



UNIVERSITY OF CALICUT

Abstract

Faculty of Engineering-B.Arch programme-Revised regulation and syllabus with effect from 2017 admissions-implemented-Orders issued.

U.O.No. 11016/2017/Admn

G & A - IV - E

Dated, Calicut University.P.O, 31.08.2017

*Read:-*1.Item No.1 of the Minutes of the meeting of the Board of Studies in Architecture held on 05.06.2017.
2.Item No.1.10 of the Minutes of the meeting of the Academic council held on 17.07.2017.

ORDER

As per paper read as (1), the Board of Studies in Architecture discussed and scrutinised the B.Arch course Regulation 2017 in detail and approved the same with modifications. The Board also approved the Curriculum and Syllabus for Combined First and Second semester B.Arch Programme.

According to paper read as (2), the Academic council in its meeting held on 17.07.2017 resolved to approve Item No.1 of the Minutes of the meeting of the Board of Studies in Architecture held on 05.06.2017.

The Vice Chancellor has accorded sanction to implement the above resolution of the Academic Council.

The following orders are therefore issued;

1.The Revised Regulations and the Syllabus for Combined First and Second semester B.Arch Programme is implemented with effect from 2017 admission.

(Regulation and syllabus appended)

Ajitha P.P

Joint Registrar

To

1.The Controller of Examinations
2.Principals of affiliated B.Arch Colleges
Copy to:PS to VC/PA to PVC/PA to Registrar/PA to CE/DR,B.Tech/EX & EG sections/SF/DF/FC

Forwarded / By Order

Section Officer

University of Calicut

Course Regulations

of

B.Arch. Degree Course

(With effect from 2017 admissions)

Preamble

Architectural education in India is regulated by the Council of Architecture (hereafter, the COA, unless otherwise specified) which was constituted under the Architect's Act 1972. Council has prescribed mandatory 'minimum standards of Architectural Education regulations'. It prescribes the structure of the B. Arch. Course, eligibility for admission of students, periods of study, standards of syllabus, examinations, faculty, infrastructure, equipment, maximum permissible intake for each batch, etc. The course regulations of B. Arch. Degree course (2017 Scheme) of the University has been formulated based on the COA regulations.

1. Conditions for Admission

Candidates for admission to the B.Arch. Degree course shall be required to have passed the Higher Secondary (Plus Two) Examination of State Board of Kerala or examination recognized equivalent by the University of Calicut (hereafter, the University, unless otherwise specified), with Mathematics as a subject, with minimum 50% in aggregate marks.

All Admissions to B.Arch. degree course shall be subject to passing of National Aptitude Test in Architecture (NATA) conducted by the COA (as per the guidelines of COA, India) or any specially designed aptitude test in architecture conducted by the competent authority of the Central / State Governments as approved by the COA. There is no provision for lateral admission to the second year or at any stage for the 5 year degree course in Architecture.

1.1 Admission to Diploma Holders

A candidate who has a diploma in architecture / engineering awarded by the State Board of Technical Examination or an examination recognized equivalent by the State Board of Technical Education after undergoing regular course of 3 years in an approved institute, securing at least 50% aggregate marks, shall be eligible to be admitted to the first year B.Arch. programme of the University. Candidates with International Baccalaureate Diploma, after 10 years of schooling, with not less than 50% marks in aggregate and with Mathematics as a compulsory subject of examination are also eligible.

Diploma holders from other states should produce an Equivalence certificate from the Controller of Technical Exams, Kerala/State Board of Technical Examinations for admission to B. Arch. Course.

Note:

A relaxation of 5% marks in the qualifying examination will be allowed to those candidates who belong to the communities listed under the Socially and Educationally Backward Classes (SEBC) and whose annual family income is up to the specified limit. SC/ST candidates need only a pass in the qualifying examination. The amendments in qualifications for admission as notified by the COA from time to time will also be applicable for the admission to B. Arch Degree Course.

Criteria for selection and method of admission to merit/management seats for B. Arch. Degree course conducted by Government/Aided/Self-financing colleges

affiliated to the University shall be governed by the rules/regulations framed by the Commissioner of Entrance Examinations or other competent authority appointed by the Government of Kerala, in consultation with the University and without contravening with the stipulation of the University Grants Commission (UGC) and the COA. The students admitted by affiliated colleges violating the above regulations will not be eligible for registration to University Examinations and contravention of the regulations shall lead to withdrawal/suspension of affiliation. They shall also satisfy the conditions regarding age and physical fitness as prescribed by the University.

2. **Structure of the Course**

The B.Arch. Degree Course will have a curriculum in conformity with the minimum standards of Architectural Education prescribed by the COA, constituted under the Architect's Act 1972, with syllabi consisting of theory, theory cum studio and studio subjects that shall be categorized as follows:

- i. Design Skills subjects include Architectural Design, Basic Design, Architectural Thesis, etc.
- ii. Technology and Construction Skills subjects include Building Materials and Construction, Architectural Detailing and Working Drawing, etc.
- iii. Arts and Humanities subjects include History of Architecture, Sociology & Economics Theory of Human Settlements, Urban Housing, etc.
- iv. Professional and Auxiliary Skills subjects include Architectural Drawing and Graphics, Visual Arts, Computer-aided visualization, etc.
- v. Electives include elective courses like Vernacular Architecture, Architectural Journalism and Photography, Entrepreneurship skills for Architects, etc.

All students shall choose three elective subjects; one each in the sixth, seventh and ninth semesters from a set of elective subjects prescribed in the syllabus and offered by the institution. There should be at least 25% students of the class/batch for an elective subject to be offered.

New electives may be introduced according to the needs of emerging fields in architecture. The name of the elective and its syllabus should be approved by the University before the subject is offered as an elective.

The subjects of study, both theory and practical, shall be in accordance with the prescribed scheme and syllabi.

The medium of instruction, examination, and evaluation is English for all courses, design studios, seminar presentations and project/thesis reports.

3. **Duration of the Course**

The course for the B. Arch. Degree shall extend over a period of five academic years comprising of ten semesters including one semester of Practical Training after the completion of the 7th semester B. Arch. Examination and one semester Architectural Thesis Project work after the completion of the 9th semester B. Arch. examination. The maximum duration permissible for taking the B. Arch. Degree course is fixed as 10 years.

Admission to the first year shall be completed by 31st August. The first and second semesters shall be combined and the S1 & S2 B. Arch. Examination will be conducted at the end of the first academic year.

The minimum number of working days in combined first and second semesters shall be 150 days. In the 3rd to 10th semesters, there shall be a minimum of 75 working days. Working periods can be of 50-60 min. duration. A Working week shall consist of 30 - 40 periods.

4. **Course Calendar**

The course calendar, published by the University in advance, should be strictly followed for ensuring timely conduct of examinations and publication of results. The course calendar should be prepared by convening a meeting of Principals / Heads of all affiliated architecture institutions.

Faculty members from affiliated architecture colleges who are assigned duty by the University for Centralized Valuation Camp should strictly attend the valuation at the specified centre; Head of each institution should ensure this, failing which disciplinary action will be initiated against defaulting colleges, including withholding of valuation of answer papers of candidates appeared for the concerned examination from such institutions. Duty leave shall be granted to such faculty members who are assigned valuation duties.

Faculty members appointed for Centralized Valuation Camp should necessarily have minimum two years teaching experience or as prescribed by the University from time to time.

At the end of every semester, the Head of each Institution should forward the list of faculty members working in the college along with their qualification, years of teaching experience, and subjects taught in various semesters to the University. This is a mandatory requirement which should be strictly followed by the Head of each Institution. The head of each Institution shall ensure the availability of sufficient number of regular faculty members having experience and qualifications (as prescribed by the COA in the Regulations for Architecture Education) in the institution.

5. **Assessment of Students**

Assessment of students for each subject will be done by internal continuous assessment and end semester examinations. The individual maximum marks allotted for continuous assessment and End-semester University examinations for each subject is as prescribed by the scheme of study.

Every teacher is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD' for every semester which consists of attendance marked in each theory / theory cum studio /studio class, the assessment marks and the record of class work (topics covered), separately for each course handled by the teacher. This should be submitted to the Head of the Department periodically (at least three times in a semester) for checking the syllabus coverage and the records of assessment marks and attendance. The Head of the Department will affix his/her signature and date after due verification. At the end of the semester, the record should be verified by the Head of the Department who shall keep this document in safe custody (for ten years

from the date of admission of that batch of students). The records of attendance and assessment of both current and previous semesters should be available for inspection.

a) **Continuous Assessment**

Internal assessment shall be conducted throughout the semester. It shall be based on internal examinations, assignments (such as home assignment, problem solving, group discussions, quiz, literature survey, seminar, term-project, software exercises, etc.) as decided by the faculty handling the course with the approval of the head of the institution, and regularity in the class.

Internal assessment marks of all theory and practical subjects should have a class average limited to 80%. If the class average of internal assessment marks of any theory subject is greater than 80%, it should be normalized to limit it to 80%. If the class average is not greater than 80%, absolute marks should be given.

For practical subjects, end-semester examination marks of the candidates who have secured 40% or more marks should have a class average limited to 80%. If the class average of end-semester examination marks of practical subjects is greater than 80%, it should be normalized to limit the class average to 80%. If it is not greater than 80%, absolute marks should be given.

All the students in the nominal roll of the class on the closing day of semester should be considered for normalization of internal marks.

Normalized internal assessment marks of theory and practical subjects, should be published in the college 10 days before sending it to the University so as to enable the students to report any corrections.

All subjects of the B.Arch. Degree Course excluding Dissertation, Practical Training, Thesis and Viva Voce are grouped into two. Continuous assessment marks shall be awarded as per the following norms for each group.

GROUP I

Basic Design, Architectural Design I, II, III, IV, V, and VI, Building Materials and Construction – I, II, III, IV, V and VI, Architectural Drawing and Graphics, Visual Arts, Model-making Workshop, Communication Skills, Building Science Lab, Computer-aided Visualization I and II, and Architectural Detailing and Working Drawing.

Assignments/other measures as specified above	– 70%,
Test(s)	– 20%
Regularity	– 10%

GROUP II

All subjects other than mentioned in Group I.

Assignments/other measures as specified above	– 30%,
Test(s)	– 60%
Regularity	– 10%

- i. The C. A. marks allotted for regularity for all subjects shall be awarded full only if the candidates have secured at least 90% attendance in the subject. Proportionate reduction will be made in the case of subjects in which he/she gets below 90% of the attendance for the subject.
- ii. The Practical Training, the Dissertation, Thesis and Viva Voce, Jury for Basic Design, Architectural Design I to VI, Study Tour, and Documentation Camp shall be conducted as per the guidelines given in Section 21.

(b) End-semester Examinations

- i. There shall be University Examinations at the end of combined first and second semester and at the end of every semester from 3rd semester onwards in subjects as prescribed under the respective scheme of examinations for B.Arch. Degree course except practical training.
- ii. Examinations for all subjects (Theory, Drawing, Architectural Design Jury, Practical Training Jury, and Thesis Viva Voce) will be conducted by the University.
- iii. Examinations will be held twice in a year – April/May session (for even semesters) and October/November session (for odd semesters); failed or improvement candidates will have to appear for the End-Semester examinations along with regular students. The combined 1st and 2nd semester is reckoned as equivalent to an even semester for the purpose of conduct of examination and the University examination will be held during April/May. However, 9th and 10th Semester examinations will be conducted in both the sessions.

6. Pattern of Questions for End-Semester Examinations of Theory Subjects

The question papers of end-semester examinations of theory subjects shall be prepared by experts having at least 2 years of experience of teaching the concerned subject for B.Arch. courses in the concerned subject.

The question papers shall conform to the following guidelines:

- (a) Even distribution of questions from all modules of the course syllabus as per the question paper pattern given in the syllabus of each subject.
- (b) Unambiguous and free from any defects/errors.
- (c) Contains adequate data/other information on the problems assigned
- (e) Have clear and complete instructions to the candidates like the structural and other codes allowed to be taken inside the examination hall, and special stationery items to be supplied to students if any.

The pattern of questions for all subjects shall be specified along with the syllabus of the particular subject.

The question papers shall be scrutinized by an expert on the subject to check the conformity to the guidelines.

Model question paper shall be prepared for each subject after the syllabus preparation. This same model question paper along with the syllabus must be sent to the question-paper setter every time for framing the questions. All question paper setters should provide the scheme and key for the evaluation. The model question paper shall be made available to students.

7. **Credit System**

Each subject shall have a certain number of credits assigned to it depending upon the academic load and the nature and importance of the subject. The credit associated with each subject will be shown in the prescribed scheme and syllabi. Each course shall have an integer number of credits, which reflects its weightage.

8. **Grading**

The university shall award the letter grade to students based on the marks secured by them in both internal assessment and end-semester examinations taken together in the subjects registered. Each letter grade indicates a qualitative assessment of the student's performance and is associated with a specified number of grade points. The grading system along with the grade points for each grade, applicable to passed candidates is shown below. All passed candidate will be allotted a grade S, A, B, C, D, or E according to the total marks scored by him/her. Absolute Marks secured by the candidates will also be included in the Mark list.

If a candidate does not pass a subject as per the conditions given in Section 10, he/she will be assigned an Unsatisfactory grade 'U' irrespective of his/her total marks. If a student does not pass a subject in two attempts, the maximum grade he/she can get is 'C' when he/she passes the subject in any subsequent examination, whatever be the marks scored by him/her.

A student is considered to have completed a subject successfully and earned the credits if he/she secures a letter grade other than 'U' in that course. Letter grade 'U' has zero grade point and the candidate has to write the examination again to improve the grade. A student's performance is measured by the number of credits that he/she has earned and by the cumulative grade point average (CGPA) maintained by him/her.

Percentage of marks (rounded off to the nearest integer) scored by the passed candidates	Corresponding Grade allotted	Grade Points
91- 100	S	10
81-90	A	9
71-80	B	8

61-70	C	7
51-60	D	6
40-50	E	5

For converting CGPA to percentage of marks, the following formula can be used.
 Percentage marks = (CGPA - 0.5) x 10.

9. **Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA)**

- a. A Semester Grade Point Average (SGPA) shall be computed for all the students for each semester, as follows:

$$SGPA = \sum_{i=1}^n \frac{C_i G_i}{C_i}$$

where, n is the number of subjects registered during the semester, Ci is the number of credits allotted to the subject as per the scheme, and Gi is the grade points corresponding to the grade awarded to the student for the subject.

- b. A Cumulative Grade Point Average (CGPA) shall be computed for all the students at the end of each semester by taking into consideration their performance in the present and the past semesters as follows:

$$CGPA = \sum_{i=1}^m \frac{C_i G_i}{C_i}$$

where, m is the number of courses registered up to that semester, Ci is the number of credits allotted to the subject as per the scheme, and Gi is the grade points corresponding to the grade awarded to the student for the subject.

An up-to-date assessment of overall performance of a student is obtained by calculating CGPA. CGPA is weighted average of the grade points obtained in all the subjects registered by the students since he entered the B. Arch. course.

- c. Both the SGPA and CGPA shall be rounded off to the second place of decimal and recorded as such for ease of presentation. Whenever the CGPAs are to be used for the purpose of determining the merit ranking in a group of students, only the rounded off values shall be made use of.

10. **Minimum for Pass**

- (a) A candidate who secures not less than 40% marks in a subject at the end-semester examinations and not less than 50% of the total marks assigned to the subject, shall be declared to have passed the examination in that subject.

OR

- (b) A candidate who secures in end-semester examination itself, 40% of the total marks assigned to a subject (60 % of the university exam marks) shall also be declared to have passed the examination in that subject.

The total marks assigned to a subject in the above calculations are the sum of maximum marks assigned to the end-semester examination and maximum internal assessment marks of that subject. Candidates will be assigned grades according to the marks scored.

- Candidates shall secure 40% of marks in the external jury and 50% aggregate in (C.A.+ External Jury) for a pass in Basic Design and Architectural Design I to VI.
- For Dissertation and other such subjects which do not have University examination, the minimum marks for pass shall be 50% of the aggregate marks.
- For the Practical Training undertaken after the seventh semester, the minimum marks for pass shall be 50% of the aggregate marks.
- Candidates shall secure 40% of marks in the external jury and 50% aggregate (C.A. + External Jury) for passing the Thesis and Viva voce.

If a student fails to secure a pass in examinations of tutorial and studio courses, including subjects which have only internal marks, the student shall be given a make-up chance. He/she shall resubmit an improved Portfolio with works done under the supervision of a faculty member assigned by the Head of the department for the subsequent viva voce examination. The internal marks secured shall be suitably revised. Maximum period for submission of improved works shall not exceed one month from the date of announcement of the results of the concerned students in the Jury examination, by the Head of the teaching institution, excluding intervening University examinations, if any. Maximum marks also will be limited to 50% or the class average for the subject whichever is lower, for internal as well as external marks. Only those students, who have appeared for the original chance, shall be eligible for make-up chance.

In case, a student fails to secure a pass in this make-up chance, the student shall have to take a break and repeat the particular subject/s when it is offered next i.e. as a repeater student in the subsequent batch without affecting the sanctioned intake of that batch, fulfill the requirements for attendance, secure fresh internal assessment and submit the design/assignments as in the case of a regular student.

11. **Improvement**

Candidates shall be allowed to improve the grade of any two subjects of Group II (as mentioned in Section 5-a) in each semester. If the candidate gets more marks in the improvement chance, marks scored in the improvement chance will be considered for grading in the subject; otherwise marks scored in the first attempt will be retained.

No candidate shall be permitted to improve the marks scored in subjects of Group I (as mentioned in Section 5-a) and Continuous Assessment unless otherwise described in these regulations.

12. **Attendance**

A candidate shall be permitted to appear for the end-semester examinations only if he/she satisfies the following requirements:

- a. He/she must secure not less than 75% attendance in the total number of working hours in each semester.
- b. He/she must earn a progress certificate from the head of the institution stating that he/she has satisfactorily completed the course of study prescribed in the semester as required by these regulations.
- c. His/her conduct must be satisfactory.

It shall be open to the Vice Chancellor to grant condonation of shortage of attendance on the recommendation of the head of the institution in accordance with the following norms.

- The shortage shall not be more than 10%.
- Shortage up to 20% shall be condoned once during the entire course provided such shortage is caused by continuous absence on genuine medical grounds.
- Shortage shall not be condoned more than twice during the entire course.

A candidate who is not eligible for condonation of shortage of attendance shall repeat the semester.

Students are eligible for duty leave if they perform certain kinds of duties like representing the college/University in sports and games, etc. on recommendation from faculty members concerned, Head of Institution shall sanction duty leave for the period of absence. The maximum limit of duty leave that can be granted to a student during a semester is 10% of the total number of instructional hours engaged in that semester.

Application for duty leave should be submitted to the Head of Institution preferably before the duty is performed or within ten working days after returning from duty. If duty leave is sanctioned, the student shall meet the faculty members handling classes for him/her in that semester (within 2 weeks after returning from duty), and request them to mark duty leave granted in the record of attendance.

13. **Registration for each Semester**

Every candidate should register for all subjects of the end-semester examinations of each semester. A candidate who does not register will not be

permitted to attend the end semester examinations; he/she shall not be permitted to attend the next semester.

A candidate shall be eligible to register for any higher semester i.e. 3rd semester onwards if he/she has satisfactorily completed the course of study and registered for the examination of the combined first and second semesters. A candidate shall be eligible to register for the fourth to tenth semesters if he/she has satisfactorily completed the course of study and registered for the examination of the immediate previous semester. He/she should register for the semester at the start of the semester before the stipulated date. University will notify the starting and closing dates for each semester.

A pass in all subjects of combined first and second semesters is required for a student to become eligible for entry into the seventh semester. A pass in all subjects of third and fourth semester would be mandatory for entry into ninth semester for all students. He/she can be permitted to register with the subsequent batch as and when he/she satisfies the eligibility condition as repeater without affecting the sanctioned intake of that batch.

As this rule for promotion is an academic prerequisite, no exemption should be granted for any reason whatsoever. The Head of the Institution should take necessary measures to implement this rule strictly.

A student can be transferred from one institution to another institution only in the beginning of 3rd semester of the course, after the completion of admission process.

A Student who has temporarily discontinued his/her studies shall be permitted to rejoin the course with permission from the University, on the recommendations of the Head of the Institution, if he/she has to discontinue the course based on medical grounds and he/she should produce the medical certificate issued by a Govt. medical officer specialized in the respective field while rejoining the course. There will be provision for maternity leave to female students as per the norms of the University in vogue.

14. **Additional Requirements for the degree**

In addition to the requirements prescribed for the award of B. Arch. Degree, each student must complete compulsory social service for a specified duration during 3rd to 9th semesters of the course. A record is to be kept showing the details of social service activities undertaken and it should be approved and certified by the Head of Institution before permitting the student to register for the tenth semester.

Social work shall have social / architectural significance .This can be a project related to INTACH, Rural/urban housing, Urban/rural social/physical surveys, Environmental issues and any such project the Head of the Institution approves. The report is to be made available in the college library for reference to concerned persons in a suitable format.

Students are required to compulsorily undertake educational tours to visit places of architectural interest and other study trips as per the requirements of the

Architectural Design Studio in the relevant semesters, taking not more than 5 working days in a semester. It can be combined with vacations/holidays.

For students who are granted exemption from attending any tour, measures shall be taken to record their attendance in the college and provide alternate tasks.

Students are also required to participate in a Documentation camp before the end of the Seventh semester.

15. **Examination Monitoring Cell**

Head of each Institution should formulate an Examination Monitoring Cell at the institution for supervising all examinations, especially the internal examinations. This cell, with a senior staff member as Convener, shall consist of minimum three members (one shall be a lady). A clerical staff having computer skills shall also be assigned for the examination monitoring cell.

The collective responsibilities of the examination monitoring cell are to:

- (a) Schedule all end-semester practical examinations as per the course calendar and inform the University two weeks in advance
- (b) Inform the University expert team (two weeks in advance) the schedule of all end-semester practical examinations.
- (c) Officiate as the examination squad to keep a vigil on all end-semester examinations. If any malpractices are found / reported by invigilators, inform these to the Head of Institution along with a report about the incident. Head of Institution shall forward all such complaints to the University.
- (d) Prepare and forward the list of examiners for all end-semester practical examinations to the Head of Institution for enabling him to issue appointment letters. Inform the University the list of examiners for practical examinations.
- (e) After closing the end-semester examinations conducted at institution level of each semester, fill-up and return the check-list given by the University.
- (f) Schedule all examinations conducted as part of internal assessment of students.
- (g) To receive any complaint from students regarding issues like out-of-syllabus questions, printing mistakes, etc. of end-semester examinations of theory and practical subjects. The cell shall investigate these complaints and if necessary forward it to the University with specific comments.
- (h) To receive any complaints from students regarding internal examinations, inquire into such incidents, and give a report to the Head of the Institution for necessary action.
- (i) In general, to function as an extended wing of the office of the Controller of Examinations of the University, at Institution level.

To conduct all the theory examinations, a Chief Superintendent and an Assistant Chief Superintendent should be appointed internally by the Head of the Institution. At least one external Additional Chief Superintendent should be appointed by the University as Observer for conducting theory examinations in all affiliated Architecture Colleges, who shall be not below the rank of an Assistant Professor in a Government/Aided College or Assistant Registrar in the University.

16. **Class Committee**

The Head of the Institution shall take necessary steps to form a class committee for each class at the start of classes of each semester. This class committee shall be in existence for the semester concerned. The class committee shall consist of the Head of Department, Staff Advisor of the class, a senior faculty member of the department, and three student representatives (one of them should be a girl). There should be at least two meetings of the class committee every semester; it shall be the responsibility of the Head of Department to convene these meetings. The decisions of the Class Committee shall be recorded in a register for further reference. Each class committee will communicate its recommendations to the Head of Institution.

The responsibilities of the class committee are:

- (a) to review periodically the progress and conduct of students in the class.
- (b) to discuss any problems concerning any subjects in the semester concerned.
- (c) to identify weaker students of the class and suggest remedial measures.
- (d) to review teaching effectiveness and coverage of syllabus.
- (e) discuss any other issue related to the students of the class.

17. **Eligibility for the Degree**

a) No candidate shall be eligible for the B. Arch. Degree unless he/she has undergone the prescribed course of study for a period of not less than five academic years (including Practical Training and Architectural Thesis Project) in an institution maintained by or affiliated to the University and has passed all the examinations as per the prescribed

B. Arch. Degree curriculum.

b) The University shall issue the mark lists of students who pass the examinations in supplementary chances, through the head of the institution in which the student attended the course work.

18. **Classification of Successful Candidates**

a) A candidate who qualifies for the degree, passing all the subjects of the ten semesters within 6 academic years after the commencement of his course of study and secures not less than a CGPA of 8.00 of all the semesters shall be declared to have passed the B. Arch. Degree examination in First Class with Distinction.

b) A candidate who qualifies for the degree, passing all the subjects of the ten semesters within 6 academic years after the commencement of his course of study and secures less than 8.0 CGPA but not less than a CGPA of 6.50 of all the semesters shall be declared to have passed the B. Arch. Degree examination in First Class.

c) All other candidates who qualify for the degree passing all the subjects of the ten semesters and not covered as per Section 18 (a) and 18 (b) shall be declared to have passed the B. Arch. Degree examination in Second class.

Name of the college where the candidate studied for the B. Arch. program shall be printed in each grade-card issued to the student. It may be indicated in each mark-list that the internal assessment marks of all subjects have been normalized.

19. **Grievance Redressal Cell**

Each college should set up a Grievance Redressal Cell constituted as per the norms prescribed by MHRD, UGC, COA, State Government, Honourable Courts etc. to look into grievances of the students, pertaining to SC & ST welfare, women, examinations etc.

20. **Anti-Ragging Cell**

The Head of Institution shall take necessary steps to constitute anti-ragging committee and squad at the commencement of each academic year. The committee and the squad shall take effective steps as specified by the Honorable Supreme Court of India, to prevent ragging.

21. **B. Arch. Degree Course Manual**

More details about the conduct and evaluation of Basic Design and Architectural Design I to VI, Practical Training, Thesis and Viva Voce, Study Tour and Documentation Camp for Architectural Design, and Dissertation are discussed in this course manual.

1. BASIC DESIGN AND ARCHITECTURAL DESIGN I TO VI

a) The Evaluation of Basic Design and Architectural Design I to VI is based on continuous Evaluation and End-Semester Examination conducted by a panel of Jury members.

The marks for the Continuous Assessment will be awarded by the staff member in charge. The University shall appoint the jury panel for the jury examinations. The Valuation panel will consist of an external examiner and an internal examiner who are to be appointed by the university on the recommendations of the Chairman of the B.Arch. program. Improvement jury, whenever required will be conducted by the same panel, as far as possible or alternate arrangement shall be done by the Chairman of the B.Arch. program. The staff member in charge of the subject shall also be included in the panel of Jury members, as far as possible.

The External Examiner shall be from among the faculty members of other teaching Institutions or an Architect registered with the COA, incorporated under Architect's Act 1972, having experience of not less than 5 years.

b) Students shall submit the portfolio consisting of the assignments / projects for the subject during the course period, with the approval of the staff-in-charge of the subject. The staff-in-charge of the subject shall submit a report consisting of the details of assignments / projects given, their objectives, and weightage given to each work, to the Chairman through the Department.

The jury members (internal and external examiners together) will evaluate the portfolio on the basis of the report. Students shall be present and explain their work to the Jury members at the time of evaluating their portfolio.

c) The pass mark for Basic Design and Architecture Design I to VI is 50 % of aggregate marks (C.A. marks + Jury marks). For external Jury, minimum for a pass shall be 40%.

d) The Jury members shall submit the consolidated marks countersigned by the Chairman and the Head of the concerned Institution to the University.

e) The result of the students who fail to secure a minimum of 40% marks in the external jury and/or a minimum of 50% of aggregate marks (C.A. marks + Jury marks) will be published by the Head of the Institution within three working days from the last day of the Jury exam, in order to facilitate them to appear for the make-up chance. Only those students, who have appeared for the original chance, shall be eligible for make-up chance.

2. PRACTICAL TRAINING

a) Introduction

As per the B. Arch. Curriculum, students shall undergo one semester of practical training immediately after the completion of the 7th semester B.Arch. examinations. Only those who have passed all studio oriented subjects (Jury evaluated subjects) up to sixth semester shall be eligible to undergo practical training. In such a case where results have not been declared the candidate shall be given a provisional enrollment in Practical Training.

The training shall be under an architect registered with the COA, possessing an experience of minimum five years and approved by the Dept. of Architecture of the teaching institution.

The duration of practical training is one semester (Min. 100 working days / as per COA norms).

b) Selection of Firm for Practical Training.

The candidate shall select the architect / firm for practical training with the approval of the Dept. of Architecture of the teaching institution, in advance before the commencement of the 7th semester University examination.

He/she should not be a faculty of the Dept. of Architecture of the teaching Institution or their immediate relatives or an architect employed in the Public sector.

Students can also select internationally recognized Architects practicing outside India, with the approval of the Dept. of Architecture of the teaching Institution.

c) Type of works to be carried out during the training period

The students are expected to gain exposure in the following aspects:

- Site visit and Site Supervision

- Preparation of drawings for getting building permissions, working drawings, service drawings, etc.
- Preparation of estimates, specifications, contract documents, and tender documents
- Discussion with clients and other consultants

d) Monthly work report

The students are required to send copies of the monthly report of the work done to the Dept. of Architecture of the teaching institution, within one week after the completion of each month. The report shall be duly signed by the principal architect or by the concerned architect supervising the work.

e) Documents to be submitted after the completion of training

The students are required to submit to the Department of Architecture of the teaching institution a report including the details of their work illustrated with sketches, prints and other documents connected with the projects on which he/she has worked both in office and at site, a work diary, originals of monthly reports, and a certificate regarding their conduct and performance of work done during the training period. This report shall be certified by the registered architect under whom the candidate had undergone practical training.

f) Evaluation of practical training

Continuous assessment for Practical Training shall be done by the institution in a systematic procedure. For the Practical Training, a viva-voce examination shall be conducted at the end of the eighth semester by a jury consisting of an internal and an external examiner appointed by the University.

Makeup chance will be given to those who fail in the jury of practical training as per the norms applicable for other Jury examinations. In case, a student fails to secure a pass in this makeup chance, the student shall have to take a break and repeat the practical training when it is offered next i.e. as a repeater student in the subsequent batch without affecting the sanctioned intake of that batch.

Variation in the opportunities for training available in various architects firms shall not adversely affect the students' marks. Their efforts to gain experience and regularity in conforming to the prescribed norms shall be taken into account.

3. THESIS AND VIVA VOCE

a) Selecting the Thesis topic

Students of the B.Arch. Degree course are required to complete an Architectural Design Thesis during the last six months of the B.Arch. Degree program.

Students admitted to the tenth semester shall submit choices of their thesis project within a week after the commencement of the tenth semester classes.

The Head of the department of the teaching institution shall allot a guide for each student considering the nature of the work and specialization of the faculty member. Students shall obtain approval for the project of Thesis from the Department of the

teaching Institution. The duration of the thesis will be 18 weeks from the date of commencement of the tenth semester of B.Arch. Degree Course.

The project selected may be either a live architectural project or a hypothetical one so that the student gets training in tackling projects similar to what he/she is likely to face in his/her professional career. The project and its programming shall be worked out by the student in consultation with the guide.

The work should include an intensive study of the topography, climate and problems concerned with design of spaces and structures. The solution of the problem shall incorporate the integrated approach of the architect, engineer, urban designer, planner and landscape architect and this shall be reflected in the preparation of drawings and written report. Students are required to maintain a work diary of the thesis work. All students are required to schedule their thesis work and get it approved by the guide at the beginning of the thesis work. A copy of the schedule shall be submitted to the thesis coordinator nominated by the Head of the Department.

b) Internal Evaluation

Internal evaluation of each student will be done by a three member jury constituted by the Department. Guide shall be one member of the jury. The other jury members are to be constituted either from the faculty of Architecture of the Teaching College and/or from among the Architects registered with the Council of Architecture, incorporated under the architect's act 1972, with not less than five years experience. The progress will be assessed by the jury periodically through a minimum of four stages of reviews, the dates of which will be published by the department before the commencement of the tenth semester. Each review shall assess the student's systematic design process and solutions expressed by graphical (including models) and oral presentation.

300 marks to be awarded as marks for internal assessment and shall be awarded through the four reviews. The split up of the same shall be normally as follows.

Review 1 - Introduction of the Thesis Topic, Feasibility studies, Basic data, Case studies/ Primary surveys, Analysis, Arriving at Inferences and Design Program, Site analysis and Conceptual development, Introduction of Special Topic.

90 marks

Review 2 – Review of Previous stage, arriving at lay out plan, Sketch design for various building blocks including Floor Plans, Sections, Elevations, Views, Block Models etc., Conformity to Relevant Standards, Bye laws etc. and Achievement of Basic Objectives of Architectural Design, Further studies on Special Topic.

90 marks

Review 3 - Review of Previous stages, Final Layout, Final Design for various building blocks through relevant Plans, Sections, Elevations, Views etc., Details of Building and Site Services, Site Planning and Landscape schemes, Preparation of

relevant Detailed Drawings, Application of Special Topic in the design scheme, Preparation of Draft Report.

90 marks

Review 4 - Preview of Final stage of all finalized drawings and schemes, Structural Details, Working Details etc., Review of Final Draft of the Report.

30 marks

A candidate who fails to secure minimum 40% marks in each review will have to appear for a supplementary review on the date announced by the department of Architecture. There shall be only one supplementary review for each stage.

Students have to obtain a total of 40% marks combining the four stages of reviews to become eligible for the external jury, failing which he/she has to repeat with the next immediate batch.

Such students will have to take a token registration from the university to continue their Thesis along with the next regular batch. These students will be considered as supplementary candidates without affecting the regular strength of the class.

c) External evaluation

The University shall appoint the jury panel for the jury examinations. The jury panel will consist of one/two external examiner(s) and internal examiners who are to be appointed by the University on the recommendations of the Chairman of the B.Arch. program.

Students shall secure 40% of marks in the external jury and 50% aggregate (Internal + External Jury) for successfully completing the Thesis and Viva voce.

The jury appointed by the University shall evaluate the thesis documents and conduct viva voce. Marks shall be jointly awarded by the jury out of the maximum of 300 and the tabulated marks list along with the original shall be forwarded to the controller of examinations through the chairperson.

d) Suggested Areas for Special Topic

- Building construction techniques and the details of the use of new materials
- Equipment and design of any one building service like air conditioning, Electrification and illumination, sanitation and water supply or acoustics
- Furnishings, fittings and finishes
- Climatic research and its applications
- Or any other suitable topic approved by the teaching institution

e) Documents to be submitted for the Jury

Two copies of the Data Collection in the preliminary design stage (up to the design and including the case studies) shall be compiled and presented in A3 size format along with the final submission. Two copies of the Final Report shall be submitted on the date and time announced by the Dept. of Architecture of the Teaching Institution. The total number of design sheets for final submission shall not exceed 30 (thirty) A1 size sheets. Models are to be submitted at the time of Viva voce examination.

The format and other instructions regarding the schedule of reviews, preparation of the bound volumes of Data Collection, Final Report, Final Sheets, Model, etc. will be announced by the Dept. of Architecture of the Teaching Institution.

The Head of the Department shall have the freedom to send the thesis documents after the final Jury evaluation for participating in competitions organized by the Council of Architecture etc., with the consent of the concerned candidate. Anything which is not explicitly covered in these regulations shall be decided by the thesis monitoring committee.

4. STUDY TOUR AND DOCUMENTATION CAMP FOR ARCHITECTURAL DESIGN

a) Study Tour

The study tours for visiting important places of Architectural interest shall be conducted as part of Architectural Design and shall officially be accompanied by the faculty members. The maximum duration of one study tour shall be limited to 15 days combined with vacation, out of which working days shall not exceed 5 in a semester. Each student shall submit a detailed bound report of the educational tour to the Head of the Department within two weeks after the programme. These bound reports signed by the staff advisor or faculty in charge of tours / visits and by the Head of the department, shall also be considered for evaluations as part of the Architectural Design Jury.

b) Documentation Camp

The documentation camp shall be of maximum 7 days duration and conducted as part of the Architectural Design course before the end of the seventh semester. The faculty members handling the subject shall also be present in the camp. The documentation camp consists of preparation of measured drawings of selected buildings / historic places inside and around the state of Kerala.

The originals of materials produced as part of the study tour and camp shall be submitted to the Department of the college and such materials submitted shall be the property of the Department. These drawings / reports shall be signed by the staff advisor or faculty in charge of the Architectural Design Studio and by the Head of department. They shall also be considered for evaluation as part of the Architectural Design Jury.

5. DISSERTATION

Students of the B.Arch. Degree course are required to submit a Dissertation as part of the ninth semester. Students admitted to the ninth semester shall submit choices of their dissertation within a week after the commencement of the ninth semester classes.

The Head of the department of the teaching institution shall allot a Dissertation Supervisor (Faculty member of the Dept. of Architecture of the teaching institution) for each student considering the nature of the topic and specialization of the faculty member. Students shall obtain approval for the topic of the Dissertation from the Department of the teaching Institution.

Continuous assessment for Dissertation shall be done for a weightage of 50% of the total marks by the Dissertation supervisor who will award marks for three assessments as per the academic schedule of the University. For Dissertation, a Viva Voce Examination shall be conducted at the end of the semester. The head of Dept. of the teaching institution shall constitute a jury for evaluating the final presentation of the dissertation work. The jury panel shall be constituted from among the faculty of the Dept. of Architecture of the Teaching institution and/or from among the Architects registered with the council of Architecture, incorporated under the architect's act 1972, with not less than 5 years experience.

Notwithstanding all that has been stated above, the University has the right to modify any of the above regulations from time to time as per the University rules and the COA regulations.

**UNIVERSITY OF CALICUT – B. ARCH. DEGREE COURSE SCHEME – 2017
ADMISSION**

COMBINED FIRST AND SECOND SEMESTER										
Course Code	Subject	Credits	Hours per Week			Duration of Exam	Marks			
			L	T	P/S		W	J	S	TOTAL
AR 17-11	Basic Design *	10	0	0	8	0		200	300	500
AR17-12	Theory of Design - I	4	2	0	0	3	100		50	150
AR 17-13	Building Materials and Construction - I	5	1	0	2	3	100		100	200
AR 17-14	Theory of Structures- I	4	2	1	0	3	100		50	150
AR 17-15	History of Architecture - I	3	2	0	0	3	100		50	150
AR 17-16	Architectural Drawing and Graphics	6	0	0	5	3	100		100	200
AR 17-17	Visual Arts & Presentation	4	1	0	2	3	100		100	200
AR 17-18	Model-making Workshop	2	0	0	2	0			100	100
AR 17-19	Communication Skills	2	0	0	2	0			50	50
TOTAL		40	8	1	21		600	200	900	1700

* Evaluation by the Jury as per the B. Arch. Degree Manual

L – Lecture, T – Tutorial, P/S – Practical/Studio, W – Written University Examination, J – Jury, S – Sessional Marks

SEMESTER I Course No.	Course Name	L-T-P/S	Credits	Year of introduction
AR17-11	BASIC DESIGN	0-0-8	10	2017
<p>Course Objectives</p> <p>The Basic Design for students of architecture would,</p> <ul style="list-style-type: none"> • Introduce the various elements and principles of design for two and three dimensional compositions. • Through a series of exercises enable the student to explore graphically the various stages of representations, communication and speculations in drawing and design. • Help to develop the ability to translate abstract principles of design into Architectural solutions for simple problems. 				
<p>Course Outcome</p> <ul style="list-style-type: none"> • An understanding of the elements and principles of design. • Comprehension of the diverse ways in which the various design elements could be composed to create a unified whole. 				
<p>Text books</p> <ul style="list-style-type: none"> • Charles Wallschlaeger & Synthia Basic Snyder, Basic Visual Concepts & Principles for artists, architects & designers, McGraw hill, USA, 1992. • Joseph De Chiara, Michael J Crosbie, Time Saver Standards for Building Types, McGraw Hill Professional 2001 				
<p>Reference Books</p> <ul style="list-style-type: none"> • Arthur L. Guptill and Susan E. Meyer, 'Rendering in Pen and Ink' , Watson-Guptill, 1997 • Francis D.K.Ching - Architecture - Form Space and Order, Van Nostrand Reinhold Co., (Canada),1979. • Francis D.K.Ching – Drawing – A creative Process, Van Nostrand Reinhold Co., (Canada),1979. • Joseph De Chiara, Julius Panero, Martin Zelnik, Time Saver Standards for Interior Design and Space Planning, McGraw Hill 2001. • Julius Panero, Martin Zelnik, Human Dimension and Interior Space, Whitney Library of Design, 1975 • Maitland Graves,The Art of Colour and Design, McGraw Hill Book Company Inc.,1951 • Mark Karhen, Space planning basics, John Wiley & son - 2004 • Neuferts' Architect's Data, Orbid Publishing Ltd., Know how the complete course in Dit and Home Improvements NO.22,Bed Fordbury,London,W.C.2,1981. • Owen Cappleman & Michael Jack Kordan, Foundations in Architecture: An Annotated Anthology of beginning design projects, Van Nostrand Reinhold, New York. • Paul Laseau, Graphic Thinking For Architects and Designers, John Wiley & Sons, New York, 2001. 				

- Paul Zelanski & Mary Pat Fisher, Design Principles & Problems , 2nd Ed, Thomson & Wadsworth, USA,1996
- Robert Gill, Rendering with Pen and Ink
- Simon Unwin, 'Analizing Architecture', Routledge, 2003
- V.S.Pramar, Design fundamentals in Architecture, Somaiya Publications Pvt.Ltd., New Delhi,1973.
- Wong Wucius, Principles of color composition, Van Nostrand Rein Hold – 1976
- Wang Wucius, , Principles of three dimensional design, Van Nostrand Rein Hold – 1976
- Wang Wucius, Principles of Two dimensional design, Van nostrand Rein hold -1972

MODULE I

FUNDAMENTALS IN DESIGN (48 Hours)

Elements in composition: Point, Line, Plane, Volume, Colour, Texture. Analyzing paintings, compositions, murals, sculptures, building and nature.

Principles of design – Dominance, unity, balance, symmetry, hierarchy, rhythm, contrast, harmony, focus etc. .

Introduction to fundamentals in drawing, composition and understanding graphic medium:
Basic exercises in drawing skill building, composition and design vocabulary

MODULE II

CREATIVITY (24 Hours)

Compositional and modeling exercises in 2 D and 3 D using concepts like abstraction, transformation, Illusion, symbolism. Exercises on observation and visual perception on the principles of Gestalt Theory

Forms: Generation of 3 D volumes from 2 D planes. Various organizations of forms and principles involved in articulating forms using architectural examples. Study of Solids and voids.

Study of linear and planar forms using materials like Mount Board, metal foil, box boards, wire string, thermocol etc.

MODULE III

FORMS (32 Hours)

Colour and texture: Study of colour and colour schemes, texture and texture scheme. Perception of colour and texture in light from natural and artificial sources. Study of openings for light, shadow, shades and sciography and their effect on spaces'

Study of fluid and plastic forms using appropriate materials like clay, plaster of paris etc. and explore the play of light and shade.

Scale and proportion: Study of scale and proportioning systems – Classical orders, Golden Section etc. Anthropometrics – Study of space standards and anthropometrics to include physically handicapped and elderly

MODULE IV

DEVELOPMENT OF DESIGN PROCESS (56 Hours)

Major: Design of a fundamental furniture lay-out , circulation, Lighting and ventilation for space such as Living, Dining Bedroom Architect's Office , Doctor's clinics or exterior space like out-door Dining, Gathering space etc.

Minor: Detailing and designing a Furniture used in the Design

Stress should be on concept generation and development of rich design process.

TOTAL HOURS: 160

SEMESTER I Course No.	Course Name	L-T-P/S	Credits	Year of introduction
AR17-12	THEORY OF DESIGN - I	2-0-0	4	2017
<p>Course Objectives</p> <p>The Theory of Design for students of architecture would,</p> <ul style="list-style-type: none"> • To introduce various facets of Architecture and its influencing factors with respect to form and space. • To introduce the basic elements/principles of form and space as one of the ways to experience the built environment. 				
<p>Course Outcome</p> <ul style="list-style-type: none"> • An exposure to the principles of architecture and applications of the same in buildings and spaces. • Awareness about various ideologies and philosophies of architecture. • An exposure to analysis of architecture through case studies of projects by various architects. 				
<p>Text books</p> <ul style="list-style-type: none"> • Francis D. K. Ching, Architecture - Form, Space and Order, Van Nostrand Reinhold Company ,1979 • Roger H. Clark, Michael Pause, Precedents In Architecture, Van Nostrand Reinhold Company ,1996 				
<p>Reference Books</p> <ul style="list-style-type: none"> • K.W.Smithies, Principles of Design in Architecture, Van Nostrand Reinhold Company , 1981 • 2. Sam F. Miller, Design Process - A Primer For Architectural & Interior Design, Van Nostrand Reinhold Company , 1995 • Ernest Burden, Elements of Architectural Design – A Visual Resource, Van Nostrand Reinhold Company , 1994 • V.S.Pramar, Design Fundamentals in Architecture, Somaiya Publications, New Delhi, 1973. • Paul Alan Johnson - The Theory of Architecture - Concepts and themes, Van Nostrand Reinhold Co. NewYork,1994. • Helm Marie Evans and Caria David Dunneshil, An initiation to design, Macmillan Publishing Co.Inc.,NewYork,1982. 				

MODULE I

INTRODUCTION TO ARCHITECTURE (15 Hours)

Understanding the relevant terms – Architecture, Art, Architectural design –Aesthetics in art and architecture.

ELEMENTS OF DESIGN – Understanding the basic elements of design: point, line, plane, volume.

FORMS – Properties of forms - Understanding perceptual effects of geometric forms, cube, sphere, pyramid, cylinder and cone and its section as well as their derivatives with respect to the evolution of architectural form and space – Transformation of forms –Articulation of forms.

SPACE – Understanding perceptual effects of specific configuration of architectural spaces – Elements defining spaces –Spatial relationships - Spatial organisation – centralised, linear, radial, clustered, grid –built form and open space relationships.

MODULE II (10 Hours)

PRINCIPLES OF DESIGN –Understanding the fundamental principles of Architectural compositions: axis, symmetry/asymmetry, balance, hierarchy, rhythm, datum, transformation, unity, harmony, dominance, climax.

PROPORTION AND SCALE IN ARCHITECTURE- Different types of proportioning systems

MODULE III (5 Hours)

CIRCULATION -Movement with reference to the architectural form and space – detailed study of relationship between architectural form and circulation – Types of circulation – Building approach and entrance - Configuration of path- Path space relationship, orientation.

MODULE IV (10 Hours)

DESIGN AND ANALYSIS - Introduction to modes of understanding architecture in totality in terms of the various aspects studied in previous modules– understanding how case studies have used representational, analytic and interpretational tools.

WORKS OF ARCHITECTS - Role of individual architects in the generation of architectural form, through study of exemplary works, architectural inspirations, philosophies, ideologies and theories of architects. (E.g. F L Wright, Le Corbusier, Charles Correa).

TOTAL HOURS: 40

UNIVERSITY EXAMINATION PATTERN

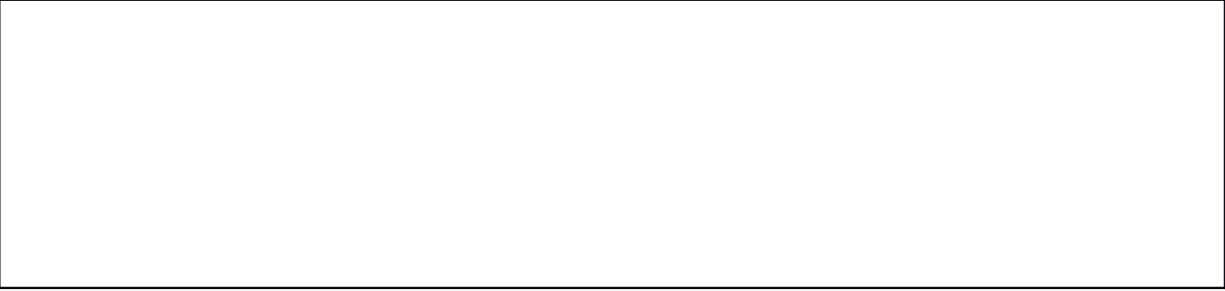
Q I - 8 short type questions of 5 marks, 2 from each module.

Q II - 2 Questions of 15 marks from module I with choice to answer anyone.

Q III - 2 Questions of 15 marks from module II with choice to answer anyone.

Q IV - 2 Questions of 15 marks from module III with choice to answer anyone.

Q V - 2 Questions of 15 marks from module IV with choice to answer anyone.



SEMESTER I Course No.	Course Name	L-T-P/S	Credits	Year of introduction
AR 17-13	BUILDING MATERIALS AND CONSTRUCTI ON - I	1-0-2	5	2017

Course Objectives

The Building materials and construction course for students of architecture would,

- Introduce to the student different components of buildings and various materials, their properties and uses.
- Provide an exposure to the principles of masonry construction, arches, lintels/ beams, corbelling, cantilever etc.
- Help them to understand the details of construction using stone and soil as well as products derived from them.

Course Outcome

- An understanding of the properties of various building materials and their applications.
- Exposure to the common construction techniques used for constructing various components of a building.
- Development of architectural drafting skills in the representation of construction details.

Text books

- Arora S.P. and Bindra S.P., “Text book of Building Construction”, Dhanpat Rai & Sons, New Delhi, 2012.
- Klans Dukeeberg, Bambus – Bamboo, Karl Kramer Verlag Stuttgart Germany, 2000.
- National Building Code Of India 2005- Part 6 Structural Design- Section 3 Timber and Bamboo.
- Francis D.K. Ching, Building Construction Illustrated John Wiley & Sons 2000.
- Balagopal T.S. Prabhu, “Civil Engineering Drawing Hand book”

Reference Books

- Ghanshyam Pandya, M.P. Ranjan, Nilam Iyer Bamboo and Cane Crafts of Northeast India; National Institute of Design (2004).
- Don A. Watson Construction Materials and Processes McGraw Hill 1972.
- WB Mckay Building construction, Vol 1,2, Longman UK 1981.
- Barry, The Construction of Buildings; Affiliated East West press put Ltd New Delhi 1999.

MODULE I**INTRODUCTION (15 hrs)**

Drafting Exercises on Representation of different types of building materials in plan and sections. Symbols used to denote different types of joinery, plumbing fittings and accessories in plan, sections and elevations.

Components of Building – Sub structure and Super structure. Drafting Exercises on Simple, cross section of walls showing various building components in plan and section.

Introduction to Building Materials – Sand, Stone, Brick, Timber, Clay & Ceramic products – their sources, classification, properties, and applications.

MODULE II**FOUNDATIONS (12 hrs.)**

Introduction to Foundations – Definition, function, types – selection criteria – bearing capacity of soil – methods of testing – settlement of foundations

Drafting exercises on various types of foundations – Wall Footing, Isolated Footing, Combined Footing

MODULE III**MASONRY (30 hrs.)**

Brick Masonry - Types of bricks, principles of brick masonry construction - joints, pointing and finishing, types of brick masonry - brick masonry work using different bonds, rat trap bond, Junctions – T- Junction (1 and 11/2 bricks), L – Junction (1 and 11/2 bricks), Cross junction (2 bricks), Piers – 1, 11/2, 2 bricks, Brick paving, Reinforced Brick Masonry, Cavity wall, Composite Masonry and arches, types of mortar & mortar mix for brick construction-Plastering - Brick masonry for foundation plinth and wall, arches and lintels in brick, coping, steps.

Principles of stone masonry construction - types of stone masonry random rubble masonry/ Ashlar Masonry - stone finishes- jointing types of mortar for stone construction - Stone masonry for foundation, plinth and wall, retaining wall, arches and lintels in stone, coping, steps, flooring, cladding.

MODULE IV**MUD CONSTRUCTION, CLAY PRODUCTS AND RURAL MATERIALS (15 hrs.)**

Cob, Rammed earth, Wattle and daub construction- Principles of Masonry construction using Adobe, Compressed Stabilized Earthen Blocks; Foundation and plinth for mud structures, Design of openings (arches, corbelled arches), Mud plaster, mud mortar, Damp and weather proofing of mud structures, Mud flooring, Construction of thatched roof.

Drafting Exercises on Hollow clay blocks – walls, roofs, partitions - Applications of various natural materials (Mud, Bamboo, Casuarinas, Palm, Coconut, Hay, Grass husk) in various parts of the building.

TOTAL HOURS: 72**UNIVERSITY EXAMINATION PATTERN**

Q I - 8 short type questions of 5 marks, 2 from each module.

Q II - 2 Questions of 15 marks from module I with choice to answer anyone.

Q III - 2 Questions of 15 marks from module II with choice to answer anyone.

Q IV - 2 Questions of 15 marks from module III with choice to answer anyone.

Q V - 2 Questions of 15 marks from module IV with choice to answer anyone.

SEMESTE	Course Name	L-T-P/S	Credits	Year of introduction
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R I Course No.				
AR 17-14	THEORY OF STRUCTURES-I	2-1-0	4	2017

Course Objectives

The Mechanics of Structures course for students of architecture would,

- Help to acquaint the students with the general methods of analyzing engineering problems.
- Assist in illustrating the applications of the methods to solve practical engineering problems.

Course Outcome

- Understanding of the concepts of mechanics of structures.
- Appreciation of the principles involved in various types of trusses and beams and their loading patterns.

Text books

- Rajasekharan S.and Sankarasubramanian G., Engineering Mechanics-Statics and Dynamics, Vikas Publications, New Delhi
- R.K.Banzal., Engineering Mechanics, Lakshmi Publications Pvt.Ltd., New Delhi
- S.B Junnarkar & H.J Shah, Mechanics of Structures Vol I ,Charotar publishing House, Anand
- R.K.Banzal., Strength of Materials, Lakshmi Publications Pvt.Ltd., New Delhi

Reference Books

- Shames I.H, Engineering Mechanics-Statics and Dynamics, Prentice Hall of India, New Delhi
- Hibbeler R.C., Engineering Mechanics- Statics, Pearson Education, New Delhi
- Timoshenko, Strength of Materials Vol. I & Vol. II, CBS Publishers & Distributors, New Delhi
- James M Gere & Stephen P Timoshenko, Mechanics of Materials, CBS Publishers & Distributors, New Delhi

MODULE I (16 hours)

Introduction to Engineering Mechanics: Principles of statics- Free body diagram - Composition and resolution of forces- Resultant of concurrent force system - Lami's theorem-Parallelogram law of forces - Method of moments - Theorem of Varignon - Parallel force system - Couple - Resultant and equilibrium for a general system of coplanar forces.

MODULE II (16 hours)

Friction: Laws of friction - Equilibrium of a body on a rough inclined plane - Ladder friction
 Properties of surfaces: Centre of Gravity - Centroid - Centroid of composite plane figures
 Moment of inertia - Parallel and perpendicular axis theorem- Moment of inertia of composite sections and rigid bodies (cylinder, circular rod, sphere) Product of Inertia-Principal axes and principal moment of inertia (Concept only)

MODULE III (14 hours)

Plane trusses: Types of trusses-Analysis of cantilever and simply supported trusses using Method of joints, Method of sections and Graphical method.

Beams: Types of beams- Supports- Loads-Support reactions of simply supported, cantilever and overhanging beams. Principle of virtual work (concept only).

MODULE IV (14 hours)

Bending Moment & Shear force: Shear force and bending moment diagrams for cantilever, simply supported and overhanging beams for different types of loading. Relationship connecting intensity of loading, shear force and bending moment

TOTAL HOURS: 60**UNIVERSITY EXAMINATION PATTERN**

- Q I - 8 short type questions of 5 marks, 2 from each module.
- Q II - 2 Questions of 15 marks from module I with choice to answer anyone.
- Q III - 2 Questions of 15 marks from module II with choice to answer anyone.
- Q IV - 2 Questions of 15 marks from module III with choice to answer anyone.
- Q V - 2 Questions of 15 marks from module IV with choice to answer anyone.

SEMESTER I Course No.	Course Name	L-T-P/S	Credits	Year of introduction
AR 17 – 15	HISTORY OF ARCHITECTURE – I	2-0-0	3	2017

Course Objectives

The History of Architecture - I course for students of architecture would,

- Provide an insight to the architecture of the prehistoric period, ancient civilizations across the world, and Buddhist and Hindu architecture in India.
- Introduce them to the cultural and contextual determinants that influenced the built form and settlement patterns.
- Help them to understand the development of architecture with reference to character, style, materials, technology, climate, geography, religion, and culture.

Course Outcome

- An understanding about the spatial and stylistic qualities associated with architecture of various civilizations.
- Placing architecture within the realm of various social, political and economic upheavals, and as a response to cultural and contextual pressures.
- Enable students to appreciate chronological developments along the timeline and across various civilizations and geographies.

Reference Books

- Banister Fletcher, ‘ Dan Cruickshank Sir Banister Fletcher’s a history of architecture: A History of Architecture’, Architectural Press, 1996
- Percy Brown, ‘ Indian Architecture: Buddhist and Hindu Periods”, D. B. Taraporevala, 1965
- Satish Grover, ‘The Architecture of India: Buddhist and Hindu’, Vikas, 1980
- G.K.Hiraskar, ‘The Great Ages of World Architecture’
- Christopher Tadgell, ‘The History of Architecture in India’, Phaidon, 1994
- Satish Chandra, ‘History of Architecture and Ancient Building Materials in India’, Tech Books Internationals, 2003
- James C. Harle, ‘The Art and Architecture of the Indian Subcontinent’: Second Edition, Yale Univ. Press, 1994
- Henri Stierlin - Hindu India - From Khajuraho to the Temple city of Madurai – Taschen, 2002
- Carmen Kagal, Vistara: the Architecture of India, published by Festival of India, 1998
- Ilay Cooper, ‘Barry Dawson, Traditional Buildings of India’, Thames and Hudson, 1998

MODULE I (16 Hours)

Study of the world civilizations to understand how people lived, their thoughts, beliefs, religions, social customs, cultural practices and related architectural growth.

A brief introduction to World Architecture.

Prehistoric: Factors influencing Architecture, General characteristics.

History, evolution and factors influencing architectural characteristics of the following Civilizations:

Ancient Mesopotamia: Ziggurat of Ur.

Ancient Egypt: Tombs & Temples - Great Pyramid at Giza, Great Temple of Karnak, Ammon, Sphinx.

Ancient Greece: Classical Orders - Optical corrections - Acropolis of Athens, The Parthenon, The Erechtheion, Agora.

Ancient Rome: Tuscan and composite orders - Roman materials and construction techniques - lintels, arches & vaults, aqueducts. Building typologies examples - Pantheon, Colosseum, Basilica of Constantine, Thermae of Caracalla, and Forum.

MODULE II (10 Hours)

Indus Valley Civilization: Culture and pattern of settlement - City planning, domestic architecture, building materials and construction techniques - Mohenjo Daro, Harappa.

Vedic Period: Vedic Village - City Planning in later Vedic period - Building materials and construction techniques.

Buddhist Architecture: Introduction to Buddhist art - Hinayana and Mahayana Buddhism - Architectural Productions during Ashoka's rule - Ashokan Pillar, Sarnath. Development of Chaitya arch. Major building typologies - The Great Stupa at Sanchi, Chaitya Hall, Karli, Main caves of Ajantha and Ellora, Rani Gumpha - Udaigiri

MODULE III (10 Hours)

Early temples: Evolution and major influences on development of form and other architectural elements. Gupta and Early Chalukyan styles - Gupta temple at Tigawa, Main caves at Badami, Ladkhan and Durga temples, Aihole.

Hindu temple architecture: Principles of Design and Construction.

Dravidian style: Contributions of various dynasties

Pallava: Rock cut and structural temples - Rathas and Mandapas at Mahabalipuram, Shore Temple at Mahabalipuram, Kailasanatha Temple at Kanchipuram.

Chola: Brihadeswara temple, Thanjavur.

Pandya: Evolution of Gopurams

Later Chalukya or Hoysala: Hoysaleswara temple, Halebid.

Vijayanagara: Hampi, Vittalaswami temple at Hampi.

MODULE IV (10 Hours)

The late Pandya or Nayak style: Complexity in Temple plan of Srirangam temple, Meenakshi temple at Madurai, Rameshwaram temple.

Indo Aryan Style: Salient features of Indo Aryan Temples

Orissan: Parasurameswara, Lingaraja temples at Bhubaneswar. Sun temple at Konark.

Khajuraho: Kandariya Mahadeva Temple at Khajuraho.

Gujarat: Sun temple at Modhera.

TOTAL HOURS: 46

UNIVERSITY EXAMINATION PATTERN

Q I - 8 short type questions of 5 marks, 2 from each module.

Q II - 2 Questions of 15 marks from module I with choice to answer anyone.

Q III - 2 Questions of 15 marks from module II with choice to answer anyone.

Q IV - 2 Questions of 15 marks from module III with choice to answer anyone.

Q V - 2 Questions of 15 marks from module IV with choice to answer anyone.

SEMESTER I Course No.	Course Name	L-T-P/S	Credits	Year of introduction
AR17- 16	ARCHITECTURAL DRAWING AND GRAPHICS	0-0-5	6	2017

Course Objectives

The Architectural Drawing and Graphics course for students of architecture would,

- Introduce students to the fundamental techniques of architectural drawing and develop appropriate manual skills for visualization and technical representation of built forms in different types of drawings. The course also acts as a bridge to understanding basics of computer aided drafting and architectural graphics.

Course Outcome

- An understanding of the concepts of architectural drawing techniques.
- Assisting the students to develop a graphical language of architecture both in 2D and 3D.

Reference Books

- N. D. Bhatt, 'Elementary Engineering'.
- Cari Lara Svensan and Wiliam Ezara Street, 'Engineering Graphics'.
- K. Venugopal, 'Engineering Drawing and Graphics'.
- S. Rajaraman, ' Practical Solid Geometry'.
- Francis D. K. Ching, ' Drawing, Space, Form, Expression'.
- Shankar Mulik, 'Perspectives and Sciography', Allied Publishers, India, 1999

MODULE I (15 Hours)

INTRODUCTION

Introduction to Architectural drawings: types of drawings- Freehand sketches and mechanical drawing for architectural applications and presentation drawings. Different mediums used such as pencil, ink, types of papers, reproduction methods. Demonstration of drawing instruments and their use. Essential kit for making architectural drawings. Single-view and multi-view drawings, Differentiating Paraline and Perspective projections- Sheet layout, title block construction, different types of lines, line thickness, dimensioning lines and dimensioning styles

1. CONIC SECTIONS- Ellipse, hyperbola, parabola.

2. SCALES

Use of scale in drawings, Representation fraction (R.F.), Classification of scales- Construction detail of Plain scale, Diagonal scale and Vernier scale.

MODULE II (30 Hours)

BASIC ARCHITECTURAL DRAWING

Introduction to Architectural drafting, symbols, lettering, dimensioning, values in drawn lines, tone, texture and color. Architectural representation of materials on drawings, terminology and abbreviations used in architectural drawings.

Basic Geometric Construction- circles, tangents, drawing polygons.

Spirals, helices and involutes.

Reduction and enlarging of given drawings. Measured drawing to scale of furniture pieces, rooms, doors, windows etc. Representation of wall thickness and openings in walls in geometrical plan shapes.

ORTHOGRAPHIC PROJECTION

Introduction to Orthographic Projection, Differentiating First angle and third angle projection. First Angle Projection- Illustrative examples-points and lines.

First Angle

1. **ORTHOGRAPHIC PROJECTION-PLANES**-Projection of planes: projection of planes/laminae of regular geometric shapes parallel to one plane and inclined to other plane, planes/laminae inclined to both reference planes.
2. **ORTHOGRAPHIC PROJECTION-SOLIDS**- First Angle Projection of solids—rectangular parallelepiped, cube, prism, pyramid, cylinder, cone, sphere.
3. **DEVELOPMENT OF SURFACE OF SOLIDS**- Geometrical solids such as prism of 4 and 5 sides, cylinder, pyramid of base sides 4 and 5, cone – Truncated solids such as cone, pyramid – Transition pieces such as rectangular reducing to circle, circle to square.

(Minimum 4 Drawing Exercises Suggested)

MODULE III (20 hrs)

ISOMETRIC PROJECTION & CONVERSION

Pictorial Projections- Introduction to Isometric, Axonometric and Oblique projections.

1. **ISOMETRY**- difference between Isometric projection and isometric view - Isometric scale isometric Projection/views of solids like prisms, cylinders, cones pyramids, and spheres. Isometric projection of sectioned and composite solids.
2. **CONVERSION OF PICTORIAL VIEWS INTO ORTHOGRAPHIC VIEWS**- Preparing scaled multi-view drawing from isometric views.

(Minimum 4 Drawing Exercises Suggested)

MODULE IV (20 Hours)

PERSPECTIVE PROJECTION & SCIOGRAPHY

1. **PERSPECTIVE PROJECTIONS**: Definition of perspective elements, classification of perspectives- Visual ray and Vanishing point Methods. Constructing one point and two point perspective views of simple solids and furniture pieces.
2. **INTRODUCTION TO SCIOGRAPHY**- principles of shades and shadows, Drawing shadows of simple objects in plan, elevation and perspective.

(Minimum 4 Drawing Exercises Suggested)

Note:

Number of drawing exercises suggested above is for class work. Additional exercises wherever necessary may be given as home assignments.

TOTAL HOURS: 85

UNIVERSITY EXAMINATION PATTERN

Q I - 2 Questions of 25 marks from module I with choice to answer anyone.

Q II - 2 Questions of 25 marks from module II with choice to answer anyone.

Q III - 2 Questions of 25 marks from module III with choice to answer anyone.

Q IV - 2 Questions of 25 marks from module IV with choice to answer anyone.

SEMESTER I Course No.	Course Name	L-T-P/S	Credits	Year of introduction
AR17 -17	VISUAL ARTS & PRESENTATION	1-0-2	4	2017

Course Objectives

The Visual Arts & Presentation course for students of architecture would,

- Provide requisite knowledge of visual language involving various media. The primary focus is on developing basic drawing and painting skills, as applied to architecture.
- Help students acquire basic knowledge about the characteristic of colours (water/ poster/ crayon etc.) and develop skills in using various media as effective and versatile presentation tools.

Course Outcome

- An understanding of the techniques of usage of various media and their applications.
- Development of architectural presentation skills using different media.

Reference Books

- J.H. Bustano, 'Principles of Colour and Colour Mixing'.
- Francis D.K. Ching, 'Architectural Graphics,' John Wiley, 2002.
- Francis D.K. Ching, 'Drawing, Space, Form, Expression'.
- Victor Perard, 'Anatomy and Drawing'.
- Luis Slobodkin, 'Sculpture-Principle and Practice'.
- Suzanne Huntington, 'Art of Ancient India'.
- Roy C. Craven, 'Indian Art'.
- J.C. Harle, 'Art & Architecture of the Indian Sub-continent'.

MODULE I (15 Hours) FUNDAMENTALS OF VISUAL ARTS

- Introduction to Art object, definition and Interpretation. Introduction to History of Art, Artistic Tradition and Theories.
- Graphic representations – Visual composition and Abstraction- Exercises involving Logo design, collage and calligraphy.
- Drawing: Types, Characteristics & functions of lines and its visual impacts.

MODULE II (18 Hours)

- Primary pencil sketching, tonal value and variation, shading techniques and texture technique.
- Primary ink drawing techniques using nib pens, Radiograph, Rotring pens, tonal value and variation, shading techniques and texture technique.
- Study of Objects having varied shapes (cuboids, prismatic, spherical, globular etc.) in different media- charcoal, pencils, pastels and ink. Sketching of simple natural / manmade forms in combination with trees , human figures etc

- d. Outdoor Study; study of monuments. Buildings in pencils, ink, charcoal, pastels etc. study should focus on Architectural details, wherever relevant.
- e. Rendering of perspective with sciography of Architectural Design problems.
- f. Sciography - Use, Definition, Direction of Light, Location of object, Method of finding shadows of a sphere, Right circular cone, shade of double curve surface of revolution. Shadows of lines and circles. Shadows of architectural elements. Shadows of circular solids. Shadows on buildings.

Module III (15 HRS)

- a. Elements of Painting: Pictorial & Spatial organizations, Form and texture in Painting, Theory of Colour- Chromatic Values, Colour wheel, colour chart, Two-dimensional/ Three dimensional aspects of Painting.
- b. Basic psychological aspects of lines, forms and colours, Unity of forms: Gestalt theory.
- c. Techniques of Rendering in water, poster, oil, mixed media and New Media.
- d. Architectural photography:
- Photography for documentation work.
 - Use of Photography for making audio-visual Presentation projects.
 - Use of Photography for simulating, overlaying or just positioning of building in different background /environments.
 - Special skills and equipment required for photography of buildings-Effects of using various lenses / filters in Photography of buildings.
 - Effects of outdoor light on buildings for photography, study of shadow in architectural photography.
 - Scale relationships in photography of buildings.-Photographing interiors-special skills and equipment required. Comparative values / effects black and white effects / colour photography in architecture.

MODULE IV (18 Hours)

- a. Introduction to Indian aesthetics/ Canonical principles of Indian Art, Sculpture & Painting.
- b. Mural Tradition in Kerala- Study of Style, Form and Technique.
- c. Languages, Methods & Techniques of Sculpture: Form, Texture, Mass and Volume. Sculpture in relief, Shallow relief, Sculpture in round. Free standing sculpture in relation to Architectural space.
- d. Techniques: Molding & casting in Plaster, Mud, Cement and Fiber glass.

TOTAL HOURS: 66

UNIVERSITY EXAMINATION PATTERN

- Q I - 8 short type questions of 5 marks, 2 from each module.
- Q II - 2 Questions of 30 marks from module I and module II with choice to answer anyone.
- Q III - 2 Questions of 30 marks from module III and module IV with choice to answer anyone.

SEMESTER I Course No.	Course Name	L-T-P/S	Credits	Year of introduction
AR 17-18	MODEL-MAKING WORKSHOP	0-0-2	3	2017
<p>Course Objectives</p> <p>The Model-making Workshop course for students of architecture would,</p> <ul style="list-style-type: none"> • Equip students with the basic skills necessary to represent their ideas three-dimensionally using simple materials. • Enable students to get acquainted with various tools essential for creating architectural models. • Help students to comprehend the exercises of the Basic Design and Architectural Graphics Studio in a better manner, as the subject is to be taught in coordination with them. 				
<p>Course Outcome</p> <ul style="list-style-type: none"> • This course will assist the students to enhance their project presentation skills by the use of simple as well as detailed architectural models. 				
<p>Reference Books</p> <ul style="list-style-type: none"> • Criss. B. M., “Designing with models: A Studio guide to Architectural Process Models”, John Wiley & Sons, Hoboken, 2011. • Werner, M., “Model Making”, Princeton Architectural Press, New York , 2011. • Congdon, Roark T., "Architectural Model Building: Tools, Techniques & Materials", Bloomsbury Academic, 2010. • Knoll, W. and Hechinger, M., “Architectural Models: Construction Techniques", Cengage Publications, 2014. • Dunn, N., “Architectural Modelmaking”, Laurence King Publishing, 2013. • Schilling, A., “Basics Model-building”, Birkhauser, Berlin, 2007. • Mi-Young, Pyo, “Construction and Design Manual: Architectural Model”, Dom Publishers, Germany, 2012. 				
<p>MODULE I BASICS OF MODEL-MAKING TECHNIQUES (6 Hours) Techniques of cutting paper to create regular polygon shapes as 2D planes (3-sided to 10-sided polygons). Creating basic solid shapes such as square, rectangle, circle & triangle with various paper medium.</p> <p>MODULE II GEOMETRIC & FREE-FLOWING FORMS (10 Hours) Creating platonic solids with suitable paper medium.</p>				

Making of models using free flowing materials such as clay, plaster of paris etc.

MODULE III

BLOCK & SITE MODELS (12 Hours)

Creating block models of buildings and detailed site model using suitable materials for roads & landscape elements.

MODULE IV

DETAILED ARCHITECTURAL MODELS (12 Hours)

Creating a detailed building model: Exterior / interior using different materials and paper to represent the actual material in a suitable scale.

TOTAL HOURS: 40

SEMESTER I Course No.	Course Name	L-T-P/S	Credits	Year of introduction
AR 17-19	COMMUNICATIO N SKILLS	0-0-2	2	2017
<p>Course Objectives The Communications Skills course for students of architecture would,</p> <ul style="list-style-type: none"> • Augment their communication skills in English by developing their listening, speaking, reading and writing skills. • Improve their speaking skills particularly with respect to clients, suppliers, business partners and colleagues and help to develop their architectural vocabulary. • Enhance their reading particularly architectural journals and books, building rules and regulations, and catalogues. • Help to cultivate their general as well as analytical writing skills especially writing resumes, letters, emails, proposals and reports. 				
<p>Course Outcome</p> <ul style="list-style-type: none"> • This course will assist the students to hone their communication skills to interact with potential clients and business partners. It would also enhance their architectural vocabulary so as to improve the efficacy of their project presentations. 				
<p>Reference Books</p> <ul style="list-style-type: none"> • Schmalz, Bill. Architect's Guide to Writing: For Design and Construction Professionals, Images Publishing Group Pty Ltd., 2014. • Greusel, D., Architect's Essentials of Presentation Skills, John Wiley & Sons, New York, 2002. • Eric H. Glendinning & Beverly Holmstrom, "Study reading - A course in reading Skills for academic purposes", Cambridge University Press, 1992. • John Kirkman, "Good style - writing for science and technology", E&FN Spon, an Imprint of Chapman & Hall, 1992. • Anderson, P.V, Technical Communication: A Reader-centered approach, Wadsworth, Eighth Edition, USA, 2014. • Krishna Mohan and Meera Banerji: Developing Communication Skills (Mac Millan India Ltd)[2000]. • John Seely, The Oxford Guide to Writing and Speaking, Oxford University Press, New Delhi, 2004. • Lewis, N., Speak Better Write Better , W.R.Goyal Publishers& Distributors, Delhi, 2011. • Wren, P.C. & Martin, H., High School English Grammar & Composition, S. Chand Publishing, 2017. • Thorpe, E. and Thorpe, S., Objective English, Pearson Education India, New Delhi, 2016. • Sen, L., Communication Skills, Prentice Hall India Learning Pvt. Ltd., New Delhi, 2007. • Carnegie, D., The Quick and Easy Way to Effective Speaking, Rupa & Co., New Delhi, 2016. • Bansal, R. K. and Harrison, J.B., Spoken English: A Manual of Speech & Phonetics, Orient Blackswan, Hyderabad, 2013. • Murphy Raymond, Essential English Grammar 2Ed, Cambridge University press • Thakkar Prathesh , The Ultimate Guide to IELTS Writing, MK Book Distributors 				

- Oxford Advanced Learners Pocket Dictionary 4th Ed.

MODULE I

BASICS OF COMMUNICATION SKILLS (12 Hours)

Introduction to Phonetics and Phonetic symbols – Relevance in the area of pronunciation-
Transcription of words using phonetic symbols especially the recurring words in the field
of Architecture –Reduction of speech sounds in natural speech -Oral presentations and role
plays (5 minutes activities)

Practice session in using a dictionary effectively with special focus on the origin, meaning
and pronunciation of words

Listening – Listening to news bulletins and related voice modulations- interviews and
discussions from various media

Speaking – Giving directions and instructions, negotiating meaning, convincing people,
describing places, telephone conversations, participating in small group discussions
-stress , rhythm and intonation in connected speech

Reading –News papers and lengthy articles related to architecture and construction

Writing - process descriptions, formal emails & letters, blogs

Vocabulary Development – Abbreviations, appropriate words to describe topics in
architecture

Grammar – Basics-Suitable tenses to write descriptions in the field of Architecture

MODULE II

DESCRIPTIVE TECHNIQUES (8 Hours)

Listening – Description of places, conversations and answering questions

Speaking - making a power point presentation on a given topic

Reading - architecture manuals / regulations

Writing - writing a resume/CV, business letters, report, Memos etc.

Vocabulary – Vocabulary building activities.

Grammar - collocations

MODULE III

ANALYTICAL SKILLS (8 Hours)

Listening - TED talks

Speaking - participating in group discussions

Reading - reading and interpreting visual information

Writing - writing analytical and argumentative essays

Vocabulary - suitable words to be used in analytical and argumentative essays

Grammar - subject-verb agreement

MODULE IV

PRESENTATION SKILLS (12 Hours)

Listening – Developing listening skills in relation to IELTS,TOEFL, GRE and CAT
examinations

Speaking – Elements of effective presentation tools-Voice Modulation-Power point
presentations-Audience Analysis-talking about one's project proposal-body language-how
to face the interview board-mock interviews-group discussion-debates-soft skills-emotional
literacy

Reading - reading essays on construction, buildings, different schools of architecture

Writing – writing proposals, role of references / bibliography, table of contents, index
Vocabulary - related vocabulary
Grammar - Cohesive devices

TOTAL HOURS: 40