



ADHIYAMAAN COLLEGE OF ENGINEERING

[An Autonomous Institution Affiliated to Anna University, Chennai]
[Accredited by NAAC]
Dr. M. G. R Nagar, HOSUR, KRISHNAGIRI (DT) – 635 130, TAMILNADU, INDIA
REGULATIONS 2022
CHOICE BASED CREDIT SYSTEM
B. ARCH – ARCHITECTURE



VISION

To foster curiosity and enhance cognitive learning skills in order to create culturally and environmentally responsible professionals who could serve society.

MISSION

To provide multi-disciplinary innovative knowledge towards technology, sustainability, and the creation of a high-quality built environment, through various approaches and creativity in design.

PROGRAM EDUCATIONAL OUTCOMES (PEOs)

1. To remain at the forefront of technology and keep themselves abreast with the latest trends and use it to make informed decisions through planning, design and implementation
2. Innovative knowledge on new information and concepts through scientific analysis.
3. Emphasize and focus on the requirements and demands of society, as well as its integration into the social, economic, cultural, and environmental aspects of nation development.
4. Impart understanding of the fundamental theories, basic concepts, and direct connections between people and their environments as well as the multifaceted aspects of architecture.
5. Challenging students to develop their abilities in problem solving, creative thinking, and informed decision-making as a focus of their professional education.

PROGRAM OUTCOMES (POs)

PO#	Graduate Attribute	Programme Outcome
1.	Analysis and Design Skill	Recognize how architectural theory and design methodology contributes to the resolution of architectural design challenges in a global society through experiences with the current situation.
2.	Architectural Knowledge	Apply the principles of design, building sciences and technology, humanities, and environmental sciences to design, planning, and construction.
3.	Ability to Think, Express, and Communicate	Understand and effectively communicate concerns relating to architecture, community, and society at large using written documentation, visual representations, and oral presentations.
4.	Critical thinking	Demonstrate critical thinking through a self-reflective process of conceptualization and design thinking that is open to consideration of alternative perspectives by analyzing, evaluating, and synthesizing ideas and information.

5.	Life Long Learning and Research	Identifying and resolving important aspects of the context of the built environment in depth by comprehensive investigation and experimental studies through research.
6.	Design representation	Implement complex two and three-dimensional graphic representation techniques using a wide variety of manual and digital media, to reflect on and explain the architectural design process.
7.	Building Analysis and Optimisation of Design	Evaluate construction costs and environmental impact, then optimise the design for several criteria.
8.	Building Systems Knowledge	Incorporate professional architectural knowledge and technical skills during schematic design to synthesize a wide range of variables into an integrated design solution by employing appropriate building materials, building systems, and construction practices.
9.	Integrated Architecture Solutions	Analyse and design both fundamental and advanced building services and technology optimally to improve quality of life in the indoor environment.
10.	History and Cultural Diversity	Understanding of the parallel and divergent histories of architecture and the cultural norms of a variety of indigenous, vernacular, local, and regional settings in terms of their political, economic, social and technological factors.
11.	Professional Ethics	Understanding of the ethical issues involved in the exercise of professional judgment in architectural design and practice, also understanding the role of the COA and the COA Code of Ethics in defining professional conduct.
12.	Environment & Sustainability	Recognize the significance of architectural responses in societal and ecological contexts to illustrate the necessity of sustainable development of the future.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO 1 To provide a high-quality education that equips students with the skills necessary to pursue careers as professionals in architecture by disseminating good knowledge in design theories and applications, building technologies, social-cultural and environmental aspects.

PSO 2 To provide information in fields related to the built environment that are vital to professional ethics and responsibility in order to prepare students to perform in interdisciplinary teams in the construction industry.

PSO 3 To impart knowledge on modern software tools & other appropriate and alternative innovative techniques in a wide range of documentation, presentation, analysis and applications for design development of buildings.



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CHOICE BASED CREDIT SYSTEM

B. ARCH – ARCHITECTURE



Programme Name: B. ARCH (Architecture)

Sl. No	I Semester		Hours/Week			
	Course Code	Course Title	L	T	P	C
1.	122ART01	Mathematics	2	1	0	3
2.	122ART02	Fundamentals of Architecture	3	0	0	3
3.	122ART03	Professional English	2	1	0	3
4.	122ART04	Architectural Drawing I	1	2	2	4
5.	122ART05	Building Materials and Construction I	1	2	2	4
6.	122ARP06	Basic Art Studio	0	2	2	3
7.	122ARP07	Fundamental Design Studio	0	1	10	6
8.	122HST07	Heritage of Tamil	1	0	0	1

Sl. No	II Semester		Hours/Week			
	Course Code	Course Title	L	T	P	C
1.	222ART01	Mechanics of Structures	2	1	0	3
2.	222ART02	History of Architecture and Culture - I	3	0	0	3
3.	222ART03	Environmental Science for Architecture	2	1	0	3
4.	222ART04	Architectural Drawing II	1	2	2	4
5.	222ART05	Building Materials and Construction II	1	2	2	4
6.	222ARP06	Rendering Techniques and Model Making	0	2	2	3
7.	222ARP07	Architectural Design Studio I	0	2	12	6
8.	222HST07	Tamils and Technology	1	0	0	1

Sl. No	III Semester		Hours/Week			
	Course Code	Course Title	L	T	P	C
1.	322ART01	Structural Analysis and Design I	2	1	0	3
2.	322ART02	History of Architecture and Culture - II	3	0	0	3
3.	322ART03	Climate and Built Environment	2	1	0	3
4.	322ART04	Site Surveying and Analysis	2	0	2	3

5.	322ART05	Building Materials and Construction III	1	2	2	4
6.	322ARP05	Digital Drawing, Visualization and Representation	1	2	2	4
7.	322ARP06	Architectural Design Studio II	0	0	12	6

Sl. No	IV Semester		Hours/Week			
	Course Code	Course Title	L	T	P	C
1.	422ART01	Structural Analysis and Design II	2	1	0	3
2.	422ART02	History of Architecture and Culture - III	3	0	0	3
3.	422ART03	Building Materials and Construction IV	1	2	2	4
4.	422ART04	Building Services I (Plumbing)	1	2	2	4
5.	422ARP05	Rural Habitat Design Studio	1	2	12	9
6.		Professional Elective I	3	0	0	3

Sl. No	V Semester		Hours/Week			
	Course Code	Course Title	L	T	P	C
1.	522ART01	Structural Analysis and Design III	2	1	0	3
2.	522ART02	History of Modern Architecture	3	0	0	3
3.	522ART03	Building Materials and Construction V	1	2	2	4
4.	522ART04	Building Services II (Electrical & Acoustic)	1	2	2	4
5.	522ARP05	Architectural Design Studio III	1	2	12	9
6.		Professional Elective II	3	0	0	3

Sl. No	VI Semester		Hours/Week			
	Course Code	Course Title	L	T	P	C
1.	622ART01	Specification Estimation & Budgeting	2	1	0	3
2.	622ART02	Interior Design Principles	1	1	2	3
3.	622ART03	Building Materials and Construction VI	1	2	2	4
4.	622ART04	Building Services – III (Mechanical & HVAC)	1	2	1	4
5.	622ARP05	Architectural Design Studio IV	1	1	14	9
6.		Professional Elective III	3	0	0	3

Sl. No	VII Semester		Hours/Week			
	Course Code	Course Title	L	T	P	C
1.	722ART01	Landscape Architecture & Design	3	0	0	3
2.	722ART02	Urban Design	3	0	0	3
3.	722ART03	Contemporary Housing	3	0	0	3
4.	722ARP04	Working Drawing and Detailing	0	2	2	3
5.	722ARP05	Architectural Design Studio V	0	1	18	9

6.		Professional Elective IV	3	0	0	3
7.		Open Elective	3	0	0	2

Sl. No	VIII Semester		Hours/Week			
	Course Code	Course Title	L	T	P	C
1.	822ART01	Professional Practice and Ethics	3	0	0	3
2.	822ART02	Construction & Project Management	3	0	0	3
3.	822ARP03	Urban Design Studio	1	1	14	9
4.	822ARP04	Dissertation	1	1	5	5
5.		Professional Elective V	3	0	0	3
6.		Open Elective	3	0	0	3

Sl. No	IX Semester		Hours/Week			
	Course Code	Course Title	L	T	P	C
1.	922ARP01	Practical Training	-	-	-	24

Sl. No	X Semester		Hours/Week			
	Course Code	Course Title	L	T	P	C
1.	1022ARP01	Thesis	-	-	-	23
2.		Professional Elective VI	3	0	0	3

Semester wise credits allocation

Semester	I	II	III	IV	V	VI	VII	VII	IX	X	TOTAL
Credits	27	27	26	26	26	26	26	26	24	26	260

PROFESSIONAL ELECTIVE COURSES: VERTICALS

VERTICAL 1: Theories in Architectural Design

Sl. No.	Course Code	Course Title	L	T	P	C
1.	X22ARE01	Design Process and Thinking	3	0	0	3
2.	X22ARE02	Structure and Architecture	3	0	0	3
3.	X22ARE03	Cultural Expression in Architecture	3	0	0	3
4.	X22ARE04	Behavioural Architecture	3	0	0	3

5.	X22ARE05	Architecture of Future	3	0	0	3
6.	X22ARE06	Contemporary Process in Architecture	3	0	0	3
7.	X22ARE07	Design Communication	3	0	0	3
8.	X22ARE08	Entrepreneurship Skill for Architects	3	0	0	3
9.	X22ARE09	Professional Service Firm: Management and Excellence	3	0	0	3

VERTICAL 2: Energy and Environment

Sl. No.	Course Code	Course Title	L	T	P	C
1.	X22ARE10	Energy Efficient Architecture	3	0	0	3
2.	X22ARE11	Waste Management and Recycling	3	0	0	3
3.	X22ARE12	Sustainable Planning and Architecture	3	0	0	3
4.	X22ARE13	Appropriate Building Technology	3	0	0	3
5.	X22ARE14	Green Buildings and Rating System	3	0	0	3
6.	X22ARE15	Environmental Impact Assessment	3	0	0	3
7.	X22ARE16	Environmental Planning and Design	3	0	0	3

VERTICAL 3: Trends and Technology

Sl. No.	Course Code	Course Title	L	T	P	C
1.	X22ARE17	Ergonomics in Building Design	3	0	0	3
2.	X22ARE18	Barrier Free Architecture	3	0	0	3
3.	X22ARE19	Architectural Acoustics	3	0	0	3
4.	X22ARE20	Contemporary Building Material	3	0	0	3
5.	X22ARE21	Building Automation and Control System	3	0	0	3
6.	X22ARE22	Architecture Design with Steel	3	0	0	3
7.	X22ARE23	Industrial Architecture	3	0	0	3
8.	X22ARE24	Infrastructure Planning and Managements	3	0	0	3

VERTICAL 4: Digital Design Process

Sl. No.	Course Code	Course Title	L	T	P	C
1.	X22ARE25	Digital Art and Graphic Design	3	0	0	3
2.	X22ARE26	Visual Communication and Architecture	3	0	0	3

3.	X22ARE27	Digital tools for Building Modelling and Analysis	3	0	0	3
4.	X22ARE28	Kinetic Architecture	3	0	0	3
5.	X22ARE29	Parametric Modelling and Coding	3	0	0	3
6.	X22ARE30	Artificial Intelligence in Design Process	3	0	0	3
7.	X22ARE25	Digital Art and Graphic Design	3	0	0	3

VERTICAL 5: Architecture, Heritage and Planning

Sl. No.	Course Code	Course Title	L	T	P	C
1.	X22ARE31	Vernacular Architecture	3	0	0	3
2.	X22ARE32	History of Non Western Architecture	3	0	0	3
3.	X22ARE33	Earthquake Resistance Architecture	3	0	0	3
4.	X22ARE34	Architectural Conservation	3	0	0	3
5.	X22ARE35	Human Settlement and Planning	3	0	0	3
6.	X22ARE36	Smart Cities	3	0	0	3
7.	X22ARE37	Urban and Regional Planning	3	0	0	3

VERTICAL 6: Allied – Art, Design and Writing

Sl. No.	Course Code	Course Title	L	T	P	C
1.	X22ARE38	Art Appreciation	3	0	0	3
2.	X22ARE39	Architectural Appreciation	3	0	0	3
3.	X22ARE40	Interior Accessories and Furniture Design	3	0	0	3
4.	X22ARE41	Architectural Criticism	3	0	0	3
5.	X22ARE42	Architecture Journalism and Photography	3	0	0	3
6.	X22ARE43	Real Estate Development	3	0	0	3

**SEMESTER WISE CREDIT ALLOCATION AS PER SUBJECT AREA
2022 Regulation**

S.No	SUBJECT AREA	CREDITS ALLOCATION										CREDITS TOTAL
		I	II	III	IV	V	VI	VII	VIII	IX	X	
1	BSC	3	-	-	-	-	-	-	-	-	-	3
2	ESC	-	6	3	7	7	4	-	-	-	-	27
3	PCC	20	17	19	16	16	19	18	13	-	-	138
4	SEC	3	3	4	-	-	-	3	-	-	-	13
5	PE	-	-	-	3	3	3	3	3	-	3	18
6	OE	-	-	-	-	-	-	2	3	-	-	5
7	PAEC	-	-	-	-	-	-	-	7	24	23	54
8	MC	1	1	-	-	-	-	-	-	-	-	2
		27	27	26	26	26	26	26	26	24	26	260
Mandatory Courses				Rural Study Tour					Educational Tour			-

BSC - Basic Science Courses

ESC - Engineering Science Courses

PCC - Professional Core Courses

SEC - Skill Enhancement Courses

PE - Professional Elective Courses

OE - Open Elective Courses

PAEC - Professional Ability Enhancement Compulsory Courses

MC - Mandatory Courses