style="list-style-type: none"> Be able to design a simple building using a design process to meet desired needs within a set of constraints. 	2.2
<ul style="list-style-type: none"> Be able to critique and evaluate architectural design projects. 	2.5
<ul style="list-style-type: none"> Be able to efficiently communicate in oral, written & graphical forms with professional quality visual aids as well as utilize computer aided design programs. 	2.7

5. Course Schedule

Week Number	Description
1	Minor Design Project
2	<ul style="list-style-type: none"> Basic layout design Presentation on 5th March
3	
4	Design Analysis <ul style="list-style-type: none"> Analysis & case study of an existing building Presentation on 26th March
5	
6	
7	Major Design Project <ul style="list-style-type: none"> Design of a residential building Presentation on May 28th
8	
9	
10	
11	
12	
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15	

6. Course Requirement

The studio hours will be divided into two segments. First one hour will be allocated for instruction and group discussion followed by a break. During the next secession, students will work in their respective cubicles and will be attended individually by the instructor. When required, additional group discussions will be held.

Attendance throughout the studio secession is a must, student's physical and mental presence is appreciated which will result in enhanced learning and better design output.

7. Project Deadlines

Students are requested to comply with the course schedule and deadline dates. However, modification in the scheduled dates can be carried out on mutual agreement among the students and the instructor. For best performance, strict adherence to the outlined course schedule is recommended.

8. Course Grading

Classification	Percentage (%)
Attendance	10%
Participation, personal qualities, punctuality & initiation	10%
Minor Projects	20 x 2%
Major Project	40%

9. References

1. Iaseau, P. **"Graphic Thinking for Architects and Designers"**, 3rd Edition, John Wiley and Sons, Inc. USA, 2001
2. Baiche, B. & Walliman, N. **"Neufert Architect's Data"** 3rd Editing, Black Well Science Ltd. U.K. 2002.
3. Journals and magazines related to Architectural Design.

Note:

- As engineering students and future professionals, students are required to be responsible and be present in all the classes. A studios missed is knowledge lost. All the students should be present in the studio before the instructor arrives and should commence their design work minimizing the wastage of time. Attendance will be taken a number of times during the studio hours and will not be repeated.
- Two un-excused absences from the studio will result in a warning letter. Further absence requires the student to withdraw from the course (W) or (DN) will be reported to the registrar office.
- Late submission of assignments is not expected and will result in reduced grades.
- To complete your work and do a good job, you are expected to put extra efforts and time at your own convenience.