



RAMAIAH
Institute of Technology

CURRICULUM

for the Academic year 2019 – 2020

SCHOOL OF ARCHITECTURE

IX & X Semester B. ARCH.

RAMAIAH INSTITUTE OF TECHNOLOGY

(Autonomous Institute, Affiliated to VTU)

Bangalore – 560054.

About the Institute:

Ramaiah Institute of Technology (RIT) (formerly known as M. S. Ramaiah Institute of Technology) is a self-financing institution established in Bangalore in the year 1962 by the industrialist and philanthropist, Late Dr. M S Ramaiah. The institute is accredited with “A” grade by NAAC in 2014 and all engineering departments offering bachelor degree programs have been accredited by NBA. RIT is one of the few institutes with prescribed faculty student ratio and achieves excellent academic results. The institute was a participant of the Technical Education Quality Improvement Program (TEQIP), an initiative of the Government of India. All the departments have competent faculty, with 100% of them being postgraduates or doctorates. Some of the distinguished features of RIT are: State of the art laboratories, individual computing facility to all faculty members. All research departments are active with sponsored projects and more than 304 scholars are pursuing PhD. The Centre for Advanced Training and Continuing Education (CATCE), and Entrepreneurship Development Cell (EDC) have been set up on campus. RIT has a strong Placement and Training department with a committed team, a good Mentoring/Proctorial system, a fully equipped Sports department, large air-conditioned library with over 1,35,427 books with subscription to more than 300 International and National Journals. The Digital Library subscribes to several online e-journals like IEEE, JET etc. RIT is a member of DELNET, and AICTE INDEST Consortium. RIT has a modern auditorium, several hi-tech conference halls and all are air-conditioned with video conferencing facilities. It has excellent hostel facilities for boys and girls. RIT Alumni have distinguished themselves by occupying high positions in India and abroad and are in touch with the institute through an active Alumni Association. RIT obtained Academic Autonomy for all its UG and PG programs in the year 2007. As per the National Institutional Ranking Framework, MHRD, Government of India, Ramaiah Institute of Technology has achieved 64th rank in 2019 among the top 100 engineering colleges across India.

SCHOOL OF ARCHITECTURE

Ramaiah Institute of Technology (RIT), Bangalore, is a leading institution offering undergraduate, post graduate and research programs in the areas of Engineering, Management and Architecture. The institute was established in the year 1962 under the aegis of Gokula Education Foundation. Its mission is to deliver Global quality technical education by nurturing a conducive learning environment for better tomorrow through continuous improvement and customization.

The School of architecture, RIT, Bangalore, was established in the year 1992. Since its establishment, the school has played a vital role in providing quality education. The Council of Architecture (COA) and AICTE has recognized this program.

The Mission of the school is to uphold RIT mission, thus provide quality education to the students and mould them to be excellent Architects with adequate management skills and noble human qualities.

Full time faculty members having postgraduate qualification from prestigious institutions in India and abroad are teaching in this school. Experienced and well respected practicing architects are invited to provide their experiences as visiting faculty. New milestones are continually being set and achieved. The synergy of the progressive management, committed faculty and students are ensure in excellent academic results year after year. This is reflected in the high number of University ranks that are secured.

The School of Architecture is now autonomous (affiliated to VTU) providing scope for further improvement. The focus has been towards fostering novel concepts and solutions in Architectural design. The student's response is very encouraging and the school recognizes and appreciates such good students by awarding them. Many of the students after graduation have pursued higher studies in various universities in India and abroad. There is a good demand for the school graduates in the industry and is developing initiatives towards co-branding of the industry and the institution school. Many have started their own enterprise and architectural practice as well.

All this has been possible as a result of the efforts of the impeccable faculty of the school. The faculty is committed to the welfare and success of the students. The teachers of the school are also engaged in enhancing their knowledge and skills and many are engaged in research activities as well. The school has experts in specialized disciplines like Habitat Design, Product Design, Urban Design, Urban Planning, Landscape Architecture, Heritage Conservation and Interior Design. Faculties of the school also actively participate in National and International conferences and publish and present papers.

The school as part of consultancy started off with the maiden project to redevelop the RIT engineering college campus and is now involved in various campus designs.

VISION OF THE INSTITUTE

To be an Institution of International Eminence, renowned for imparting quality technical education, cutting edge research and innovation to meet global socio-economic needs

MISSION OF THE INSTITUTE

MSRIT shall meet the global socio-economic needs through

- Imparting quality technical education by nurturing a conducive learning environment through continuous improvement and customization
- Establishing research clusters in emerging areas in collaboration with globally reputed organizations
- Establishing innovative skills development, techno-entrepreneurial activities and consultancy for socio-economic needs

QUALITY POLICY

We at MS Ramaiah Institute of Technology strive to deliver comprehensive, continually enhanced, global quality technical and management education through an established Quality Management System complemented by the synergistic interaction of the stake holders concerned.

VISION OF THE DEPARTMENT

To achieve and propagate high standards of excellence in architectural education.

MISSION OF THE DEPARTMENT

- The school's commitment is to prepare people to make a difference;
- To create an environment that shall foster the growth of intellectually capable, innovative and entrepreneurial professionals, who shall contribute to the growth of the society by adopting core values of learning exploration, rationality and enterprise; and
- To contribute effectively by developing a sustainable technical education system to meet the changing technological needs incorporating relevant social concerns and to build an environment to create and propagate innovative designs and technologies.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs):

- PEO 1:** Use the knowledge and skills of Architecture to analyze the real life problems and interpret the results.
- PEO2:** Effectively design, implement, improve and manage the integrated socio-technical systems.
- PEO 3:** Build and lead cross-functional teams, upholding the professional responsibilities and ethical values.
- PEO 4:** Engage in continuing education and life-long learning to be competitive and enterprising.

PROGRAM SPECIFIC OUTCOMES (PSOs):-

- a. Apply knowledge and skills of arts and sciences to the various Architectural scenarios.
- b. Design and develop projects based on function, form and analysis.
- c. Design and improve integrated systems of people, materials, information, facilities, and technology.
- d. Function as a member of a multi-disciplinary team.
- e. Identify, formulate and solve industrial requirements and problems.
- f. Understand and respect professional and ethical responsibility.
- g. Communicate effectively both orally and in writing.
- h. Understand the impact of design solutions in a global and societal context.
- i. Recognize the need for and an ability to engage in life-long learning.
- j. Have knowledge of contemporary issues in industrial and service sectors.
- k. Use updated techniques, skills and tools of architecture throughout their professional careers.
- l. Implement the concepts of project and construction management to satisfy customer expectations.

Curriculum breakdown structure:

The curriculum of Architecture program is so structured to include all the courses that together satisfy the requirements of the program specific criteria prescribed by the **Council of Architecture**. The Course code, Course title, the number of contact hours and the number of credits for each course are given in the following table. The courses are grouped in line with the major components of the curriculum namely: (i) Humanities and Social Sciences, (ii) Arts and Science, (iii) Basic Architecture and Engineering courses, (iv) Professional core courses, (v) Electives and (vi) Project and industry exposure/internship.

Breakup of Credits for B Arch Degree Curriculum. (I to X Semester)

Sem	HSS	AS	BAE	PCS	Electives	Project / Internship	Total Credits
I	1	7	6	11	-	-	25
II	-	8	6	11	-	-	25
III	-	6	8	11	-	-	25
IV	-	3	11	11	-	-	25
V	2	6	6	11	-	-	25
VI	2	-	12	11	-	-	25
VII	3	-	8	11	3	-	25
VIII	5		3		2	15	25
IX	-	-	-	-	-	25	25
X	-	-	-	-	-	25	25
Total	13	30	60	77	5	65	250

HSS	- Humanities and Social Sciences	- 13
AS	- Arts and Science	- 30
BAE	- Basic Architecture & Engineering	- 60
PCS	- Professional Core Subjects	- 77
Elective	- Professional Electives, relevant to the chosen specialization	- 05
Project / Internship	- Project Work and Internship in Architect's office	- 65

Board of Studies for the Term 2019-2020

- | | | |
|-----|-------------------------------|--------------------------|
| 1. | Prof. (Dr.) Pushpa Devanathan | Chairperson |
| 2. | Ar. Chitra Vishwanath | VTU Nominee |
| 3. | Ar. Vidyadhar S. Wodeyar | External Industry Expert |
| 4. | Ar. Ulhas Rane | External Industry Expert |
| 5. | Dr. Rama RS | Academician |
| 6. | Dr. Chidambara Swamy | Academician |
| 7. | Ar. Subbiah T S | Alumni |
| 8. | Prof. Vishwas Hittalmani | Member |
| 9. | Prof. (Dr.) Rajshekhar Rao | Member |
| 10. | Prof. (Dr.) Jyotimay Chari | Member |
| 11. | Dr. Rashmi Niranjana | Member |
| 12. | Dr. Monalisa Vyas | Member |
| 13. | Er. Vijayanand M | Member |

SCHOOL OF ARCHITECTURE

TEACHING STAFF SCHOOL OF ARCHITECTURE

TEACHING STAFF

Sl No	Name	Qualification	Designation
1	Ar. Pushpa Devanathan	M.Arch., P.G.D.I.(PhD)	Professor & HOD
2	Ar. Vishwas Hittalmani	M Des	Professor
3	Ar. Rajshekhar Rao	M L Arch (PhD)	Professor
4	Ar. Jotirmay Chari	M Arch (PhD)	Professor
5	Prof. Prasad G	M.Arch	Professor (Tenure Faculty)
6	Dr. Rashmi Niranjan	PhD , MFA (Fine arts)	Associate Professor
7	Dr. Monalisa	M Arch , PhD	Associate Professor
8	Ar. Surekha R	M.L Arch	Associate Professor
9	Ar. Lavanya Vikram	M.L Arch	Associate Professor
10	Ar. Sudha Kumari	M.Arch	Associate Professor
11	Ar. Meghana K Raj	M L Arch	Associate Professor
12	Ar. Tejaswini H	M. L.Arch	Associate Professor
13	Ar.Sudhir Chougule	M L Arch	Associate Professor (Tenure Faculty)
14	Ar. Mallika P V	P G – Urban Design	Associate Professor (Tenure Faculty)
15	Ar. Nikhil V Wodeyar	M L.Arch	Associate Professor(Tenure Faculty)
16	Er. Vijayanand M	M Tech (PhD)	Assistant Professor
17	Er. Aruna Gopal	BE	System Analyst
18	Ar. Shivdepthi Reddy	M.Arch(Architectural Conservation)	Assistant Professor
19	Ar. Kriti Bhalla	B.Arch	Assistant Professor
20	Ar. Kanika Bansal	M.Arch(Environmental Planning)	Assistant Professor

21	Ar. Apoorva Lakshmi R	B.Arch	Assistant Professor
22	Ar. Aishwarya Yoganand	M.Sc(Sustainable Building Systems)	Assistant Professor
23	Ar. Divya Susanna Ebin	M Arch (Urban Design)	Assistant Professor
24	Ar. Yashas Hegde	M Arch (Urban Design)	Assistant Professor
25	Ar. Arpita Sarkar	M L.Arch	Assistant Professor
26	Ar. Jyotsna Rao J	M LArch	Assistant Professor
27	Ar. Ranjitha Govindaraj	M L.Arch	Assistant Professor
28	Ar. Reema Harish Gupta	M.Arch (Urban Design)	Assistant Professor
29	Ar. Trisha Sinha	M.Tech (Infrastructure systems)	Assistant Professor
30	Ar. Theju V Gowda	M Sc. Architecture	Assistant Professor
31	Ar. Akshata Shagoti	M.Arch	Assistant Professor
32	Ar. Amala Anna Jacob	M.Arch (Urban Design)	Assistant Professor
33	Ar. Meghana M	M.Arch (World Heritage Studies)	Assistant Professor
34	Ar. Sheethal B S	M.Arch (Regional Planning)	Assistant Professor

ADMINISTRATIVE STAFF

1	Mrs. Padmavathy. B	MBA	FDA
2	Mrs. Ambika	M Tech	Assistant Instructor
3	Mr. Nagesh B.L	Dip. in Mech.Engg.	Assistant Instructor

SUPPORT STAFF

1	Mr. Ramachandra Chari	Attender
2	Mr. Penchaliah	Attender

SCHEME OF TEACHING & EXAMINATION IX SEMESTER B ARCH

ACADEMIC YEAR 2019- 2020

2015 Batch			Teaching scheme per week			Examination scheme		SEE Marks
Sl. No	Subject code	Title of the Subject	Lecture / Studio	Tutorial	Practical	Total	Exam	
1	AR901	Practical Training	0	0	25	25	SEE (Viva voce)	100
						25		

Evaluation Pattern : Marks allocation for SEE (viva-voce)		Portfolio	Critical Appraisal	Material Analysis	Viva Voce
AR901	Practical Training	50	20	10	20

SEE = SEMESTER END EXAMINATION

Note:

- For Practical training viva-voce exam, one internal faculty and two external jurors will conduct the exam.
- Portfolios and certificate have to be submitted which will be retained in the department for one year.
- All students have to register and submit the portfolios and certificate from architect's office on the first day, at the beginning of the viva voce exam.

PRACTICAL TRAINING – AR901

Requirements of Practical Experience in office

- Exposure to office work and practical experience
- Understanding of working drawings
- Understanding of construction details and innovative details
- Preparation of tender documents
- Regular visit to site to understand the practical problems
- Stacking methods of various building materials
- Understanding and taking measurements to prepare bill of quantities
- Understanding of local byelaws, rules and regulations
- Preparation of drawings for sanction purpose
- Maintaining day to day diary with dates with signature of the architect
- At the end of the training period collect a certificate of experience and satisfactory performance from the architect. (Let the dates match with the semester beginning and closing dates)
- All the drawings are signed by the architect and your name shall be mentioned in the title block (This is a must in computer drawings)
- Photographs of various stages of the work and details
(Familiarize yourself on the above topics even if works in some of the above listed areas are not subjected to you in the office.)

Present the case study of one well known work of the architect.

Undertake a study of a building material of your choice and make a presentation.

SCHEME OF TEACHING & EXAMINATION X SEMESTER B ARCH
ACADEMIC YEAR 2019- 2020

2015 Batch			Teaching scheme per week			Examination scheme		
Sl. No	Subject code	Title of the Subject	Lecture / Studio	Tutorial	Practical	Total	Exam	SEE Marks
1	AR1001	Practical Training	0	0	25	25	SEE (Viva voce)	100
						25		

		Portfolio	Critical Appraisal	Material Analysis	Viva Voce
AR1001	Practical Training	50	20	10	20

SEE = SEMESTER END EXAMINATION

Evaluation Pattern : Marks allocation for SEE (viva-voce)

Note: For Practical training viva-voce exam one internal faculty and two external faculty will conduct the exam.

- Portfolios and certificate have to be submitted which will be retained in the department for one year.
- All students have to register and submit the portfolios and certificate from architect's office on the first day, at the beginning of the viva voce exam.

PRACTICAL TRAINING – AR1001

Requirements of Practical Experience in office

- Exposure to office work and practical experience
- Understanding of working drawings
- Understanding of construction details and innovative details
- Preparation of tender documents
- Regular visit to site to understand the practical problems
- Stacking methods of various building materials
- Understanding and taking measurements to prepare bill of quantities
- Understanding of local byelaws, rules and regulations
- Preparation of drawings for sanction purpose
- Maintaining day to day diary with dates with signature of the architect
- At the end of the training period collect a certificate of experience and satisfactory performance from the architect. (Let the dates match with the semester beginning and closing dates)
- All the drawings are signed by the architect and your name shall be mentioned in the title block (This is a must in computer drawings)
- Photographs of various stages of the work and details

(Familiarize yourself on the above topics even if works in some of the above listed areas are not subjected to you in the office.)

Present a case study of one well known work of the architect.

Undertake a study of a building material of your choice and make a presentation.

SEMESTER - IX

PRACTICAL TRAINING

Course Code: AR901

Prerequisite: Nil

Course Coordinator:

Credits: 0: 0: 25

Contact Hours: Internship

Course objectives:

- To provide exposure to the various dimension of architectural practice
- To prepare working drawing and detailing
- To prepare students to design and detail architectural projects with confidence
- To enable students to develop skills to start their own practice.

Course Content:

Preparation of working drawings and details

Acquire knowledge of computer skills for drafting, design, 3D view etc

Understand how an office functions

Through site visits gain practical knowledge and solve problems that arise during construction at site.

Discussion with clients

Critical analysis of an Architect Designed building presented with a portfolio

Study a building material and its usage in practice.

Course outcome (COs):

Student will be able to

- Conduct professional practice as per the demand of industry. (PO- a, c)
- Carryout designing and detailing of architectural projects.
(PO- a, b, c, d, e, f, j, k, l)
- Demonstrate skills to start an independent practice. (PO- d, k, g)

Note: Students should work under a registered architect from council of architecture and the registered architect should sign in the certificate with registration number.

Students have to send a report of their progress and a log of works done every month to their respective proctors.

SEMESTER - X

PRACTICAL TRAINING

Course Code: AR1001

Prerequisite: Nil

Course Coordinator:

Credits: 0: 0: 25

Contact Hours: Internship

Course objectives:

- To provide exposure to the various dimension of architectural practice
- To prepare working drawing and detailing
- To prepare students to design and detail architectural projects with confidence
- To enable students to develop skills to start their own practice.

Course Content:

Preparation of working drawings and details

Acquire knowledge of computer skills for drafting, design, 3D view etc

Understand how an office functions

Through site visits gain practical knowledge and solve problems that arise during construction at site

Discussion with clients

Critical analysis of an Architect Designed building presented with a portfolio

Study a building material and its usage in practice.

Course outcome (COs):

Student will be able to

- Conduct of professional practice as per the demand of industry. (PO- a, c)
- Carryout designing and detailing of architectural projects.
(PO- a, b, c, d, e, f, j, k, l)
- Demonstrate skills to start an independent practice. (PO- d, k, g)

Note: Students should work under a registered architect from Council of Architecture and the registered architect should sign in the certificate with registration number.

Students have to send a report of their progress and a log of works done every month to their respective proctors.