॥ सा विद्या या विमुक्तये ॥

स्वामी रामानंद तीर्थ मराठवाडा विद्यापीठ, नांदेड

'ज्ञानतीर्थ', विष्णुपुरी, नांदेड – ४३१ ६०६ (महाराष्ट्र राज्य) भारत

SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED

'Dnyanteerth', Vishnupuri, Nanded - 431 606 (Maharashtra State) INDIA

Established on 17th September, 1994, Recognized By the UGC U/s 2(f) and 12(B), NAAC Re-accredited with 'B++' grade

स्वामी रामानंद तीर्थ मराठवाडा विद्यापीठ, नांदेड

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संलग्नित महाविद्यालयांतील विज्ञान व तंत्रज्ञान विद्याशाखेतील **Bachelor of Architecture** या पदवी स्तरावरील पाचव्या वर्षाचा सुधारित अभ्यासक्रम शैक्षणिक वर्ष २०२२–२३ पासून लागू करण्याबाबत.

प रि प त्र क

या परिपत्रकान्वये सर्व संबंधितांना कळविण्यात येते की, प्रस्तुत विद्यापीठाच्या संलग्नित महाविद्यालयांतील विज्ञान व तंत्रज्ञान विद्याशाखेतील Bachelor of Architecture या पदवी स्तरावरील पाचव्या वर्षाचा सुधारित अभ्यासक्रम शैक्षणिक वर्ष २०२२–२३ पासून लागू करण्याच्या दृष्टीने मा. कुलगुरू महोदयानी मा. विद्या परिषदेच्या मान्यतेच्या अधीन राहून मान्यता दिलेली आहे.

सदरील परिपत्रक व अभ्यासक्रम प्रस्तुत विद्यापीठाच्या **www.srtmun.ac.in** या संकेतस्थळावर उपलब्ध आहेत. तरी सदरील बाब ही सर्व संबंधितांच्या निदर्शनास आणून द्यावी.

'ज्ञानतीर्थ' परिसर,
विष्णुपुरी, नांदेड – ४३१ ६०६.
जा.क्र.:शैक्षणिक–१/परिपत्रक/पदवी–आर्किटेक्चर अभ्यासक्रम सुधारित/
२०२३–२४/234
दिनांक : १८.०८.२०२३.

आपली विश्वासू
सहा.कुलसचिव
शैक्षणिक (१–अभ्यासमंडळ) विभाग

प्रत माहिती व पुढील कार्यवाहीस्तव :

१) मा. अधिष्ठाता, विज्ञान व तंत्रज्ञान विद्याशाखा प्रस्तुत विद्यापीठ.
२) मा. संचालक, परीक्षा व मूल्यमापन मंडळ यांचे कार्यालय, प्रस्तुत विद्यापीठ.
३) प्राचार्य, सर्व संबंधित संलग्नित महाविद्यालये, प्रस्तुत विद्यापीठ.
४) सिस्टम एक्सपर्ट, शैक्षणिक विभाग, प्रस्तुत विद्यापीठ. यांना देवून कळविण्यात येते की, सदरील परिपत्रक व अभ्यासक्रम संकेतस्थळावर प्रसिध्द करण्यात यावा.

SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY NANDED

Syllabus for Bachelor of Architecture

Program : B. Arch.

Course: Bachelor of Architecture

Fifth Year

(Semester IX & X)

(As per Credit Based Semester and Grading System With effect from the academic year 2016-2017)

Proposed Teaching Scheme for Fifth Year B. Arch. Course Semester IX											
Teaching Scheme						Examination Scheme					
Sr.no	Subject	Lecture hours	Training period	Studio lecture	Total	Term work	Pract. work	Theory exam	Total marks	Credits	Duration
591	Synopsis for thesis	Nil	1 Week	Nil	1 week	25	Nil	Nil	25	1	Nil
592	Architecture design studio - VIII	Nil	Nil	108	108	100	50	100	250	10	12 Hours In Two Days
593	Research in architecture -II	48	Nil	Nil	48	25	25	Nil	50	2	Nil
									325	13	

*Total Marks For the Examination = 325
Minimum Marks for Passing the Examination
Internal Exam Has To Be Conducted At College Level
Internal: 50% on Report Submitted Attendance in Architects Office and Telephonic Information.
External and Theory: 40%
Daily Report Signed By Architect Should Submit After Completion Of Training Office Hours
Should Be Minimum 8 Hours Or As Per The Office Timings.
The Colleges Are Required To Arrange The Time Table As Per Semester And As Per The Teaching Scheme Prescribed.
In Charge Should Mobile Once In A Month to Architect and Report 10students for One Faculty.

SYNOPSIS FOR THESIS

Subject Code No: 591	Term work: 25 Marks
Lecture Hours: Nil	Practical Exam: Nil
Period of Training: 1 Week	Theory Exam: Nil
Credits : 1	Total: 25 Marks

- To submit synopsis for choosing topic for thesis project. (It should be three different projects of students choice & will be finalize by concern professor. Any one of the three can be finalized or it can be changed if required.)
- Finalize guide Type and Aim of the thesis to be decided between them. Also places for case studies to be finalized.

Architecture Design studio- VIII

SUBJECT CODE NO: - 592
Lecture Hours: - Nil
Studio Hours: - 108
Total: - 09 per Week – 108
Credits: - 10

Term Work: - 100 Marks
Practical Exam: - 50 Marks
Theory Exam: - 100 (12 Hours)
in Two Days (6 Hours per Day)
Total: - 250 Marks

Course Objective

Subject aims at preparing the students to handle complex architectural issues at this stage addressing various challenges in terms of scale, complexity of functions, social economic context, traffic and vehicular movement and so on. Along with the challenges of physical issues, students are also now expected to address spatial and visual language of their project with reference to the urban context and setting of their site.

Course Outline [Project type 1 — one of the two options & Project type 2]

1. 1. Study of Urban Areas in terms of Urban level issues like Mobility, movement network, builtform disposition, character, identity, activities, open space networks, walkability, inclusiveness, etc.

Community participation initiatives and analysis.

Identify issues related to above aspects at Neighbourhood level and offer design solutions for improving the status of the neighbourhood with reference to the above aspects. Setting up of Guidelines to achieve the master plan objectives and broad implementation strategy to achieve sustainable neighbourhoods.

The project shall include a Study area and Master Plan area of 2- 3 Ha. with detailed Architectural Resolution of a component/s admeasuring not less than 10000 to 20000 sqm Area of Functional space depending on Context and Complexity.

The Architectural project should evolve of the study of the Area and be an outcome of issue formulation, Development Plan proposals for the area if any and a subset of the overall Master Plan for the Area.

OR

1. Multi Functional Complex of Buildings or Speciality Building in an Urban Context with substantial Complexity addressing Issues of Character, Identity, Builtform, Contextuality, Advanced Services, Green Initiatives , landscape integration, traffic management with impact on immediate surroundings, structural resolution in detail. Building Quantum not less than 10000 to 20000 sqm Area of Functional space depending on Context and Complexity and appropriate plot Area. (eg. Healthcare facility, Educational Institution, 5 Star Hotel, Convention Centre, Multimodal Transport Hub, Shopping Mall and Multiplex, redevelopment project etc.). Project should explore the Impact on the Surrounds and from the Surrounds with reference to the Urban Insert being proposed. . Project should explore the Impact on the Surrounds and from the Surrounds with reference to the Urban Insert being proposed

2. One Esquee / Charette be undertaken in each of the Terms (One week Duration) exploring design solution for a project / component , ideas for which would help the Main Design Project.

Research in architecture – II

SUBJECT CODE NO: - 593
Lecture Hours: - 48
Studio Hours: - Nil
Total: - 48
Credits: - 02

Term Work: - 25 Marks
Practical Exam: - 25 Marks
Theory Exam: - Nil
Total: - 50 Marks

COURSE OBJECTIVES:

- To enable students to undertake research focused on an issue related to the built environment.
- To report research in a technical manner.

COURSE OUTLINE:

- Unit I — Data collection and analysis preferably with use of statistics.
- Unit II — Presentation of data using various techniques (verbal, visual, graphical, numerical)
- Unit III — Technical writing
- Unit IV — Presentation of a research paper in form of a seminar

SESSIONAL WORK:

- Tutorial based on units I to III.
- To undertake original research work on the research proposal prepared in Semester VII and report the research in form of a technical paper of 4000 words minimum.

NOTE:

- The guide must have minimum 5 years of teaching experience. Preferably a guide should not guide more than 8 students.
- It is desirable that the research seminar is presented in front of experts.
- It is beneficial to the students if the topic of research is related to the architectural design project of semester X.

REFERENCE BOOKS

Babbie, E. *The Practice of Social Research.* third edition. Belmont: Wadsworth Publishing Co., 1983. book.

Cresswell, J.W. *Research Design: Qualitative and Quantitative Approaches.* Thousand Oaks: Sage, 1994. Book.

De Vaus, D.A. Surveys in Social Research. Jaipur: Rawat Publications, 2003. Book.

Dey, I. Qualitative Data Analysis: A User Friendly Guide for Social Scientists. London: Routledge, 1993. Book.

Groat, L. & Wang, D. Architectural Research Methods. New York: John Wiley and Sons Inc., 2002.

Michelson, William. Behavioural Methods in Environmental Design. Stroudsberg, Pennsylvania: Dowden, Hutchinson and Ross, Inc., 1982

Nachmias, C.F. & Nachmias, D. Research Methods in Social Sciences. Great Britain: St. Martin's Press.Inc., 1996. Book.

Patton, M.Q. Qualitative Evaluation Methods. Newbury Park: Sage Publications, 1980. Book.

Sanoff, H. Methods of Architectural Programming. Vol. 29. Dowden Huthinson and Ross, Inc., 1977. Document.

Visual Research Methods in Design. USA: Van Nostrand Reinhold, 1991.

Swami Ramanand Teerth Marathwada university, Nanded .										
Teaching Scheme For Fifth Year B.Arch. Course Semester X										
FIFTH YEAR										
Semester -X										
Sr. No.	Subject Code	Subject Name	TEACHING SCHEME		EXAMINATION SCHEME					
			LECTURE Hours	STUDIO Hours	TOTAL	Credits	THEORY	STUDIO		TOTAL
								INTERNAL	EXTERNAL	
1	5-X-1	DISSERATION AND THESIS	NIL	108	108	12	NIL	100	200	300
	5-X-2	PROFESSIONAL TRAINING - 2	48	NIL	48	05	100	25	NIL	125
	5-X-3	Elective - 8	48	NIL	48	02	NIL	50	NIL	50
	5-X-4	Elective - 9	48	NIL	48	02	NIL	50	NIL	50
		TOTAL								525

Notes: - theory internal sessional /term work (to be submitted in the form of report) work and external /practical (on report submitted previously) viva are considered as separate heads of passing

Total marks for the examination = 525

Minimum marks for passing the examination:

Internal exam has to be conducted at college level

Internal: 50%

External and theory: 40%

Each period shall be of 50 minutes duration and each semester shall consist of 90 days of teaching program.

The colleges are required to arrange the time tale as per semester and as per the teaching scheme prescribed.

Elective I. A, b, c, d students has choice to choose any one of it.

Elective II. A, B, C, D Students has choice to choose any one of it.

For elective the student has to take a guide separately for both subjects choose the topic and collect data by site visits net survey books etc. show and discuss with guide &have to produce a report &seminar.

DISSERTATION

Subject Code No: 5-X-1

Lecture Hours: Nil

Studio Hours: 9 per week -108

Total: 9 - 108

Credits: 12

Term work: 100 Marks

Practical exam: 200 Marks

Theory exam: Nil

Total: 300 Marks

Dissertation is seen as a culmination (final stage) of the development of the student knowledge attitude and skills over the course of studies of Architecture.
Students have submitted synopsis in IX th Semester. The selected subject to discussed in detail by following procedure.
Students are expected to develop of his/her choice of subject to demonstrate his/her ability to use effectively the tools of independent investigation and judgment to evolve design culture .The application these may be original design of research oriented work . Student shall choose a subject related to Architecture only, by considering following aspects:

- Data collection and analysis.
- User's requirement and justification.
- Feasibility of project economically, physically and socially.
- Climatic considerations / Environmental Issues.
- Selection of site.
- Method of construction / Advance Technology, etc.
- Integrated building services.
- Constructional technologies / structural systems.
- Landscape and Town planning.

At the end of the semester, each student is expected to submit all original drawings prepared as per the specifications of the department with the Guidance of Guide as per the university / college timetable. Three copies of the report in the specified format along with the model submitted to the Department, after obtaining the approval of the respective guides.
The performance sheet submitted by the department. Thesis committee should be the basis for allowing student to appear for the final viva –voce.
For the end exams, viva – voce will be conducted by jury comprising of the external examiners and head of the department of the respective colleges will be internal examiner.
For the final viva-voce 40% internal marks will be assessed by respective guides / HODs of the colleges / Department and 60% will be external marks out of the total 200 marks.

PROFESSIONAL PRACTICE II

Subject Code No: 5-X-2

Lecture Hours: 04 -48

Studio Hours: Nil

Total: 04 Per Week - 48

Credits : 5

Term work: 25 Marks

Practical exam: Nil

Theory exam: 100 Marks (03 Hrs)

Total: 125 Marks

Aim :

To expose the students to issues concerning architectural practice such as Valuation of Immovable properties, Acquisition, Arbitration, Standard rate etc.

Objectives:

- Further the students shall be exposed to professional practice and knowledge of advance issues in the profession.
- To expose the students on some of the important issues like Arbitration, land acquisition, easements etc.

UNIT I : Valuation :

Definition – Is it art or science – Examples from everyday life .
Cost, price & Value – Essential characteristics of Value – classification of value.
Market value & its characteristics

UNIT II : Purpose of Valuation :

Income tax, Wealth tax, Acquisition of property, Mortgage of property, Loans from bank and other institutions:

UNIT III : Methods of Valuation :

A) Land and Building Method.
B) Rental Method.

A) Land and Building Method:

i) Situation, locality, area, shape, Ratio of frontage to depth, Return frontage Encumbrances. Depreciations – straight line method.
ii) Belting Method of valuation of land.
iii) Leasehold Lands – Tenure
Free hold and lease hold Tenure, Types of Lease.

B) Rental Method: -

i) Gross rent and rent – Capitalized Value – Year of purchase, Outgoings – Repairs, NA – Assessments, Annuity.
ii) Sinking fund, Physical & Economic life of buildings, Revisionary Value of Land.
Examples to be solved for Valuation.

UNIT IV: ARBITRATION:

Introduction, Meditation and conciliation:-
Arbitration: - Arbitration clause in contract. Advantages of Arbitration, Arbitrator, Appointment, Qualification.
Powers and Duties: - Terms and condition of Arbitration agreement.
Arbitral Award, Reasoned and unreasoned award – Scott's Schedule.
Conduct of Arbitration proceedings.
Expected matters – Development – Legal position.

UNIT V : Land Acquisition :

Introduction, Basic principles of land Acquisition Act. Investigation – objections and confirmation. Claim and award.

UNIT VI : Standard Rent :

Rent control act, Standard rent, Methods of Ascertaining standard. Theory of comparables, Standard rent by investment theory.
Period of first Letting, Apportioned Area of Land.
Architect as an expert witness.
Calculation of standard rent.

UNIT VII : Easement :

Meaning , Dominant and Servient heritage . Characteristics of Easement.
Natural rights – Customary rights .
Continuous and Discontinuous easement . Methods of acquiring Easement.
Essential conditions of enjoyment of Easement of supports and Drainage .

UNIT VIII : E Tendering

UNIT IX : PERT AND CPM:

Methods of planning and programming , Bar charts , Milestone charts ,Elements of network ,Pert Networks , CPM. Networks , Critical activities and critical path , CPM : Cost Model.

Reference books:--

1) Professional practice – Roshan Namavati.

ELECTIVE –I (A) OR

VERNACULAR ARCHITECTURE

Subject Code No: 5-X-3

Lecture Hours: 04 Per Week - 48

Studio Hours: Nil

Total: 04 - 48

Credits: 2

Term work: 50 Marks

Practical exam: Nil

Theory exam: Nil

Total: 50 Marks

Aim :

To study everyday Architecture in the traditional context built in various culture and geographical regions of India with an emphasis on regional building types, use, regional characteristic materials, construction and building process.

Objective;

- To introduce the study of vernacular architecture as a process.
- To provide an overview of the various approaches and concepts to the study of Vernacular Architecture.
- To study the various vernacular forms in the various regions of India.
- To look at the Impact of colonial rule on the vernacular architecture in India.

Unit I : Introduction

Factors contributed to the evolution with examples. The advantages of studying it and possible applications today.

Unit II : Approaches and concepts :

Different approaches and concepts to the study of vernacular architecture an overview – Aesthetic, architectural and anthropological studies in detail.

Unit III : Vernacular Architecture in India and at International level :

Factors that contributed to its evolution . A few examples of tribal settlements. And factors that contributed to the evolution in Middle East, Far East and Tribal Settlements .

Unit IV : Vernacular Architecture in Maharashtra :

Factors that contributed to its evolution. A few examples of tribal settlements. Settlement planning strategies.

Unit V : Western influences in Vernacular Architecture In India :

Colonial influence on the various Goan house. Evolution of the bungalow from the traditional Bungalow planning principles and materials and methods of construction.

References :

- Encyclopedia of vernacular architecture of the world . - Cambridge University press .
- Mud architecture of the Indian Desert , Aadi centre, Ahmadabad .

ELECTIVE –I (B) OR

HOUSING

Subject Code No: 5-X-3	Term work : 50 Marks
Lecture Hours : 04 -48	Practical exam : Nil
Studio Hours : Nil	Theory exam: Nil
Total : 04 Per Week -48	Total: 50 Marks
Credits :2	

Aim :

To study the basic concepts and issues related to urban and rural housing.

Objective:

- To give an understanding and appreciation of housing in terms of issues, problems, and directions.
- To outline factors that influence housing affordability and to familiarize students with various schemes and policies of the government in the housing sector .
- To inform about the various housing design typologies and the process involved in housing project development.

Unit I : Evolution of housing :

Brief review of the historical development of housing in various context.

Unit II: Housing demand and supply:

National housing policy – Housing agencies and their role in housing development. Impact of traditional life style – Rural housing – Public Private Sector Housing.

Unit III : Housing standards :

Issues involved in traditional housing standards for rural and urban areas desirable and minimum standards residential densities.

Unit IV : Housing strategies :

Review of different forms of housing globally – particularly with reference to the third world countries .Brief acquaintance with some strategies such as sites and services. Upgrading existing Shelter, simulating private sector production developing building materials and alternative technologies, improving architectural design etc.

Unit IV : Housing layouts and designs :

Traditional pattern of housing design, Row housing, Cluster Housing, Apartment Housing, Low-rise housing, Neighborhood unit. Case studies of Housing projects.

Reference books:–

Alexander – Christopher

Pattern language, Towns, Building – Oxford University press – New York.

HUDCO – Housing for low income. HUDCO.

ELECTIVE –I (C) OR

BUILDING CONSTRUCTION MANAGEMENT

Subject Code No: 5-X-3

Lecture Hours : 04 -48

Studio Hours : Nil

Total : 04 Per Week - 48

Credits : 2

Term work : 50 Marks

Practical exam : Nil

Theory exam: Nil

Total: 50 Marks

Aim :

To introduce the importance of Construction management in the field of Architecture .

Objective:

- To give understanding and appreciation of Construction Management in terms of issues, techniques, problems and directions, economic strategies .

Unit I: Introduction :

Construction in India, its role in development , Importance of management in construction, role of construction manager, construction team, responsibilities and authorities of construction manager organization.

Unit II : Management Techniques :

Planning for construction projects: principles, objectives, advantages of planning, stages of planning.

Scheduling: - Definition, Advantages, methods of scheduling, bar chart, milestone chart controlling.

Life cycle cures :- job layout, work breakdown structure.

PROJECT MANAGEMENT THROUGH NETWORKS : Introduction, objective, Advantages, terms and definition , type of networks, rules for drawing a network .

Introduction to PERT , CPM , finding critical path.