

DEPARTMENT OF ARCHITECTURE

| | COURSE PLAN | I – PART I | | |
|--|--|-----------------------------|-----------------|--|
| Name of the programme and specialization | B.ARCH (ARCHITECTURE) | | | |
| Course Title | BUILDING CONSTRUCTION AND MATERIALS II | | | |
| Course Code | AR 207 | No. of Credits | 3 | |
| Course Code of Pre- requisite subject(s) | | | | |
| Session | July 2022 | Section (if, applicable) | NA ARCHITECTURE | |
| Name of Faculty | Prof.K. BHAGYASRI | Department | ARCHITECTORE | |
| Official Email | bhagyasri@nitt.edu | Telephone No. | 9884472866 | |
| Name of Course Coordinator(s) | NA MARINE | | | |
| (if, applicable) | NA NA | Telephone No. | NA | |
| Official E-mail | | | | |
| Course Type | CORE COURSE | | | |

Syllabus (approved in BoS)

Study the properties and characteristics of different materials used for roof of coverings R.C.C. and composite roof slab flooring materials timber and glass.

Joinery and detailing of various types of wooden doors fully glazed, partially glazed, sliding and folding door, etc. fully glazed window in timber fixing of glass, fixtures and fastenings.

Developmental reference to traditional trusses, different forms, lean-to, double lean- to collar, couple roof, fixing of Mangalore tiles, A.C. & G.I. sheets and gutters.

Flat roof construction in R.C.C. and composite materials, steels trusses and details of roof coverings and gutters.

Principles of flooring and terracing - floors - brick, stone, concrete and timber floors with timber floors with floor finishes.

REFERENCE TEXTS

- 1. Arora, S.P. & Bindra, S. P., "A Text Book of BuildingConstruction", Dhanpat Rai & Sons, New Delhi, 1994.
- 2. Jha, J. &Sinha, S.K., "Building Construction", Khanna Publishers, New Delhi, 1997.

COURSE OBJECTIVES

- i)To make student knowledgeable in construction techniques, technologies and material specifications for roofing and flooring in buildings.
- ii)To make the student aware of the different materials used for roofing and flooring.
- iii)To make the student understand in detail the types and design of doors and their joinery.

MAPPING OF COs with POs

| MAPPING OF COs with POs Course Outcomes | Programme Outcomes (PO) |
|--|-------------------------|
| Understand construction techniques, analyse and suggest roof design, interpret & create construction drawing for the same, for any type of building. | |



- 2. Understand construction techniques, analyse and suggest flooring, interpret & create construction drawing for the same, for any type of building.
- 3. Develop door design for a given opening, interpret the design for construction & create working drawing with joinery details for the

COURSE PLAN - PART II

COURSE OVERVIEW

Course topics – as given in syllabus. Students will be given introduction to the topic including the theoretical data required to understand the concepts. Students will then be required to do construction drawings (plan, elevations, sections & detailed drawings) for the given project/topic. The idea is to give an overall understanding of types of materials available; choosing a material; modifications as influenced by site constraints and design inputs; different construction practices & stages of construction in a site.

COURSE TEACHING AND LEARNING ACTIVITIES

| S.No. | Week/Contact | TAING ACTIVITIES | Assistation 1 |
|-------|----------------------|--------------------|--|
| | Hours | Topic | Mode of Delivery |
| 1 | Week 1 to week 6 | Roofing | Lecture/PPT |
| 2 | Week 7 | Material Studies 1 | presentations/Studio Seminar presentation |
| 3 | Week 8 to Week 11 | Flooring | by students Lecture/PPT |
| 4 | Week 12 | Material Studies 2 | presentations/Studio Seminar presentation |
| 5 | Week 13 to Week 16 | Doors | by students Lecture/PPT |
| OURS | SE ASSESSMENT METHOD | e | presentations/Studio |

COURSE ASSESSMENT METHODS

| S.No. | Mode of Assessment | Week/Date | | |
|--------|-----------------------------------|---------------------------|--|-------------------|
| 1 | Continous assesment - BC | Meevipate | Duration | % Weightage |
| 20,000 | Plates (Roofing) | Week 1 - 6 | | 25 |
| 2 | Seminar Presentation | Week 7 & 12 | ALLEGA TO THE STATE OF THE STAT | |
| 3 | Test | 18/10/2022 | | 10 |
| | Continous assesment - BC | tentatively | 1 hr | 10 |
| 4 | Plates (Flooring + Doors) | Week 8 to 16 | Sinc duling the | 25 |
| CPA | Compensation Assessment* | 29/11/2022 tentatively | 1 hr | |
| 5 | Final Assessment * | | | O PARTIES AND THE |
| nanda | tory; refer to guidelines on page | | | 30 |

*mandatory; refer to guidelines on page 4

COURSE EXIT SURVEY

Online feedback from students through survey

COURSE POLICY



One compensation assessment for absentees in assessments shall be conducted. Only genuine cases of absence shall be considered. Late submissions will not be encouraged for sheets.

ATTENDANCE POLICY (A uniform attendance policy as specified below shall be followed)

- At least 75% attendance in each course is mandatory.
- A maximum of 10% shall be allowed under On Duty (OD) category.
- > Students with less than 65% of attendance shall be prevented from writing the final assessment and shall be awarded 'V' grade.

ACADEMIC DISHONESTY & PLAGIARISM

- Possessing a mobile phone, carrying bits of paper, talking to other students, copying from others during an assessment will be treated as punishable dishonesty.
- > Zero mark to be awarded for the offenders. For copying from another student, both students get the same penalty of zero mark.
- The departmental disciplinary committee including the course faculty member, PAC chairperson and the HoD, as members shall verify the facts of the malpractice and award the punishment if the student is found guilty. The report shall be submitted to the Academic office.
- > The above policy against academic dishonesty shall be applicable for all the programmes.

ADDITIONAL INFORMATION, IF ANY

A student must score a minimum of 20% in the final assessment to complete the course.

For a student to secure a minimum of E grade, he/ she has to secure a minimum of 40% in the cumulative assessment in theory courses

Course Faculty

FOR APPROVAL

CC-Chairperson Sound My HOD XTh

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Guidelines

- a) The number of assessments for any theory course shall range from 4 to 6.
- b) Every theory course shall have a final assessment on the entire syllabus with at least 30% weightage.
- c) One compensation assessment for absentees in assessments (other than final assessment) is mandatory. Only genuine cases of absence shall be considered.
- d) The passing minimum shall be as per the regulations.

| B.Tech. Admitted in | | | P.G. | |
|---------------------|------|-------------------------------------|------|-----|
| 2018 | 2017 | 2016 | 2015 | |
| 35% or (Class | | (Peak/3) or (Cl whichever is low | | 40% |

- e) Attendance policy and the policy on academic dishonesty & plagiarism by students are uniform for all the courses.
- f) Absolute grading policy shall be incorporated if the number of students per course is less than 10.
- g) Necessary care shall be taken to ensure that the course plan is reasonable and is objective.