Shri Vaishnav Vidyapeeth Vishwavidyalaya

Shri Vaishnav institute of Architecture

Choice Based Credit System (CBCS) Scheme in the light of NEP-2020 by COA

B.ARCH (2021)

BARCH CURRICULUM-2021

PREFACE: ABOUT THE INSTITUTE

'To provide meaningful architecture is not to parody history but to articulate it'- Daniel Libeskind

Shri Vaishnav Institute of Architecture is a new school of architecture in Madhya Pradesh. It is also the most vigorous. In addition to architecture, the school has foresight over the years to embrace a broader range of fields that address and improve human environments, including planning and the arts.

Good Education Is So Important, We Need To Look At The Way People Are Taught, It Not Just About Qualifications To Get A Job, It's About Being Educated

- Zaha Hadid

What binds these fields together?

- is a strong commitment to the deployment of technology toward social good
- the use of design and deliberation approaches towards action that is distinct from but complementary to the engineering approach to problem-solving.
- the shared belief in heightening the aesthetic attributes of our lived experience.

While advocating the forward-looking, technologically-driven optimism of SVIA, the school shall also invest in critically reflecting on technological innovation, its social impact, and its confrontation with cultural values.

The school is fully committed to **the mission of leadership.** The tradition of innovation has begun and shall be taken ahead with its faculty and students striving to articulate its mission and show the way.

The school's abundance of resources stems primarily from the Institute's full endorsement and support of the university's vision. These resources include an unmatched concentration of talent among its faculty and staff, a wealth of state-of-the-art facilities, and generous financial support that shall enable the students to experiment, innovate and take risks. While this "SVIA model" is new we shall seek to constantly test it and renew it. SVIA shall be involved in inventing the future The new department of architecture in the institute exists within a context so deeply committed to the advancement of knowledge through scholarship, research, and innovation. There are even fewer operating in a place with as pressing a sense of responsibility to "bring this knowledge to bear on the world's great challenges". The Department of Architecture at SVVV is truly unique among architecture programs in its commitment to creating a culture of experimentation **to expand the discipline and change the world.**

At SVIA, processes, and acts of design, research, testing, and experimentation are intertwined and grounded in critical contemporary questions which require deep knowledge of the past and present as well as insights into the future. We enable and open up our student's understanding of the built environment as a cultural, technological, social, and ecological condition one in which design is as critically focused on answering questions as it is on solving problems through intervening in the world.

The department offers an undergraduate degree program and an energetic and rich site to study the field. This structure presents research on the one hand and possibilities for integration on the other. It allows the undergraduate students to learn, bringing a plurality of views and interests to the fore and fostering a culture of intense and productive debate.

Architecture education must bridge theory and practice. As educators we need to lead, not follow." - Karen Fairbanks, partner, marble Fairbanks

PREFACE: ABOUT THE INSTITUTE

VISION	
	Excellence in design education enables sustainable endeavors for societal well-being with leadership
MISSION	
i.	**Develop core competencies of design and professionalism to address societal and environmental concerns.**
ii.	**Enable experiential learning and community engagement to create inclusive and sustainable design.**
iii.	**Provide an international platform for interdisciplinary learning and collaborative research**

In the new year, we shall launch several new initiatives to support experimentation and collaborative teaching, and practice. We continue to strive to provide precise and rigorous architectural training, teaching students how to frame and test ideas and arguments through the design process, while also challenging them to pursue questions that push us all beyond our comfort zones.

Our goal, as a department, is to prepare our students not only with "best practices" but to find ways to transform the profession to meet future challenges.

The Mind Without Educating the Heart Is No Education at All – Aristotle

The Bachelor of Architecture is a 5-year full-time course offered by SVIA.

The Bachelor of Architecture curriculum includes

- Integrated learning methodology
- Learning techniques such as block models, sketches, illustrations, and PBL.

Assessment

- Assignments and sessional (interactive and regular)
- Design reviews, Display of marks break-up at regular intervals.

University Vision and mission

The revised curriculum for the Under-Graduate program of Architecture at SVIA, Indore is based on international and national best practices of education, institute charter, and faculty feedback. The curriculum is the first step towards 'Outcome Based Education' to bring substantial equivalency of the architectural education offered at the institute with international standards. To plan the substantial equivalency, each course is written with expected educational outcomes followed by details, so that it provides a clear outline of the academic experience received by the students and its compliance with acceptable standards and practices. To prepare the curriculum two faculty workshops were conducted to connect with Outcome Based Education and Learning Theories. Then there were several

faculty meetings to plan vertical progression and horizontal integration of subjects, pedagogical approach (distribution of skill, knowledge, and value), credit-based system, the

relation of credit to contact hours, and expectations of Council of Architecture norms. Several national and international architectural curriculums were referred to make this. The process was led by a core committee from the department. The ten semesters B.Arch. the program has 268 credits, and each semester has 28 credits based on 28 contact hours per semester student's opportunities for Under-Graduate research, the curriculum has seminars that will help students to explore their interests and connect with design. These seminars are so arranged that students get research training which finally culminates into a design thesis.

• All subjects have different components like L-lecture, T-tutorial, Practical/ studio, and all are given equivalent credits as per the contact hours. These components are defined as below: Lecture (L) Lecture is a one-way mode of transferring information/ concepts/ theory to students, usually delivered by an instructor. To check the understanding of concepts, frequent tests and quizzes are supplemented with the lecture. Tutorial (T) For completing class assignments, one-to-one practice sessions conducted by and with faculty member(s) are tutorials. Practical/ Studio (P/S) Practical / Studios are sessions where students use various mediums and modes to define the real-life problem(s) and solution(s) for the same, individually or in the group.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)	
i.	Graduates will exhibit competencies in professional engagements in the industry, government, academia, research, entrepreneurial pursuit, and consulting firms, and higher education by applying knowledge of architecture and allied fields.
ii.	Graduates, guided by the principles of sustainable development and global interconnectedness, will understand how architectural projects affect society and environment contribute to society as broadly educated, expressive, ethical, and responsible citizens with proven expertise
iii.	Graduates will exhibit adaptability, flexibility, communication skills, team spirit, ethical conduct, achieve peer recognition; as an individual or in a team; through demonstration of good analytical, design and implementation skills and leadership qualities.
iv.	Graduates will engage in will thrive to pursue continuous life-long learning, career enhancement, pursuing higher education with critical thinking and interdisciplinary approach with changing global and local needs to fulfil their goals.

• The curriculum includes professional training in the eight-semester. This is given equivalent credit compared to a regular semester, based on the professional training received in equivalent contact hours.
• The subject coding system adopted for the syllabus is as follows: -
• Every subject code has 4 Arabic numeric digits: - ARCH- XXX
• Each code starts with the semester number, i.e., 1 to 0 (STARTS FROM 1 TILL 10 AS 0 semester)
• Last two digits denote the subject number where even stands for studio/ practice-based subjects and odd number stands for theory-based subjects.

GRADUATE ATTRIBUTES

- Equipped with professional architectural knowledge.; Competent in design and development.; Proficient in conducting site Investigation and analysis.; Good at Modern Technology Usage.; Emphases on Environment Sustainability concerns.; Ethical.; Efficient in coordination with consultants.; Good at communication.

COURSE STRUCTURE

Salient features of B. Arch Program

- Architectural Design Learning is focused on spatial experiences and live case studies.
- Building Technology will provide hands-on learning through **carpentry workshops, construction yards & site visits.**
- In Architectural graphics, students will be trained in sketching, 3-D software, and various rendering techniques.
- **Model-making workshop** is a highlight of our program wherein students will work at various scales experimenting with different materials.
- In the state-of-the-art **CAD Centre**, students will simulate climatic data and structural systems.
- **Art Room** will facilitate the students to develop creative skills like painting, mural making, clay modelling, etc.

The matrix of Course structure having ten semesters is made up of the following "Areas" on the next page

UNIQUE FEATURES

The International framework of 21st-century skills is divided into three skill sets and twelve components laid out.

- **Skill Set 1:** Learning and Innovation with the components: Critical thinking and problem solving, communication and collaboration, and creativity and innovation.
- **Skill Set 2:** Digital Literacies with the components: information literacy, media literacy, and information and communication literacy.
- **Skill Set 3:** Life and Career Skills with the components: flexibility and adaptability, initiative and self-direction, social and cross-cultural interaction, productivity and accountability, and leadership and responsibility.

- The program follows a modern dynamic curriculum with a wide range of courses. A wide range of electives nurtures the interests of students. Students are encouraged to develop critical thinking.

PROGRAMME OUTCOMES (Pos)

1.	ARTS & CRAFT	o Basic Design; Architectural Graphic Skill
2	ARCHITECTURE:	o Design; Humanities; History; Theory & Criticism
3	SKILLS:	o Hand skills; Computer-based skills
4	TECHNOLOGY:	o Building Materials; Construction; Technology; Services & Structure
5	PRACTICE:	o Professional Practice, Office/field Training
6	ENVIRONMENT:	o Environmental Science; Sustainability
7	SUPPLEMENTARY:	o Related Study Program (RSP)/ Electives/ Communication Skills

Cognitive

Analysis/ Critical Thinkings/ Decision Making/Adaptive Learning/Problem Solving/Executive Function/Active Listening/Interpretation/innovation/Creativity/ICT Literacy/Comminication/Reasoning-Argumentation

Interpersonal

Adaptablity/ Integrity/ Appreciation for Diversity/ Self-Monitoring/ Continuous Learning/ Initiative/ Productivity/Ethics/ Professionalism/ Flexibiity/ Self-Evaluation/ Responsibility/ Ctizenship/ Perseverance/Carrer Orientation

Intrapersonal

Responsible/Social/Influence with others/Leaership/Assertive Communication/Empathy/Perspective-Taking/Trust/Self-Presentation/Coordination/Conflict resolution/Service Orientation/Negotiation/Collaboration/Reasoning-Argumentation

- Hands-on practical experience is imparted through workshops. The scholarship is given to meritorious students. The Institute is equipped with a Material lab, Climate Lab. The Institute has academically strong core faculties with diverse backgrounds. Expert lectures and seminars by professionals and academicians are regularly organized.

PROGRAMME OUTCOMES (Pos)

PO1	Architectural Knowledge:	Apply the acquired knowledge of, **design (arts, fundamental & complex), operation(** building sciences & technologies,) and **improvements of systems,(**process and environment i.e humanities, and environmental sciences in design, planning, and construction) With Art in practice
PO2	Problem analysis:	Identify, formulate, and conduct research literature; analyze various scales of architectural projects contextually to arrive at substantiated conclusions. Ability to identify, critically analyze, formulate and solve (complex architectural problems) Design problems
PO3	Design/development of solutions:	Ability to devise, conduct exploration, and analyze data to provide well-informed conclusions in the design process.Ability to design an integrated solutions system and process to meet desired needs within realistic constraints such as health, safety, security, and environment to incorporate interdisciplinary approaches for multidimensional with contextual, societal issues about the built environment.
PO4	Conduct investigations of complex problems:	Use research-based knowledge and methods including context analysis, case studies, project requirements, and synthesis of the information to provide context-specific solutions. Ability to select appropriate technology and techniques and use them with dexterity

PO5	**Modern tool usage:**	Identity, select and apply the appropriate tools to access, predict, design, and simulate qualitative and quantitative outcomes within limitations.
PO6	**The Architect and Society:**	understand and resolve the environmental, economic, and societal implications of architectural work; make the case publicly for better human environments in contemporary society
PO7	**Environment and sustainability:**	Understand the importance of architectural solutions in societal and environmental contexts to demonstrate the need for sustainable development. Ability to understand the impact of global change, in a contemporary, economic, environmental, and societal context for sustainable development. Apply reasoning to address socio-cultural and legislative aspects relevant to professional practice and social responsibility.
PO8	**Ethics:**	Apply ethical principles to commit to professional ethics, responsibilities, and norms of professional practice. To produce well-informed socially responsible global citizens with sharp critical thinking skills having sound awareness about professional practice, planning, management, Building byelaws, ethics, and values. They will have an entrepreneurial spirit. Ability to function professionally with ethical response-ability as an individual as well as in multidisciplinary teams with a positive attitude.act following the ethical principles of the profession of architecture;
PO9	**Individual and teamwork:**	Function effectively as an individual as well as a member or a leader in diverse interdisciplinary settings.
PO10	**Communication:**	Comprehend and communicate effectively through documentation, and graphical and verbal presentations of issues related to architecture, community, and society at large. (with clients, peers, and community;)
PO11	**Project management and finance:**	Demonstrate knowledge and understanding of professional and management principles to apply to one's work, as a member and a leader, to manage projects in multidisciplinary environments.
PO12	**Life-long learning:**	Recognize the need for, have the preparation and ability to engage in independent and lifelong learning in the broader sense of professional practice, the domain of societal and technological change. Ability to appreciate the importance of goal setting and recognize the need for lifelong learning. engage in lifelong learning and professional development following graduation;

BASIC COURSE MATRIX FOR FIVE YEARS: 10 Semesters/ 268Credits

BASIC COURSE MATRIX FOR FIVE YEARS: 10 SEMESTERS/ 268 CREDITS

COURSE MATRIX					STAGE	I STAGE												II STAGE							
					LEVEL	FOUNDATION				CORE								PREOFESSIONAL							
					YEAR	I YEAR				II YEAR				III YEAR				IV YEAR				V YEAR			
COURSE	CORE SUBJECT	CODE	S.NO	LECTURE TYPE	SUBJECT	AESTHETIC				ANALYTICAL				SYNTHETIC				PROFESSIONAL				CRITICAL			
					SEMESTER/ CREDIT	I	CR	II	CR	III	CR	IV	CR	V	CR	VI	CR	VII	CR	VIII	CR	IX	CR	X	CR
ARCHITECTURE - AR					STUDIO	DESIGN N FUNCTION				VERNACULAR				HOLISTIC AND SERVICES				URBANISM		PROFESSIONAL		URBAN		THESIS	
	DESIGN	1	1	STUDIO	BASIC DESIGN& VISUAL ARTS STUDIO	AESTHETIC FUNCTIONAL	9																		
		1	2	STUDIO	ARCHITECTURAL DESIGN STUDIO			CONCEPTUAL-DESIGN LANGUAGE	9	CLIMATIC MATERIAL STRUCTURE, FORM	9	LANDSCAPE HABITAT, ENVIRONMENT, SERVICES	9	GATEWAYS, THRESHOLD INSTITUTIONAL, BUILDING SYSTEM, SERVICES	9	TEMPORAL - DESIGN DEVELOPMENT PART TO WHOLE	10	NON-LINEAR	10			STREET & PRECINCT	16	THESIS	16
		2	3	STUDIO CUM THEORY	ALLIED STUDIO - SUPPORTING STUDIO /THEORY					ENVIRONMENT		CLIMATE RESPONSIVE ARCHECTURE		LANDSCAPE DESIGN& SITE PLANNING	3	HUMAN SETTLEMENTS PLANNING	3	HOUSING	3			MINOR STUDIO			
					THEORY																				
	HISTORY	5	5	THEORY	HISTORY AND ARCHITECTURE& CULTURE	HISTORY OF HUMAN SETTLEMENTS	2	EARLY, MEDIEVAL	2	RENAISSANCE, MUGHAL	2	COLONIAL, EARLY INDUSTRIAL	2	MODERN, POST MODERNISM	2										
			5/6	THEORY / PRACTICAL	CORE ELECTIVES											CORE ELECTIVE I	2	CORE ELECTIVE II	2			CORE ELECTIVE IV A	2	CORE ELECTIVE IV B	2
																		CORE ELECTIVE III	2			CORE ELECTIVE V A	2	CORE ELECTIVE V B	2
	PRINCIPLE	6	6	THEORY	PRINCIPLES			ENVT SC FOR ARCHITECTURE	2	CLIMATE RESPONSIVE	2	TOA	2	AGRITECTURE	2	URBAN DESIGN	2								
TECHNOLOGY - TE					STUDIO	BASIC						DESIGN & ADVANCED													
	CONSTRUCT	3	6	STUDIO CUM THEORY	BUILDING TECHNOLOGY AND MATERIALS	BUILDING MATERIALS, LOAD-BEARING	4	LOAD BEARING, TIMBER	4	ADVANCED COMPONENTS, BASIC R.C.C	4	STEEL	4	PREFAB, ADVANCED IN TECHNOLOGY	4	MISCELLANEOUS	3	ADVANCED	3						
					THEORY																				
	SERVICES	9	7	PRACTICAL	BUILDING SERVICES	SURVEY	2	WSS	2	EL/MC	2	AC/L	2					ELE	2						
		7	8	THEORY	THEORY & DESIGN OF STRUCTURES	BASICS	2	STRUCT	2	SP	2	RCC	2	S	2	REPORT	2								
SKILLS -SK					STUDIO	BASICS				INTERMEDIATE		ADVANCED													
	DRG	4	10	STUDIO	ARCHITECTURAL GRAPHICS & DRAFING	INTRO	3	PERSCIO.	3	MEASURE DRAW	3	WORKING DRAWING MANUAL	3												
					THEORY	BASIC				INTERMEDIATE				ADVANCED											
	COMMUNICATION		9	THEORY	ESTIMATION& COSTING, SPECIFICATION CONTRACTS											SECVB	2								
			12	THEORY	ARCHITECTURAL RESEARCH METHODS																				
		9	13	THEORY	COMMUNICATION SKILLS	CS	2											ESA	2						
		8	14	PRACTICAL	GRAPHICAL SKILLS MANUAL / COMPUTER (WORKSHOP/STUDIO)	INTRO	2	2D - BASIC	2	CAI 3D	2	CAII ADVANCED	2	BIM	2	DAG	2								
PRACTICE -PR					THEORY									BASIC				INTERMEDIATE				ADVANCED			
	TRAINING AND CRIT	2	15	THEORY	PROFESSIONAL ETHICS AND HUMAN VALUES																	EPM	2	PE	2
		0	16	THEORY	PROFESSIONAL TRAINING															PT	16				
		903	18	RESEARCH SEMINAR	THESIS INQUIRY									SEMINAR I	2			SEMINAR II	2	DOC	4	PRE THESIS	2	SEMINAR III	2
SUPPORTING - AR					ELECTIVES/PROJECT	BASIC				GENERIC				INTERMEDIATE				PROFESSIONAL							
	SEM ELECTIVE	10	19	STUDIO	PROFESSIONAL ELECTIVE	POOL I ODD	2	POOL I EVEN	2	POOL II	2	POOL II	2	POOL II	2	POOL II	2							POOL IV	2
					CORE ELECTIVE													POOL III generic	3	POOL III generic	4	POOL III generic	3		
		10	20	PROJECT	SEMESTER BREAK PROJECT/INTERNSHIP	STUDY	2	INTERNSHIP	2	STUDY	2	INTERNSHIP	2	STUDY	2	INTERNSHIP	2							POOL IV	2
					TOTAL CREDITS (S+T+L/P)	3+6+3	28	3+6+3	28	3+6+3	28	3+6+3	28	3+3+3	28	3+6+3	28	3+3+3	28	1+1+1	24	2+3+1	24	1+3+2	24