

Visvesvaraya Technological University, Belagavi
BACHELOR OF ARCHITECTURE
 Scheme of Teaching and Examination (2021)
 Outcome based Education (OBE) Choice Based Credit System (CBCS)

SMESTER-IX

SI No	Course category	Course Code	Title of the Subject	Teaching Dept	Teaching Hours/ Week							Examination					Credits		
					Lecture	Tutorial	Studio		Practical	Seminar	Self Study	Total	Duration in Hours	CIE marks	SEE Marks			Total	
							Core	Applied							Theory Marks	Term Work			Viva Marks
					L	T	S	S	P	SM	SS								
1	PAEC / PCC	21ARC91	Architectural Design Project (Thesis)				8	8				16		100			200	300	16
			Total				8	8				16		100			200	300	16
PCC - Professional Core Course PAEC - Professional Ability Enhancement Course				This is research writing in a thrust area in architecture. Methods of analysis should have a scientific basis and thorough investigative research is required from primary and secondary sources- through library research and literature review; documentation, etc. This can be a prelude to the Architectural Design Thesis. Progressive Marks(CIE) to be awarded by the subject teacher. Term work & Viva Voce examination shall be conducted jointly by one internal & one external examiner appointed by the University. Progressive Assessment (Continuous Internal Evaluation)(CIE) to be awarded by the subject teacher.Semester End Examination (SEE) will be conducted by VTU. Term work & Viva Voce examination shall be conducted jointly by one internal & one external examiner appointed by the University. Minimum Marks to be secured in CIE for passing: 50%. Theory (SEE) marks, Term work marks and Viva marks : 40 % .															

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SEMESTER- X

Sl No	Course category	Course Code	Title of the Subject	Teaching Dept	Duration of professional	Duration in Hours	CIE marks	Examination				Credits
								SEE Marks			Total	
								Theory Marks	Term Work	Viva Marks		
1	PAEC	21ARC101	Professional Training*	Architecture	16 weeks					200	200	18
			Total							200	200	18

PAEC - Professional Ability Enhancement Course

Progressive Assessment (Continuous Internal Evaluation)(CIE) to be awarded by the subject teacher. Semester End Examination (SEE) will be conducted by VTU. Term work & Viva Voce examination shall be conducted jointly by one internal & one external examiner appointed by the University. Minimum Marks to be secured in CIE for passing: 50%. Theory (SEE) marks, Term work marks and Viva marks : 40 % in each.

*** The commencement date of Professional Training shall be the date of commencement of the semester as notified by the University.**
 Orientation under an architect registered with Council of Architecture that would include the process of development of conceptual ideas, presentation skills, involvement in office discussions, client meetings, development of the concepts into working drawings, tendering procedure, site supervision during execution and coordination with the agencies involved in the construction process and to facilitate the understanding of the evolution of an architectural project from design to execution

IX Semester

ARCHITECTURAL DESIGN PROJECT (Thesis)			
Course Code	21ARC91	CIE Marks	100
Teaching Hours/Week (L:T:P: S)	0:0:0:16	SEE Marks(VIVA)	200
Total Hours of Pedagogy	16	Total Marks	300
Credits	16	Exam Hours	----
Course objectives: <ul style="list-style-type: none">a) To demonstrate an ability to comprehend the nature of architectural problem and create a brief which sets the frame work for design.b) To demonstrate an advanced level design ability to convert the brief set forth earlier into a speculative proposition of design.c) To articulate and delineate the propositions of design into an architectural solution addressing all the dimensions using diagrams, analog or digital drawings and models.			
Teaching-Learning Process (General Instructions) <p>These are sample Strategies, which teacher can use to accelerate the attainment of the various course outcomes.</p> <ol style="list-style-type: none">1. Studio discussions, activities, sketches, drawings, assignments for learning.2. Evaluation by submission of drawings, Reports, open juries.			
INTRODUCTION: <p>In principle, the final year Architectural Design Project, positioned at the culmination of multi- year architectural education program, constitutes the threshold between student’s academic learning and the profession. It provides an opportunity to do more than demonstrate the accumulated skills and focus on actively engaging with the discipline by contributing new ideas, design solutions or exploring new dimensions to existing or current issues in the field. Ideally, the Architectural Design Project should continue with the Project Proposal submitted during 21ARC93 Thesis Seminar (conducted in the Ninth semester) and build/enhance/improve on the architectural narrative that sets the premise for design demonstration.</p>			

OUTLINE:

Listed below are a few parameters that could govern, frame and aid in evaluating the projects. These parameters and stages should be fine-tuned depending on the resources. It is advised that the projects should be run as a design studio with individual guidance under one or more guides and project coordinator.

(a) Guidelines (scope, scale and limitations):

- All projects should be grounded in some kind of critical enquiry; the depth of enquiry can be extended and the time spent on design can be reduced in a specific case, but such a project should demonstrate clarity in terms of research design. The suggested maximum weightage for study will be 25% in the case of a Study + Design Project.
- Selected projects can be of any scale and size (in terms of built areas) as long as the required rigor and depth is demonstrated by the student to merit consideration as a final project. It is advised not to attempt very large projects that have numerous structures and tend towards repetitive design with minimal variations or very complex projects due to time constraint.
- The scope of the project should firmly be in the purview of architecture even though it can have an interdisciplinary premise. All genres of projects (study or design) should end with a design solution or research dissertation.

(b) Generic studio model highlighting the salient stages

- **Project seminar**– Student shall present a seminar on the project topic which would include the following
 1. Precedents of similar projects, either actual visit to such projects or through literature reviews.
 2. Cultural, contextual, historical, technological, programmatic concerns of the project.
 3. Prevalent or historical models of architectural approach to such projects and a critique of such models
 4. A rhetorical or a speculative statement that would be the basis of further investigation. (For example: Architecture in the information age: Design of libraries in the new virtual reality regime). Documentation which is a part of this presentation shall be taken as completion of “case study” part of the final requirement.
- **Mid Review**– There shall be a review to clarify the conceptual statements and assumptions of the students. Students shall present a clearly articulated design response to context, program and users. Conceptual framework and preliminary architectural scheme using drawings and models shall be the end products of this stage.
- **Final Review** – Final review should consist of all the works which would be presented at the viva. Mode of presentation shall be tentative but the body of work presented should demonstrate the intellectual rigour and skill of the student through the design process and must include various iterations (including study models) and the final design outcome. Number of sheets shall be limited to maximum of 20 plus two case study sheets.

(c) Final output/outcomes:

- The final output or body of work should include a report; detailed and completed analog and digital drawings and presentation model. In case of research dissertation an in depth research study of a specialised architectural component should be undertaken and presented in the form of a detailed report with proper references and appendix and a plagiarism check report not exceeding 15%.

(d) Project Report:

- Three copies of the reports shall be submitted for evaluation in the Viva. The report in typed or computer printed form shall provide an overview of the entire process from formulation of the project to the design resolution. It should discuss the program, site-analysis, literature review, case studies, design criteria, concept and include detailed design drawings from all stages and photographs of the models.

Note:

- a) The requirements pertaining to the differently abled, elderly people and children are to be addressed in design and detailing.
- b) At the time of Viva examination, the student shall show to the jurors the portfolio containing the evolution of his/her design from the beginning to the final output. All the drawings and reports shall be certified by the Principal of the School of Architecture as bona fide work carried out by the student during the semester.

Teaching-Learning Process

1. Studio discussions, activities, sketches, drawings, assignment for learning.
2. Evaluation by submission of drawings, Reports.

Course outcome (Course Skill Set)

- 1) The students will be able to learn the preparation of a Project Report.
- 2) The students will be able to apply his learning in the preparation of a Project Report.
- 3) The students will be able to work with a team or individually on a given assignment/project.

Assessment Details (both CIE and SEE)

(methods of CIE need to be defined topic wise i.e.- Studio discussions, Reviews, Time problems, test, Seminar or micro project)

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 50% marks individually both in CIE and 40 % marks in SEE to pass. Semester End Exam (SEE) is conducted for 200 marks (Viva-voce). Based on this grading will be awarded.

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 50% marks individually both in CIE and 40 % marks in SEE to pass. Semester End Exam (SEE) is conducted for 200 marks (Viva-voce) and a minimum of 50% (150 marks out of 300) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together. Based on this grading will be awarded

Continuous Internal Evaluation:

Methods suggested:

1. Studio discussions, Reviews, Time problems, CIE tests, Seminar or micro project, Quiz, report writing etc.
2. The class teacher has to decide the topic for the Design and Seminars if any, in the beginning only. The teacher has to announce the methods of CIE for the subject in advance in writing.

Semester End Examination:

1. The student needs to submit his/her works done throughout the semester, including rough sheets for the Viva examination, at least one day prior to the Viva work examination to the course teacher/coordinator.
2. The Viva-voce will be evaluated by Two external teacher appointed by the University along with Course teacher or an internal examiner.
3. The SEE marks list generated is to be signed by both internal and external examiners and submitted to VTU in the sealed cover through the Principal of the institution.

Suggested Learning Resources:**Books/ SUGGESTED REFERENCES:**

All references will be project specific and will include a wide range of subjects (history, theory, services, material and construction) from architecture and allied fields addressed through critical papers, essays, documented studies and books.

Web links and Video Lectures (e-Resources):

- <https://ndl.iitkgp.ac.in>
- <https://www.youtube.com/watch?v=oO3eZwvgb-c> (From COA social)
- <https://www.youtube.com/watch?v=SHwT6XwTTIY> (From COA social)
- https://www.youtube.com/watch?v=5cM3n_naMHY&t=15s
- <https://www.youtube.com/watch?v=jW9oPt7-TA4>
- <https://www.youtube.com/watch?v=M1TiUa7cpm0>
- <https://www.youtube.com/watch?v=677ZtSMr4-4>

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning

- 1) Sketching of the concepts, detailing. Working with study models.
- 2) Individual seminar on the project periodically to showcase the improvement.
- 3) Preparation of reports, editing the report, etc.

X Semester

Professional Training			
Course Code	21ARC101	CIE Marks	----
Teaching Hours/Week (L:T:P: S)	--	SEE Marks(VIVA)	200
Total Hours of Pedagogy	16WEEKS DURATION	Total Marks	200
Credits	18	Exam Hours	----
Course objectives: <i>To provide exposure to the various aspects of architectural practice</i>			
Teaching-Learning Process (General Instructions) These are sample Strategies, which teacher can use to accelerate the attainment of the various course outcomes. Orientation under an architect that would include the process of development of conceptual ideas, presentation skills, involvement in office discussions, client meetings, development of the concepts into working drawings, tendering procedure, site supervision during execution and coordination with the agencies involved in the construction process and to facilitate the understanding of the evolution of an architectural project from design to execution.			
OUTLINE: The student is expected to be exposed to preparation of working drawing, detailing, preparation of architectural models, computer applications in design and drafting, filing system in respect of documents, drawing and preparation of tender documents. Site experience may be given in respect of supervision of the construction activity, observing the layout on site, study of the stacking methods of various building materials, study of taking measurement and recording. Students should also acquaint themselves with local building byelaw.			
Monitoring of Training: A. Submission of Joining report: To be submitted within one week from the date of joining. Students must report for the training from the day of commencement of 9th semester as notified by VTU. B. Submission of periodical reports: Students shall maintain a day to day record of their engagement for the period of training. This will be recorded in an authorized diary to be counter signed by the architect at the end of each week and the same diary shall be sent to the training co-ordinator once in a month. C. Completion certificate: At the end of the training period, a student shall produce a certificate of satisfactory completion of training in duplicate.			

Submission of Portfolio:

Students shall present a portfolio containing the following works before the examiners for Viva-Voce Examination:

- 1) Training Report: This shall contain copies of only such drawings which have been dealt, drafted or designed by student. It shall also contain a brief description of works handled during the training along with photographs, pencil sketches etc.
- 2) Building Study – This shall include a detailed critical study of a building designed by the architect with whom the student has worked. The study should include of function, aesthetics, context, structure etc., This shall be presented through drawings, photographs, write ups etc.
- 3) Building Material Study – This shall be a detailed study of new or relatively new building materials available in the market. A study of its properties, uses, cost, maintenance etc., is expected to be done. Samples of materials shall also be obtained and presented.
- 4) Detailing study – This shall be a study of interesting details done in the firm where the student has undertaken the training. This shall include sketches and photographs of the detail.

Note:

1. Students shall work only in architectural firms functioning over 5 years and headed by an architect registered with Council of Architecture, New Delhi.
2. In case of an architectural firm abroad, the Principal Architect of the firm should hold the title of architect under the law of that country.

Teaching-Learning Process

- 1) Students need to observe the technical details and detailing used in the office while preparing drawings.
- 2) Students need to observe the procedures and systems of the office while submitting the drawings, reports etc.
- 3) Students need to be proactive for the assignments given to them.

Course outcome (Course Skill Set)

- 1) The students get exposed to the professional work and field work.
- 2) The students will relate the academic work with professional work.
- 3) The students will appreciate the pace of the work in profession and learn to work as a team member.

Assessment Details (both CIE and SEE)**Continuous Internal Evaluation:**

- 4) There is no Continuous Internal Evaluation Marks for this subject. However students to send their appointment order and joining letter to HOD/Principal as record.
- 5) The students need to update their progress to the institution on monthly basis
- 6) The students need to submit a portfolio of work done by them in an Architect's office as per the details given in the submission portfolio above.

Semester End Examination:

4. The student needs to submit his/her works done throughout the semester, including rough sheets for the Viva examination, at least one day prior to the Viva work examination to the course teacher/coordinator.
5. The Viva-voce will be evaluated by an external teacher appointed by the University along with Course teacher or an internal examiner.

The SEE marks list generated is to be signed by both internal and external examiners and submitted to VTU in the sealed cover through the Principal of the institution.

Suggested Learning Resources:**Books**

Professional Practice by Roshan Namavati

Web links and Video Lectures (e-Resources):

- <https://ndl.iitkgp.ac.in>
- <https://www.youtube.com/watch?v=NPj-Jiz2cJk>
- https://www.youtube.com/watch?v=6ASoSf_DaYU
- <https://www.youtube.com/watch?v=34gw4FfyeUg>
- https://www.youtube.com/watch?v=0k-ii9vJA_0

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning

- 1) The student can visit sites along with office staff and document the learning.
- 2) The student to collect the information on various materials and document the same.
- 3) The student to document a building of the Architect and critically analyse the same.