

Bombay Suburban Art and Craft Education Society's

L. S. Raheja School of Architecture

Recommendations and Action taken report 2022-23

At L. S. Raheja School of Architecture, **outcome based learning** is kept at the forefront while exploring and implementing the B.Arch curriculum in terms of:

1. **Design of Assignments**
2. **Lecture Delivery**
3. **Expected Outcomes**
4. **Topics for Electives**
5. **Design of Allied Design and other value added subjects and assessment patterns.**

The same approach is retained in the design of other co-curricular activities like:

1. **Semlnars and Workshops** : Workshop as an Applied Teaching Method helps Students to **Think - Learn - Work**. As a **Tool** it helps students to **Create Ideas** and **Make Decisions** in a disciplined way. As an Academic activity it **Triggers The Imagination and Creativly** in an environment away from Restrictions and Formal Processes.
2. **Study Tours** : The Study Tours are conducted at **National and International level** to allow the students pounder selflessly independent of their self interest and to absorb the **Cultures and Experiences** of various **Sites - Places - Ctities - States** and then to consider and apply it in their work.
3. **Interactions with professionals from the field :**
4. **Field and Site Visits**

The **Accrediting standards and Student Performance Criteria** is based on four core values of **Design, Leadership, Stewardship, and Critical Thinking**.

The **Student Performance Criteria** are organized into various **REALMS**:

REALM A: CRITICAL THINKING AND REPRESENTATION

Graduates from The L. S. Raheja School of Architecture must be able to **build abstract relationships** and understand the impact of ideas based on the study and analysis of multiple theoretical, social, economic, cultural, and environmental contexts. They must also be able to use a diverse range of skills to think about and convey architectural ideas, including writing, investigating, speaking, drawing, and modeling.

REALM B: BUILDING PRACTICES, TECHNICAL SKILLS, AND KNOWLEDGE

Graduates from The L. S. Raheja School of Architecture must be able to comprehend and apply the technical aspects of design, systems, and materials to architectural solutions in a sustainable manner.

REALM C: INTEGRATED ARCHITECTURAL SOLUTIONS

Graduates from The L. S. Raheja School of Architecture must be able to demonstrate and synthesize a wide range of variables like research, problem identification, setting evaluative



criteria, analyzing solutions, predicting the effectiveness of implementation and taking informed decisions into an integrated, cohesive and holistic design solution.

REALM D: PROFESSIONAL PRACTICE

Graduates from the L.S.Raheja School of Architecture must understand business principles for the practice of architecture, including management, advocacy, and the need to act legally, ethically, and critically for the good of the client, society, and the public.

Table 1: Matrix of cognitive processes and knowledge dimensions used for teaching practices for various subjects (Theory & Studio)

Level	Transformation	Action	Order	Context	Realm
Facts	Observation	Awareness	Isolated	Explicit	Experience
Data	Organisation	Curiosity	Structured	Organised	Concepts
Information	Relation	Appreciation	Scaled	Analytical	
Knowledge	Application	Illumination	Connected	Interpretive	Design
Understanding	Integration	Expertise	Networked	Implicit	
Wisdom	Theory	Virtuosity	Dynamic	Tacit/zen	

Table 2: Matrix of Thirty Six Coordinates in architectural education used for teaching practices for various subjects (Theory & Studio)

	Remember	Understand	Apply	Analyze	Evaluate	Create
Facts	<p style="text-align: center;">Increasing Complexity of Cognitive Aspect</p> <p style="text-align: center;">→</p> <p style="text-align: center;">↓</p> <p style="text-align: center;">Increasing Complexity of Knowledge Aspect</p> <p style="text-align: right;">Multiple Coordinates of learning can be targeted across both aspects</p>					
Data						
Information						
Knowledge						
Understanding						
Wisdom						

Suggestions, recommendations and action taken for improvement of curriculum, electives and value added subjects

S.No	Suggestions by various stakeholders	Recommendations by the Institute	Action taken
Mission –Reason for existence of the Program			
1.	As suggested by the Teachers the subject Theory of Design can be	The Theory of Architecture / history lecture or seminar provides an excellent forum for the discussion and	Integrating both the subjects to study the relationship between Theory of Design and Architecture



	<p>integrated as a part of Architecture Design Studio.</p>	<p>development of habits of criticism and enquiry and influencing design synthesis. The institute should create multiple learning resources for the students and teachers not only for reference but to create a knowledge body in the form of literature / document and archive the same.</p>	<p>Design studio is as per the ideology of the school and a practice to encourage reading /writing on architecture as a part of design project brief.</p> <p>The work produced during lecture series / workshop is archlved in digital format and is available for reference on the library portal as well documented in form of text and graphics as hard copy.</p>
<p>2.</p>	<p>As suggested by the teachers, considering the theory and technical subjects along with the environmental impact should be sequential and relevant to architecture Design Brief. (Project Brief)</p>	<p>As per the teaching scheme of the curriculum, 75% of total periods of study should fulfill the goals of the study that is the application and integration of various courses into an architecture design project.</p>	<p>The study focuses on the course objectives and method of teaching Cultural Context, Construction Technology & Environment and in particular to their integration into design studio in Part A as well as Part B of the academic study of B.arch programme.</p> <p>As per the curriculum, the institute implements the coordination between THEORY AND TECHNICAL SUBJECTS / ARCHITECTURE DESIGN AND ALLIED DESIGN subject as teaching learning process.</p> <p>First Year : Architecture Design and Basic Design - the outcome and objective of the assignment based on subject learning of theory of elements and principle of design, art and culture, concept and idea, anthropometric data and ergonomics culmination of the same in form of drawing detailing and representation techniques, mapping and story board writing /model making and sketching.</p>

		<p>Second Year: Architecture Design and Interior Design - the outcome and objective of the assignment based on subject learning is to understand the space relationship and articulation of space/aesthetics/ materials and their application process/market survey. Culmination of the same in the form of drawing detailing and representation techniques, mood board and material board/sketching as thought / model making.</p> <p>Third Year : Architecture Design and Landscape Design - the outcome and objective of the assignment based on subject learning of Theory of elements and principle of landscape design the space relationship and environmental impact/aesthetics/ site planning and culmination of the same in form of drawing</p> <p>Fourth year: Students are taught to handle mass housing in Architectural design projects and mapping of urban areas in allied design subjects. Courses like Architectural representation and detailing where the outcomes focus on the application of development rules and regulations is seen in the design proposal of the students that is further integrated with courses like specifications (report writing), advanced building construction (proposal of structural systems). The students are able to translate their integrated understanding of the design, technical subjects,</p>
--	--	---



			<p>graphical representation, and knowledge of professional practice into a professional setting during their internship. It helps in increased skills in performing tasks in a professional office, ability to communicate in a professional setting and understanding of the social and ethical role of the architect.</p> <p>Fifth year: Research topics for course of design dissertation are finalized by the students. The students learn to propose viable holistic solutions after thorough research and application of theory, technical and design subjects. This learning outcome prepares them to select their field of expertise for the Masters programme.</p>
	<p>Values - fundamental and shared basis of reasoning, critique and discourse</p>		
2.	<p>As suggested by the Teachers the Teaching practices in the Studio Classes and Theory classes should be based on the subject wise modules to engage the student in Practice based Learning as well theory subjects learning to gain the knowledge based</p>	<p>As a professional course in its 3rd and 4th year studies in Architecture aims to consider how current practice can be investigated to improve student engagement and learning outcomes in this area and ultimately give depth and credibility to our students' work.</p>	<p>The design studio lies at the heart of architectural education where learning through a well-documented pedagogical process of 'LEARNING BY DOING' forms the primary student experience.</p> <p>The Graduates of our institute are able to comprehend the technical aspects of design, systems, and materials and are able to apply that comprehension to architectural solutions. In addition, the impact of such decisions on the environment is well considered in</p>



	on principles and ideologies .		their assignment and architecture design project.
3.	As suggested by the Teachers in the new age of technology and easily available knowledge, what is the role of a teacher and how he/she demonstrates to the student how to design is a critical process.	Design is a critical process therefore teaching learning practices should be based on the perceptions of the students to express their interest in learning new theories in architecture and having lectures about how architects develop their ideas.	The nature of 'design' which is a process that involves phases of analytical understanding, critical thinking, and creative decision making ,architecture students should be able to apply what they learn in studio for the distinct phases of analysis (analytical understanding) and synthesis (creative decision making) of their design work.
4.	Elective in advanced software knowledge is the most preferred elective by students and alumni alike. After Advanced Software, the second most preferred electives by students is graphical representation and presentation techniques , followed by hands-on or application based electives on building material exploration and construction techniques . Students also suggested electives	All the realms of student performance criteria are kept in mind while designing the curricular assignments, electives and value added subjects for various semesters. The topics for electives should be explored and implemented keeping in mind their relevance, connection and application with various courses of a particular semester . Electives should be designed to help students develop a diverse range of skills that make them profession ready and teach practical know-how of various parameters associated with this field. 11 electives/ certificate courses were conducted during the academic year 2022-23 that covered	Basic skills of graphical representation were taught through electives of Architectural Softwares- AutoCAD and SketchUP conducted for F.Y.B.Arch and S.Y.B.Arch students. Students were taught skills of observation and visualization through an elective on Sketching and rendering that taught them to disassemble everyday objects and graphically represent them through rendered exploded isometric views. Revit, Rhino and Grasshopper were introduced through electives through 2nd year and 3rd year. Students were introduced to Parametric architecture, taught to explore and create new forms and improve their drafting and graphical skills through these softwares. Architectural and urban mapping using GIS basics was introduced to T.Y.B.arch students.



	<p>on research and analytics.</p>	<p>subjects like Architectural Sketching & Rendering, AutoCAD basics, Architectural Softwares- AutoCAD and SketchUP, Revit basics, Revit & Rino, GIS basics, Effective use of Glass in the Built Environment, Advanced Landscape, Introduction to Construction Management , Earthquake Resistant Architecture and Passive design, and Heritage Conservation.</p>	<p>Students were taught to make informed decisions about the type of glazing assembly that can be used after research on glazing types (material and technology exploration) and understanding the energy performance of a building by using LBNL's Window software in an application based elective like Effective use of Glass in the Built Environment.</p> <p>Management hybrid methodologies like Pert (Program evaluation and review technique) and CPM (Critical Path Method), Cost, Finance, Material, Risk & Design control were taught to Fifth year students under the elective of Introduction to Construction Management.</p>
<p>5.</p>	<p>Alumni felt that electives that teach entrepreneurship, finance management and understanding real estate should be conducted.</p> <p>Students also requested electives on time management and finance management.</p> <p>Teachers suggested that courses related to policy making, administration, management and</p>	<p>Interactions with various professionals from the field of architecture should be promoted in multiple ways on a regular basis to make them aware of the actual handling of professional practice in addition to theoretical knowledge.</p>	<p>Practicing architects from core and visiting faculty are a part of the design studio team that helps the students get an insight into the process of practical know-how on a regular basis. In addition to this, The "Insights Lecture Series" which was first introduced in 2014, conducted 16 lectures during the academic year 2022-23. Through this series, students got to learn and interact with practicing architects from the field, know about their practices, functioning of offices, design projects, site handling etc.</p> <p>Panel discussions with practicing architects were conducted during the college festival "Aakar" for understanding the business of Architecture and Interior Design.</p>

	finances in practice could be added.		Students were introduced to the basics of a business set up through a Masterclass on "7 Pillars of business set-up" . The students were taught about finances, legal framework, team structure and management, marketing, branding and sales, customer management and business viability.
		Students can be introduced to self- learning platforms like SWAYAM for exposure to educational opportunities during academic studies.	The Institution will encourage students for such additional learning processes to gain additional credits and knowledge.
6.	Alumni suggested topics like - Introduction to Multi-disciplinary fields, Art and art forms, alternative careers, Architectural photography, guidance on post graduation fields, that can be made a part of value added subjects. Other suggestions made by students include subjects like wellness and mental health, and understanding human behavior.	Exposure to multidisciplinary forms of art is important to students of architecture as it helps develop a well rounded approach that includes application of diverse courses. Seminars on career guidance on post graduation fields can be conducted for students to expose them to the possibilities the field of architecture has to offer. Architectural photography can be an elective for students across various classes which can be an important value added course. Everyone should be made aware of Physical, mental, social, emotional and spiritual well-being that determines complete health. Awareness and activities that help balance these parameters should be made	Multiple workshops giving an insight and hands-on experience in various forms of art were conducted during the college festival "Aakar". Students who approach faculty for career guidance on post graduation fields one-on-one are mentored by the faculty. Architectural photography can be included as an elective in the next academic year. Students enjoyed physical health activities like kickboxing, taekwondo, dance etc. through workshops, Spiritual and mental health through workshops on "Pranic healing", "Mental health". Students were made aware of mental and social well being

Handwritten signature



		a part of the curriculum in as many ways as possible.	through masterclasses like "Our greatest pain caused by the lies we tell" and "Madness".
7.	Alumni suggested longer duration of internship	Post graduation, students are expected to engage with architectural practices for further experience. Database of various architectural firms with the Institute is a resource.	90 working days as prescribed in the B.arch curriculum is sufficient during the semester of study.
8.	Teachers suggested that Viva Voce exams should be introduced for technical subjects like Building construction and services.	Viva Voce exams for technical subjects can be conducted at Institute level .	Institute should discuss with B.O.S. (University of Mumbai) regarding the reintroduction of the end of semester Viva Voce examination for all technical subjects.
9.	Teachers suggested that credit attribution for Environmental studies be reviewed as it is only 2 credits against College projects which have 6 credits.	Sustainable development is a key aspect that cannot be ignored by future architects in their practices. Hence the Institute recommends the revision of the credit system for value added subjects like EVS.	Institute should discuss with B.O.S. (University of Mumbai) regarding the revision of the credit system for various courses.

S.D.



