



**THIAGARAJAR COLLEGE OF ENGINEERING,
MADURAI – 625015**

(A Govt. Aided Autonomous Institution Affiliated to Anna University)

CURRICULUM AND SYLLABI – 2026

(B. Arch – R 2026)

B.Arch. Programme (Full-Time)

**Applicable to the students admitted in B.Arch. Programme,
offered in Thiagarajar School of Environmental Design and Architecture,
Thiagarajar College of Engineering,
from the Academic year 2026 – 2027 onwards**

THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI- 625150
 (A Govt. Aided, Autonomous Institution affiliated to Anna University)
THIAGARAJAR SCHOOL OF ENVIRONMENTAL DESIGN AND ARCHITECTURE
 (For the candidates admitted from 2026 - 2027)

Programme Educational Objectives (PEO's)

PEO1: Graduates shall apply architectural knowledge, critical thinking, and technological competence to develop innovative, functional, and sustainable design solutions for complex built environment challenges.

PEO2: Graduates shall pursue ethical and socially responsible professional practice by addressing issues of equity, inclusivity, environmental stewardship, and community well-being.

PEO3: Graduates shall employ research, analytical skills, and evidence-based approaches to investigate and solve architectural, environmental, and societal problems relevant to professional practice.

PEO4: Graduates shall function effectively as leaders and collaborative members of multidisciplinary teams, demonstrating professional communication, project management, and organizational skills.

PEO5: Graduates shall engage in lifelong learning, professional development, entrepreneurship, and innovation to adapt to emerging technologies and evolving societal needs.

PEO- Mission Mapping

PEO	M1	M2	M3	M4	M5
PEO1	S	M	M	M	M
PEO2	M	S	S	M	L
PEO3	S	M	S	S	M
PEO4	M	S	L	M	S
PEO5	S	M	M	S	M

L - Low; M – Medium; S – Strong

THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI -- 625 015
Programme Outcomes -- Competencies -- Performance Indicators

PO1 – Knowledge and Reflective Thinking Develop innovative architectural solutions to complex problems by integrating social, environmental, and technical considerations.	
Competency	Performance Indicators [TPS Level -- Verb]
1.1 Demonstrate competence in Architectural Design, Visual Composition and Fine Arts	1.1.1 Design aesthetically informed built environment proposals by integrating principles of visual composition and architectural design. [TPS 6 – Create]

1.2 Demonstrate competence in Human Behaviour, Diversity and Social Relationships in Built Environments	1.2.1 Design inclusive architectural solutions by integrating knowledge of human behaviour, social diversity, and cultural relationships. [TPS 6 – Create]
1.3 Demonstrate competence in Site Analysis, Program Development and Contextual Response	1.3.1 Develop contextually responsive architectural solutions by synthesizing site conditions and programming requirements. [TPS 6 – Create]
1.4 Demonstrate competence in Urban Design, Conservation and Environmental Problem Solving	1.4.1 Develop sustainable urban design and conservation strategies to address complex environmental and spatial challenges. [TPS 6 – Create]
1.5 Demonstrate competence in Cultural, Contextual and Heritage Awareness	1.5.1 Design architecturally sensitive and historically informed solutions by integrating cultural heritage and local contextual considerations. [TPS 6 – Create]

PO2 – Critical Thinking

Apply knowledge of architecture, building science, humanities, and environmental systems to design solutions.

Competency	Performance Indicators [TPS Level -- Verb]
2.1 Demonstrate competence in Building Science, Structural and Environmental Systems	2.1.1 Apply structural and environmental systems to identify and formulate solutions to complex technical challenges in buildings. [TPS 3 – Apply]
2.2 Demonstrate competence in Building Materials, Construction Techniques and Envelope Systems	2.2.1 Apply appropriate building materials and construction methods to resolve functional and performance-based problems. [TPS 3 – Apply]
2.3 Demonstrate competence in Critical Inquiry and Analytical Thinking	2.3.1 Analyse complex architectural design problems using analytical and critical inquiry skills. [TPS 4 – Analyse]

PO3 – Design / Development of Solutions

Design creative, functional, sustainable, and technically sound architectural solutions.

Competency	Performance Indicators [TPS Level -- Verb]
3.1 Demonstrate competence in Creative and Functional Architectural Design Solutions	3.1.1 Design original, functional, and aesthetically coherent architectural solutions that address project requirements. [TPS 6 – Create]
3.2 Demonstrate competence in Accessibility, Life Safety and User-Centered Design	3.2.1 Evaluate architectural proposals based on principles of universal design and life safety

	to justify inclusive and code-compliant design solutions. [TPS 5 – Evaluate]
3.3 Demonstrate competence in Integration of Structural, Environmental and Service Systems	3.3.1 Apply structural, environmental, and mechanical service systems in developing holistic and technically sound building designs. [TPS 3 – Apply]
3.4 Demonstrate competence in Comprehensive and Sustainable Building Design	3.4.1 Design comprehensive building solutions that incorporate sustainable strategies, performance targets, and long-term resilience. [TPS 6 – Create]

PO4 – Research and Investigation

Analyse data, design precedents, and evaluation findings to develop research-based architectural design solutions.

Competency	Performance Indicators [TPS Level -- Verb]
4.1 Demonstrate competence in Research-Based Programming and Design Investigation	4.1.1 Develop architectural design briefs by synthesizing findings from systematic investigations and programming research. [TPS 6 – Create]
4.2 Demonstrate competence in Documentation, Data Collection and Analysis, & Design Evaluation	4.2.1 Collect, document, and evaluate design data to validate architectural decisions throughout the design process. [TPS 4 – Analyse]
4.3 Demonstrate competence in Analysing Architectural and Urban Precedents	4.3.1 Analyse architectural and urban precedents to extract relevant design strategies applicable to contemporary problems. [TPS 4 – Analyse]
4.4 Demonstrate competence in Contextual and Evidence-Based Design Studies	4.4.1 Develop informed and justified design outcomes by synthesizing evidence-based methodologies and contextual analyses. [TPS 6 – Create]

PO5 – Technical Skills

Use digital tools and technologies in architectural design and communication.

Competency	Performance Indicators [TPS Level -- Verb]
5.1 Demonstrate competence in Technical Documentation and representation	5.1.1 Produce accurate technical drawings and construction documentation to professional standards. [TPS 3 – Apply]
5.2 Demonstrate competence in Techniques and Technological Applications	5.2.1 Apply knowledge of current technologies to produce buildable and technically detailed architectural designs. [TPS 3 – Apply]

5.3 Demonstrate competence in Application of Contemporary Tools in Design Processes	5.3.1 Utilise contemporary digital design tools and software to enhance design quality, productivity, and communication. [TPS 3 – Apply]
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PO6 – Sustainability and Environment Design buildings addressing climate change, zero-carbon goals, and biodiversity.	
Competency	Performance Indicators [TPS Level -- Verb]
6.1 Demonstrate competence in Sustainable and Climate Responsive Architectural Design	6.1.1 Design climate-responsive buildings that incorporate passive strategies and achieve zero-carbon or low-energy performance targets. [TPS 6 – Create]
6.2 Demonstrate competence in Environmental Conservation and Ecological Responsibility	6.2.1 Apply ecological principles and environmental conservation strategies to minimise the impact of buildings on natural systems. [TPS 3 – Apply]
6.3 Demonstrate competence in Integrated Building Systems and Resource Efficiency	6.3.1 Design integrated building systems that optimise energy, water, and material resource efficiency. [TPS 6 – Create]
6.4 Demonstrate competence in Urban Conservation, Heritage and Environmental Planning	6.4.1 Apply urban conservation and heritage planning principles to protect and sustainably develop the built and natural environment. [TPS 3 – Apply]

PO7 – Society, Ethics and Inclusion Apply principles of ethics, equity, inclusivity, and social responsibility.	
Competency	Performance Indicators [TPS Level -- Verb]
7.1 Demonstrate competence in Social Responsibility and Ethical Architectural Practice	7.1.1 Apply ethical frameworks and social responsibility principles to architectural practice and design decision-making. [TPS 3 – Apply]
7.2 Demonstrate competence in Inclusivity, Accessibility, equity and Human Diversity	7.2.1 Design inclusive environments that address the needs of diverse users, including persons with disabilities and marginalized communities. [TPS 6 – Create]
7.3 Demonstrate competence in Cultural Heritage, Community Values and Contextual Sensitivity	7.3.1 Apply awareness of cultural heritage and community values to design contextually sensitive and socially responsible architecture. [TPS 3 – Apply]

7.4 Demonstrate competence in Legal Responsibilities, Professional Ethics and Client Awareness	7.4.1 Apply professional codes of ethics, legal obligations, and client responsibilities in architectural practice. [TPS 3 – Apply]
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PO8 – Teamwork and Leadership Function effectively in multidisciplinary teams and leadership roles.	
Competency	Performance Indicators [TPS Level -- Verb]
8.1 Demonstrate competence in Industry–Institute Interaction and Collaborative Practice	8.1.1 Engage in collaborative practice with industry partners and institutional stakeholders to develop professionally relevant skills. [TPS 3 – Apply]
8.2 Demonstrate competence in Leadership, Teamwork and Professional Coordination	8.2.1 Lead and coordinate multidisciplinary teams effectively to deliver architectural projects within defined objectives and constraints. [TPS 3 – Apply]
8.3 Demonstrate competence in Self-awareness, Emotional Intelligence and Personal Growth	8.3.1 Apply self-awareness and emotional intelligence to contribute positively to team dynamics and professional development. [TPS 3 – Apply]

PO9 – Communication Communicate architectural ideas effectively.	
Competency	Performance Indicators [TPS Level -- Verb]
9.2 Demonstrate competence in Verbal, and Written Skills	9.1.1 Communicate architectural proposals through structured verbal presentations, and written reports, to diverse audiences. [TPS 3 – Apply]
9.2 Demonstrate competence in Visual Presentation Skills	9.2.1 Communicate architectural proposals through visual media to diverse audiences. [TPS 3 – Apply]

PO10 – Professional Practice, Finance, Management and Entrepreneurship Understand practice, contracts, project management, and construction processes.	
Competency	Performance Indicators [TPS Level -- Verb]
10.1 Demonstrate competence in Architectural Practice, Entrepreneurship	10.1.1 Apply knowledge of professional procedures, contracts, and practice management to operate effectively within the architectural profession. [TPS 3 – Apply]
10.2 Demonstrate competence in Project Financing, Cost Control and Construction Management	10.2.1 Apply cost planning and construction management principles to control project budgets and delivery timelines. [TPS 3 – Apply]

10.3 Demonstrate competence in Adaptability to Emerging Trends and Global Practices	10.3.1 Apply emerging global trends, technologies, and professional practices in architectural design and practice. [TPS 3 – Apply]
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PO11 – Lifelong Learning and Career Development Engage in continuous learning and self-development.	
Competency	Performance Indicators [TPS Level -- Verb]
11.1 Demonstrate competence in Professional Training and Career Development	11.1.1 Engage in structured internship and professional training experiences to develop industry-relevant competencies and career readiness. [TPS 3 – Apply]
11.2 Demonstrate competence in Lifelong Learning and Knowledge Enhancement	11.2.1 Demonstrate continuous self-directed learning and knowledge enhancement to support professional architectural practice [TPS 3 – Apply]
11.3 Demonstrate competence in Self-awareness, Leadership and Holistic Development	11.3.1 Demonstrate self-awareness by applying personal strengths, values, and professional goals to support holistic growth and leadership development. TPS 3 – Apply]

PEO-PO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
PEO1	S	S	S	M	S	S	L	L	M	L	M
PEO2	M	L	M	L	L	M	S	L	L	M	M
PEO3	S	S	M	S	L	M	L	L	L	M	M
PEO4	L	L	L	L	M	L	M	S	S	S	M
PEO5	M	M	L	M	M	M	M	M	S	S	S

Programme Specific Outcomes (PSO):

After the successful completion of the B.Arch degree programme:

PSO1: Graduates shall demonstrate competence in architectural design by integrating social, environmental, technological, and sustainability considerations to create inclusive and resilient built environments.

PSO2: Graduates shall employ contemporary design tools, digital technologies, building systems, and interdisciplinary knowledge in architectural practice and allied fields of design and development.

PSO3: Graduates shall engage in research, critical inquiry, ethical professional practice, and lifelong learning to contribute effectively to the advancement of architecture and society.

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SCHEDULING OF COURSES (For the candidates admitted from 2026-2027 onwards)

SEMESTER	1	3	4	5	7	8	Total Hours/ Credits
Sem 1	26ARCA0 - Fundamentals of Architectural Design	26ARCB0 - Fundamentals of Building Systems	26ARCC0 - Computational methods for Patterns and Proportions	26ARCD0 - Principles of Design	26ARCE0 - Graphical Representation	26ARCF0 - Visual Arts and Model Making	30
	(PCC - DT)	(PCC - TE)	(PCC - KN)	(PCC - KN)	(PCC - SD)	(PCC - SD)	
	14	4	2	2	4	4	

Program Core Courses = ; Program Elective Courses = Educational Tour - 1 credit; (Audit Courses will be offered from 3rd semester); TOTAL CREDITS = 261 CREDITS MINIMUM



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COURSES OF STUDY

Degree: B.Arch

Annexure – I

FIRST SEMESTER

S.No	Course Code	Name of the Course	Number of Hours/ Week			Credit	Semester/ Prerequisite
			L	T	S		
1.	26ARCA0	Fundamentals of Architectural Design	-	-	14	14	I Sem & above
2.	26ARCB0	Fundamentals of Building Systems	2	-	2	4	I Sem & above
3.	26ARCC0	Computational methods for Patterns and Proportions	2	-	-	2	I Sem & above
4.	26ARCD0	Architectural Design Principles	2	-	-	2	I Sem & above
5.	26ARCE0	Graphical Representation	1	-	3	4	I Sem & above
6.	26ARCF0	Visual Arts and Model making	-	1	3	4	I Sem & above

SCHEME OF EXAMINATIONS

S.No	Course Code	Name of the Course	Duration of Terminal exam in hours	Marks			Min. marks for Pass	
				Continuous Assessment	Terminal exam	Max. marks	Terminal exam	Total
1.	26ARCA0	Fundamentals of Architectural Design	-	60	40	100	45	50
2.	26ARCB0	Fundamentals of Building Systems	3	50	50	100	45	50
3.	26ARCC0	Computational methods for Patterns and Proportions	3	40	60	100	45	50
4.	26ARCD0	Architectural Design Principles	3	40	60	100	45	50
5.	26ARCE0	Graphical Representation	-	50	50	100	45	50
6.	26ARCF0	Visual Arts and Model making	-	50	50	100	45	50

- For Theory courses Terminal Examination will be conducted for maximum marks of 100 and subsequently be reduced to 60 marks for the award of terminal examination marks.
- For Theory cum Studio Courses Terminal Examination will be conducted as written exam or viva-voce for maximum marks of 100 and subsequently be reduced to 50 marks for the award of terminal examination marks.
- #For Studio Courses Terminal Examination in the form of Viva-voce will be conducted

during the end semester for a maximum of 100 marks and subsequently be reduced to 40 marks for the award of terminal examination marks.

- ** Terminal Examination will be conducted for maximum marks of 100 and subsequently be reduced as mentioned above for the award of terminal examination mark

