



ARCH 601: Architectural Design – V

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
PC	AR	STUDIO	ARCH 601	ARCHITECTURAL DESIGN V				200	200	400			8	8

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

3RD YEAR / VI Semester

ARCH 601: Architectural Design – V

Course Educational Objectives (CEOs):

To develop abilities in design in the context of user requirements.

Course outcomes (COs):

<p>At the end of the course, students will be able to</p> <p>Expected Skills / Knowledge Transferred:</p> <p>Focus: Design Development</p>	<p>Students will learn to develop the design proposal, which could reach the execution stage.</p> <p>The student will achieve the capacity to Production of detailed drawings necessary for the execution of the building</p> <p>The student will develop an understanding and importance of detail, integration of Building systems, clarity and effective communication of production drawings</p> <p>To enhance the understanding of the complexities of architectural design for residential needs and develop creative design solutions for good living environments. Use of standards, handling of space, and application of knowledge gained from other subjects in design.</p> <p>To enhance the understanding of the complexities of architectural design for residential needs and develop creative design solutions for good living environments.</p>
--------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Course Overview:

- This course is intended to provide skills for designing single-use, small-span and single-storey buildings.

Course Contents:

Sr. No.	Syllabus: Topic	Subtopic	Teaching Hours:
DESIGN			
	Part-Whole relationship – Back and forth design processes		
	Exposure to materials, products, and assembly constructional principles.		
	Methods of specification writing information systems used in working drawings.		
	Structural and Services Resolution of Part (Short Project) including calculations and specifications/approximate costing		
I.	Theme & focus of design:	Study, analysis & utilization of Contemporary Structural Systems in Hi-tech Architecture; Understanding, exploration & development of design programme, concepts & detailed design with a focus on Steel.	20hrs
II.	Basic Components	Behavioral Science; Functionality; Building Materials; Theory of Design; Form Development; Tectonic decisions: Structures, Building Materials, Services; Site Planning; Building Control Regulations; Inclusive Design; Design Communication.	24hrs
III.	Temporal Architecture:	Importance, Exploring & Understanding the essence; detailing process; User analysis; Elements; functionality, aesthetics; Materials. This Minor Exercise will be represented through conceptual development (sketches, physical & digital models).	35 hrs
IV.	Design Analysis:	Exploration & analysis of works of iconic Hi-tech Architecture; Understanding design philosophy & process; Learning from design quality, Literature/book reviews; Architectural critiques.	35hrs
V.	Design Exercise:	Building Design. The complexity of design: Multi-storied building/s or large-span structures. Focus on building services as an integral part of the design & construction process. Typology: Transport Hubs, Shopping Malls, Hotels, Hospitals, Media Houses, Broadcasting Stations, Sports Facilities, Apartments, etc. Site extent: Up to 8000 m2.	46 hrs

Sessional work:

Chairperson
Board of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya, Indore

Chairperson
Faculty of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Controller of Examination
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Joint Registrar
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore



ARCH 601: Architectural Design – V

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
PC	AR	STUDIO	ARCH 601	ARCHITECTURAL DESIGN V				200	200	400			8	8

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Guidelines

Necessary theoretical inputs are to be given highlighting the norms and design issues. The topics not covered as design problems will have to be covered by the Studio faculty members through lecture/slideshow sessions and site visits.

Assignments /Tasks are to be set from the entire syllabus; The topic of the project is to be displayed on the Institute Notice Board fifteen days - a week time in advance OF the commencement of the classes

Continuous Evaluation shall be made of students' work based on various models, sketch assignments, and market surveys.

One Major And the rest minor tasks are to be set from the entire syllabus

Assignments:

The final submission shall necessarily include a model for at least one of the two main problems.

In the end, in an exam which is a viva-voce, the students have to present the entire semester's work for assessment.

Note:

Evaluation is to be done through viva voce by an external examiner appointed by the university at the Institute. Portfolios, after the university exam, shall be retained at the Institute level for the viva-voce

Suggested Readings:

Bousmaha Baiche & Nicholas Walliman, Neufert Architect's data, Blackwell Science Ltd.
Building Code – ISI
 Chiara Joseph de and Others. Time Savers Standards of Building Types. McGraw – Hill, 1990.
 Ching, Francis D.K. Architecture: Form, Space, and Order, 2nd Ed. Van Nostrand Reinhold, New York, 1996.
 Criss B. Mills, Designing with models: A Studio Guide to making & using architectural models, Thomson & Wadsworth, USA,2000.
 DeChiara and Callender, Time-saver standards for building types, Mc Graw Hill Company
 Hanks, A. David. Decorative Designs of Frank Lloyd Wright, Dover Publications, Inc. New York, 1999.
 Hepler, E. Donald, Wallach, I. Paul. Architecture Drafting and Design, 3rd Ed. McGraw-Hill Book Company, New York, 1977.
 Itten, Johannes. Design and Form: The basic course at the Bauhaus, Thames and Hudson Ltd., London 1997.
 Kirk, Paul Hayden and Sternberg, D. Eugene. Doctors Offices and Clinics, 2nd Ed. Reinhold Pub., USA, 1960.
 Krier, Rob. Architectural Composition, Academy Editions, London, 1988.
 Maier Manfred Basic Principles of Design, Vol.1, 2, 3 & 4, Van Nostrand Reinhold, NY. (1977)
 Meiss, Pierre Von. Elements of Architecture: From Form to place, E and FN Spon, London, 1992.
 Mike w.Lin, Drawing & Designing with confidence – A step by step guide, John Wiley & Sons, USA,1998.
 Neufert, Ernst. Ernst Neufert Architects Data, Granada Pub. Ltd., London,2000.
 Peloquin, Albert. Barrier-Free Residential Design. McGraw-Hill, Inc., New York,1994.
 Pevsner, Nikolaus. A History of Building Types. Thames and Hudson, London,1976.
 Ramsey / Sleeper, National Architectural graphic standards, The American Institute of Architects
 Sam F Miller, Design process– Van Nostrand Reinhold
 Shah, S. Charanjit. Architects Hand Book Ready Reckoner. Galogotia Pub., New Delhi, 1996.
 Smithies, K.W. Principles of Design in Architecture. Chapman and Hall, 1983.
 Untermann, Richard and Small, Robert. Site Planning for Cluster Housing.
 Wucius, Wong. Principles of Two-Dimensional Design. Van Nostrand Reinhold 1972.
 Time-saver standards for building types, DeChiara and Callender, McGraw Hill Company
 Neufert Architect's data, Bousmaha Baiche & Nicholas Walliman, Blackwell Science Ltd
 National Building Code - ISI
 New Metric Handbook – Patricia Tutt and David Adler – The Architectural Press

Chairperson
Board of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya,Indore

Chairperson
Faculty of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Controller of Examination
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Joint Registrar
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore



ARCH 602: Human Settlement Planning

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
PC	AR	THEORY CUM STUDIO	ARCH 602	HUMAN SETTLEMENTS PLANNING	60	30	30	15	15	150	1		2	3

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

ARCH 602: Human Settlement Planning

Course Educational Objectives (CEOs)::

To make the student understand various planning-related issues.

Course outcomes (COs):

At the end of the course, students will be able to

- Compare different types of settlements based on their characteristics and attributes.
- Explain the evolution of a place with time and mass.
- Identify the stakeholders, indicators, etc. associated with the Land Economies.
- Apply the tools required to assess the present statistics of a Place/ Area.
- Analyze different approaches associated with the Implementation Strategies.

Expected Skills / Knowledge Transferred: Should be in a position to make a neighbourhood plan for 5000 people.

Focus: Town planning skills / Compare different types of settlements based on their characteristics and attributes.

Course Overview:

This course focuses on the review of the origin of Human Settlements to the level of understanding of the various Town Planning problems.

- Understand the concept of urban planning.
- Gain knowledge of the evolution of Human Settlements in history
- Apply the principles of physical planning in preparing a settlement plan and Pattern of Urbanization

Course Contents:

Unit	Syllabus: Topic	Subtopic	Teaching Hours:
I.	Introduction to Urbanisation	Urbanization: Facts, Theories. Socio-spatial problems of migrants, slums, high and low-density housing; high rise living such as isolation, alienation, accessibility, conflicts etc as related to the planning and design of buildings in different areas of the city. Social Survey and social research.	10hrs
II.	Introduction to Urban planning	Transportation and communication: Basic concepts of land use planning – purpose, need and requirement; goals, objectives and principles Determinants of land use and planning process. Population studies and forecasting.	5 hrs
III.	Theories of Urban planning	Benefits of planning; Arguments for and against planning Different theories and debates of land-use planning – Concentric Zone Theory, Isolate Estate Model, Sector Theory, Multiple Nuclei Theory etc.; Landuse allocation models – William Alonso: Bid Rent Theory, etc. Debates on land-use planning: transit-oriented development, land-use intensity and the size of the city, sprawl and compact urban form etc. Contemporary Concepts In Town Planning: Role and contribution of the following towards contemporary town planning thought - Patrick Geddes, Patric Abercrombie, Daniel Burnham, Soria Y Mata, Frederick Olmstead, Henry Wright, Ebenezer Howard, Clarence Perry, Clearance Stein, CA Doxiadis, Le Corbusier, Frank Lloyd Wright. Principles of Ekistics: Introduction to the concepts of green belts, satellite towns, neighbourhoods, and roads in solving some of the	8 hrs

Chairperson
Board of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya,Indore

Chairperson
Faculty of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Controller of Examination
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Joint Registrar
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore



Shri Vaishnav Vidyapeeth Vishwavidyalaya

Shri Vaishnav institute of Architecture

Choice Based Credit System (CBCS) Scheme in the light of NEP-2020 by COA

B. ARCH (2021-26)

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
PC	AR	THEORY CUM STUDIO	ARCH 602	HUMAN SETTLEMENTS PLANNING	60	30	30	15	15	150	1		2	3

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

IV.	Contemporary issues of Urban Planning	Sustainability and rationality in planning Components of sustainable urban and regional development Landuse planning practices – Indian and global perspective. New Horizons: Rebuilding our cities – penalty for neglect, Urban renewal, Necessity and Advantages of urban renewal- various steps in urban renewal programme New utopians – the search for space – the form search – density equation, A brief introduction to redevelopment schemes and urban renewal, the problem of slum and shanty areas and a review of the concepts regarding solutions: clearance, rehabilitation and improvement.	8 hrs
V.	Legislations and Regulations	Land as a resource: Its character, potential Land value; drivers of demand for land on the land market Statues and laws governing land administration and management. Urban landuse classifications Different policies related to land use and zoning, land suitability analysis etc. Principles And Process Of Planning: Development plans- A general and introductory study of inputs, objectives, preparation and outputs of a Master plan for a city; land-use classification, features and relationships with transportation. Meaning and use or implication of O-D surveys, desire line diagrams trip generation, attraction, distribution and modal split. Introduction to housing and community facilities; the role of F.S.I, densities in housing. The basic methodology for the planning of industrial areas and recreation areas.	5 hrs
	Governance of Planning	<ul style="list-style-type: none"> • Local government in India • District Planning Committees and Metropolitan Planning Committees; • ULC, Area/Urban Development Authorities 	4 hrs

Sessional work:

Guidelines

Assignments /Tasks are to be set from the entire syllabus; The topic of the project is to be displayed on the Institute Notice Board fifteen days - a week time in advance OF the commencement of the classes

Continuous Evaluation shall be made of students' work based on various models, sketch assignments, and market surveys.

One Major And the rest minor tasks are to be set from the entire syllabus

Assignments:

At least one exercise related to the preparation of a layout for a residential neighbourhood of about 5000 populations. This is a studio subject and students should be made to prepare layout drawings as studio exercises along with the theoretical inputs. The studio work should be supplemented with appropriate site visits.

Note:

Evaluation is to be done through viva voce by an external examiner appointed by the university at the Institute. Portfolios, after the university exam, shall be retained at the Institute level for the viva-voice

Suggested Readings:

Bhagiratha Rao, E.L. Land Acquisition Manual in Andhra Pradesh.

Buch, N. Mahesh. Planning the Indian city.,

Chand, Mahesh & Puri, Vinay Kumar. Regional Planning in India. Allied Pub.Ltd., Bombay, 1990.,

Doxiadis, C.L. Ekistics: Introduction to the science of Human Settlement.

Gallion, B. Arthur & Eisner, Simon. Urban Pattern: City Planning & Design, 5th Ed. Van Nostrand Reinhold, New York, 1986.

Chairperson
Board of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya,Indore

Chairperson
Faculty of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Controller of Examination
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Joint Registrar
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore



ARCH 602: Human Settlement Planning

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
PC	AR	THEORY CUM STUDIO	ARCH 602	HUMAN SETTLEMENTS PLANNING	60	30	30	15	15	150	1		2	3

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Hyderabad Urban Development Authority. Hyderabad Urban Development Authority, HUDA, 1981.

Khosla, R.K. Urban and Rural Development in India.

Patterson, T. William. Land-use Planning Techniques of Implementation.

Rama Reddy, Padala & Srinivas Reddy, Padala. Commentates on Hand Reforms Laws in Andhra Pradesh.

Rame Gowda, K.S. Urban and Regional Planning. Univ. of Mysore, Mysore, 1972.

Rangwala, S.C. & Others. Town Planning, 18th Ed. Charotar Pub. House, Anand,2003.

A.Bandopadhyay, Textbook of Town Planning, Books and Allied, Calcutta 2000.

John Ratcliffe, An Introduction to Town and Country Planning, Hutchinson 1981.

Arthur B. Gallion and Simon Eisner, The Urban Pattern – City planning and Design, Van Nostrand Reinhold Company

Rangwala, Town Planning, Charotar publishing house

G.K.Hiraskar, Town Planning, Rame Gowda, Urban and Regional Planning

S.K.Khanna, Highway Engineering, C.E.G. Jhusto, Nemchand & Bros. Roorkee 1997

N.V.Modak, V.N.Ambedkar, Town and country planning and Housing, Orient Longman, 1971

Rappoport, Amos. House, Form and Culture.

Singh, Alok Kumar, & Others (ed). Strategies in Development Planning.

Alexander, Christopher, A pattern language. New York: Oxford University Press, 1977

Edward. D. Mills, "Planning: The Architects' Hand Book, Butterworth, London, 1985

Krier, Rob, "Urban Space", Academy Editions, London,1967, Chapin, F.S.; and Kaiser, E.J., (1979), "Urban Landuse Planning", University of Illinois,

Urbana, L.R. Kadiyali, (2014). "Traffic Engineering and Transport Planning", Khanna Publications, New Delhi, P R. Berke and D R Godschalk, (2006).

"Urban Landuse Planning", University of Illinois Press

B.G. Hutchinson, (2011). "Principles of Urban Transport Systems Planning", McGraw Hill

Dimitriou, T.H., (1990), (ed), "Transportation Planning for Third World Countries", Routledge, London

Faludi, A., (1973), "Planning Theory", Pergamon Press, Oxford, Faludi, A., "Three Paradigms of Planning Theory", pp. 81-101, in Healy, P.. Jain A K,

(2010). "Urban Transport: Planning and Management", APH Publishing

Kurt, Leibrant., (1970), "Transportation and Town Planning" C. S Papacostas, and P. D Prevedouros, "Transportation Engineering and Planning", PHI

Learning D. Mohan, (2013). "Safety, Sustainability and Future Urban Transport", Eicher Goodearth Limited, New Delhi

Field B.G., and MacGregor, B.D., (1987), "Forecasting Techniques for Urban and Regional Planning", Hutchinson, London

McDougall, G., and Thomas, M.J., (eds), (1982), "Planning Theory: Prospects for the 1980's", Pergamon Press, London



ARCH 603: Building Material and Construction VI

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
BS& AE	TE	THEORY CUM STUDIO	ARCH 603	BUILDING MATERIALS & CONSTRUCTION – VI	60	30	30	15	15	150	1		2	3

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

ARCH 603: Building Material and Construction VI

Course Educational Objectives (CEOs)::

To create awareness among the students regarding problems related to old buildings and methods to mitigate their problems. and cope up to work with newer techniques.

Course outcomes (COs):

At the end of the course, students will be able to

- Students will develop an understanding of advanced building systems,
- Students will develop an understanding of Earthquake resistance structure
- The student will be equipped with a Basic understanding of quantity, estimation and costing
- Students will understand different types of mechanical circulation systems

Expected Skills / Knowledge Transferred: To understand the techniques of constructing using different materials

Focus: Miscellaneous on issues related to failures in buildings

Course Overview:

The course focuses on introduce new advanced materials and techniques in use

Course Contents:

Unit	Syllabus: Topic	Subtopic	Teaching Hours:
I.	Types of Structures	Study of Suspended, tensile and tensegrity, space frame, geodesic structure,	15 hrs
II.	Types of advanced Structures	pneumatic structure structures The principle of Earthquake resistance structure	10hrs
III.	Estimation	Introduction, Different types of estimation techniques Data required for the preparation of estimation Rate analysis: Purpose, Importance & factor affecting rate analysis	10hrs
IV.	Mechanical systems	General information regarding S.O.R., B.O.Q. & Specifications Different types of mechanical circulation systems i.e. Escalators, Elevators, Travelators etc.; Different types of ducts & shafts	10hrs

Sessional work:

Guidelines

Assignments /Tasks are to be set from the entire syllabus; The topic of the project is to be displayed on the Institute Notice Board fifteen days - a week time in advance OF the commencement of the classes

Continuous Evaluation shall be made of students' work based on various models, sketch assignments, and market surveys.

One Major And the rest minor tasks are to be set from the entire syllabus

Assignments:

This is a studio subject and students should be made to document the problems in old buildings through inspections and propose remedial measures by preparing construction drawings as studio exercises with the theoretical inputs given through lectures. to prepare construction drawings for studio exercises along with the theoretical inputs. The studio work should be supplemented with appropriate site visits for the technology

Note:

Evaluation is to be done through viva voce by an external examiner appointed by the university at the Institute. Portfolios, after the university exam, shall be retained



ARCH 603: Building Material and Construction VI

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50% OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30% OR 20%)	End Sem University Exam (50% OR 10%)	Teachers Assessment* (50% OR 10%)					
BS& AE	TE	THEORY CUM STUDIO	ARCH 603	BUILDING MATERIALS & CONSTRUCTION – VI	60	30	30	15	15	150	1		2	3

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

at the Institute level for the viva-voice

Suggested Readings:

A.Agarwal –Mud: The potentials of earth-based material for third world housing – IIED, London 1981.
 Bachmann, Hugo. Seismic Conceptual Design of Buildings: Basic Principles for Engineers, Architects, Building Owners and Authorities. Kanpur: National Information Centre of Earthquake Engineering, 2003
 Barrie, Donald S. Professional Construction Management: Including CM, Design-Construct and General Contracting. New Delhi: McGraw Hill Education India Pvt Ltd, 2013
 Barry, R. Construction of Buildings Vol – 2-5: Single Storey Frames, Shells and Lightweight Coverings. New Delhi: Affiliated East-West Press Pvt. Ltd., 1999
Bindra, S P.and Arora, S P. Building Construction: Planning Techniques and methods of Construction, 19th ed. Dhanpat Rai Pub. New Delhi, 2000.
 Bronze, Svetlana. Earthquake Resistant Confined Masonry Construction. Kanpur: National Information Centre of Earthquake Engineering, 2007
 Callahan, Michael T. Construction Project Scheduling. New Delhi: McGraw Hill Education India Pvt Ltd, 2014
 Chitkara, K. K. Construction Project Management: Planning, Scheduling and Controlling. New Delhi: Tata McGraw-Hill Publishing Company Ltd., 2011
 Construction And Design Manual Mobile Architecture. Germany: Dom Publishers, 2012
 Das, P. K. Introduction to Seismic Safety in Architecture. Maharashtra: National Institute of Advanced Studies in Architecture (NIASA), COA, 2007
Dr B.C.Punmia – Building construction
Feilden, M. Bernard. Conservation of Historic Buildings. Butterworth Scientific, London, 1992.
Francies D.K.Ching – Building Construction Illustrated. VNR, 1975.
 Gahlot, P. S. Construction Planning and Management. New Delhi: New Age International (P) Limited, 2014
 Guidelines for Earthquake Resistant Non-Engineered Construction. Kanpur: National Information Centre of Earthquake Engineering, 2004
Hailey and Hancock, D.W. Brick Work and Associated Studies Vol. 2. MacMillan, London, 1979.
 Hinze, Jimmie. Construction Contracts. New Delhi: Tata McGraw Hill Education Private Limited,2013
HUDCO – All you wanted to know about soil stabilized mud blocks, New Delhi, 1989.
 IITK - GSDMA Guidelines for Seismic Design of Buried Pipelines: Provisions with Commentary and Explanatory Examples. Kanpur: National Information Centre of Earthquake Engineering, 2007
 IITK - GSDMA Guidelines for Seismic Design of Earth Dams and Embankments: Provisions with Commentary and Explanatory Examples. Kanpur: National Information Centre of Earthquake Engineering, 2007
 IITK - GSDMA Guidelines for Seismic Design of Liquid Storage Tanks: Provisions with Commentary. Kanpur: National Information Centre of Earthquake Engineering, 2007
 IITK - GSDMA Guidelines for Seismic Evaluation and Strengthening of Buildings: Provisions with Commentary and Explanatory Examples. Kanpur: National Information Centre of Earthquake Engineering, 2007
 IITK - GSDMA Guidelines for Structural Use of Reinforced Masonry: Provisions with Commentary and Explanatory Examples. Kanpur: National Information Centre of Earthquake Engineering, 2007
 London, 1992.
 McKay J. K. Building Construction Vol – 2-4: Metric. Delhi: Pearson Education Asia Pte. Ltd., 2014
 McKay, W. B. Building Construction Vol - 1: Metric. New Delhi: Pearson Education Asia Pvt. Ltd.; India, 2013
McKay, W.B. Failures and Repair of Concrete Structures Vol. IV.
 McLeod, Virginia. Detail In Contemporary Timber Architecture. UK: Laurence King Publishing, 2010
 Millias, Malcolm. Building structures from concept to design. London: Spon Press, 2005
Mitchell. Advanced Structures.
Moxley, R. Mitchell's Elementary Building Construction, Technical Press Ltd.
 Murty, C. V. R.. Earthquake Design Concepts. Kanpur: National Information Centre of Earthquake Engineering, 2006
 Murty, C. V. R.. Earthquake Rebuilding in Gujarat: An EERI Recovery Reconnaissance Report.Oakland: Earthquake Engineering Research Institute, 2005
 Muttoni, Aurelio. Art of Structures: Introduction to the Functioning of Structures in Architecture. UK: Taylor & Francis, 2011
 Paulson, Boyd C.. Computer Applications in Construction. New Delhi: McGraw Hill Education India Pvt Ltd, 2014
 Peurifoy, Robert L. Construction Planning Equipment and Methods. New Delhi: Tata McGraw Hill Education Private Limited, 2012
 Peurifoy, Robert. Estimating Construction Costs. New Delhi: Tata McGraw-Hill Publishing Company Ltd., 2011
 Phillips, David. Detail In Contemporary Concrete Architecture. UK: Laurence King Publishing Ltd, 2012
 Punaima, B. C.. Comprehensive Design of Steel Structures. New Delhi: Laxmi Publications Pvt. Ltd., 2012
 Punmia, B. C.. Building Construction. New Delhi: Laxmi Publications Pvt. Ltd., 2008
R.Chudley – Building Construction Handbook – BLPD, London 1990.
R.Chudley, Construction Technology.
Raikaar, R.N. Learning From Failures: Deficiencies in Design. Construction and Service, R and D Centre, New Bombay, 1987.
Rangwala, S.C. Building Construction, 22nd ed. Charotar Pub. House, Anand,2004.
 Rangwala, S. C.. Estimating, Costing and Valuation. Anand: Charotar Publishing House, 2012
Rangwala, S.C. Engineering Materials: Material Science, 31st Ed. Charotar Pub. House, Anand, 2004.
 Ruske, Wolfgang. Timber Construction for Trade, Industry, Administration: Basics and Projects. Switzerland: Birkhauser- Publisher of Architecture, 2004

Chairperson
Board of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya,Indore

Chairperson
Faculty of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Controller of Examination
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Joint Registrar
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore



Shri Vaishnav Vidyapeeth Vishwavidyalaya

Shri Vaishnav institute of Architecture

Choice Based Credit System (CBCS) Scheme in the light of NEP-2020 by COA

B. ARCH (2021-26)

ARCH 603: Building Material and Construction VI

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
BS& AE	TE	THEORY CUM STUDIO	ARCH 603	BUILDING MATERIALS & CONSTRUCTION – VI	60	30	30	15	15	150	1		2	3

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Salvadori, Mario. Why Buildings Stand Up: The Strength of Architecture. New York: W. W. Norton and Co., 1980

Schacher, Tom. Confined Masonry: For One and Two Storey Buildings in Low Tech Environments: A Guide Book for Technicians and Artisans. Kanpur: National Information Centre of Earthquake Engineering, 2009

Schodek, Daniel L. Structures. New Delhi: PHI Learning Private Limited, 2014

Service, R and D Centre, New Bombay, 1987.

Sushil Kumar. T.B. of Building Construction, 19th ed. Standard Pub, Delhi, 2003.

Use of Bamboo and a Reed in Construction – UNO Publications

Watson, Donald. Time-Saver Standards for Building Materials and Systems: Design Criteria and Selection Data. New Delhi: Tata McGraw Hill Education Private Limited, 2009

Watts, Andrew. Modern construction handbook. New York: Springer, 2013

Chairperson
Board of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya, Indore

Chairperson
Faculty of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Controller of Examination
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Joint Registrar
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore



ARCH 604: Digital Techniques of Representation

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
SEC	SK	STUDIO	ARCH 604	DIGITAL TECHNIQUES OF REPRESENTATION				50	50	100			2	2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

ARCH 604: Digital Techniques of Representation

Course Educational Objectives (CEOs)::

overall nurturing of the student with issues in practice and field outside

The course shares an In-depth understanding of 3D modelling through digital software to enable the student to make effective audiovisual presentations, create three-dimensional models and visualization of interiors. The intent is to possess intermediate to advanced skills with improvement in the speed and quality of modelling.

Course outcomes (COs):

At the end of the course, students will be able to

The program equips you with both academic and practical knowledge to help navigate the fast-evolving world of the Visual Design and User Experience industry.

Expected Skills / Knowledge Transferred:

The program equips the world of the Visual Design and User Experience industry

Focus: Computer based Skills

3D modelling through digital software to enable the student to make effective audiovisual presentations, create three-dimensional models and visualization

Course Overview:

- Design as an expertise appeals to and applies to a wide range of professionals across roles and sectors. This program is ideal for Aspiring and practising designers, researchers, and Startup entrepreneurs: Select fresh graduates with exceptional potential aspiring to start their career in design

Course Contents:

Unit	Syllabus: Topic	Subtopic	Teaching Hours:
	Creating solid models and surfaces using 3d modelling software such as 3dsmax, Revit, Rhino etc. Developing Interior Views and simple designs, applying materials and creating rendered images through rendering software such as Lumion, VRay etc. Introduction to Animation.		
I.	Design Essentials & Design Thinking	Design Building Blocks ; Perceivable and Non-Perceivable Elements of Design ; Overview of principles of design basics Form and functionality correlation ; Overview of Design Process with Basics of Design Methods. Basic colour theories ;Gestalt Principles; Types and techniques of drawing methods and visualization ;Understanding various art materials, usage and visualization techniques ;Design drawing	8hrs
II.	Visual Thinking	Design Thinking and its correlation with visual and optical perspectives ; Dimensions of visual thinking: Drawings, Diagrams, Maps, Visual Composition, Narratives, History and Visuality, Researching the Visual	8hrs
III.	UX-UI Foundations	Overview of UX-UI Design ; User profiling and its importance in designing delightful products and experiences Deeper aspects of UX-UI ; Introduction, User Experience Design Research, Designing and Ideating, Foundations of UI, Prototyping, Final output	5hrs
IV.	Digital Storytelling	Mediums of photography, animation, film-making ;Composition and various storytelling techniques ; Creating a script, Storyboarding, Art Direction, Cinematography, Lighting, Sound, Editing; Understanding cinematic language and practising it through making a film.	5hrs
V.	Graphic Design and Visual Branding	Typography ; Publication Design ;Branding and Identity ;Information and Data Visualization	4 hrs

Sessional work:

Chairperson
Board of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya,Indore

Chairperson
Faculty of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Controller of Examination
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Joint Registrar
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore



ARCH 604: Digital Techniques of Representation

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
SEC	SK	STUDIO	ARCH 604	DIGITAL TECHNIQUES OF REPRESENTATION				50	50	100			2	2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Guidelines

Assignments /Tasks are to be set from the entire syllabus; The topic of the project is to be displayed on the Institute Notice Board fifteen days - a week time in advance OF the commencement of the classes

Continuous Evaluation shall be made of students' work based on various models, sketch assignments, and market surveys.

One Major And the rest minor tasks are to be set from the entire syllabus

Assignments:

Final Presentations and illustrations helpful for further design

Note:

Evaluation is to be done through viva voce by an external examiner appointed by the university at the Institute. Portfolios, after the university exam, shall be retained at the Institute level for the viva-voice

Suggested Readings:

- <https://iithyderabad.talents.com/vdux/faq.html#faq5>
- Oscar Riera Ojed, Lucast Guerre, Hyper-realistic Computer Generated Architectural Renderings.
- Giuliano Zampi Conway Lloyd Morgan, Virtual Architecture.
- Aidan Chopra, Rebecca Huehls, SketchUp For Dummies
- Bonnie Roskes, Modeling with SketchUp for Interior Design
- Daniel Tal, Rendering in SketchUp Inside Rhinoceros 5 Ron K.C. Cheng



ARCH 606: Urban Design

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
PC	AR	THEORY	ARCH 606	URBAN DESIGN	50	20	30			100	2			2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

ARCH 606: Urban Design

Course Educational Objectives (CEOs)::

Students will understand the fundamental concepts and theories of urban design and apply them in their design projects.

Course outcomes (COs):

- At the end of the course, students will be able to
 - To develop a conceptual understanding of Urban Design and contextual planning principles in the built environments
- Expected Skills / Knowledge Transferred:
 - To develop a conceptual understanding of the Urban contextual w.r.t human
- Focus: understanding of urban forms and spaces
 - The overall goal of the course is to help students formulate an understanding of urban forms and spaces. The city's HISTORY OF ARCHITECTURE will be examined. The contemporary needs of society and the role of spaces will be dealt with along with the need for design control.

Course Overview:

The overall goal of the course is to help students formulate an understanding of urban forms and spaces. The city's HISTORY OF ARCHITECTURE will be examined. The contemporary needs of society and the role of spaces will be dealt with along with the need for design control.

Course Contents:

Unit	Syllabus: Topic	Subtopic	Teaching Hours:
I.	Introduction:	Introduction: Introduction to Urban Design; Terminologies; Stakeholders & their role in the process of Urban Design; Urban Design as a Multidisciplinary field; Necessity & benefits of quality urban design; Scope, strategies, levels, legislation & scale of Urban Design. The emergence of urban design as a discipline – Concepts of urban design –Urban design theories of Gordon Cullen and Kevin Lynch People’s Perception:	4hrs
II.	Anatomy of an Urban Area	Anatomy of an Urban Area: Urban morphology & urban character; Elements & aspects of Urban Design; Built & Unbuilt spaces; Buildings, public spaces, streets & transport; pedestrianisation & streetscape; movement pattern; services; safety & sensitive urban development – defensible spaces. Nature and urban design - open spaces; Environment & urban design. Urban scale, Mass and Space; Understanding components of urban fabric; Making a Visual survey; Understanding the various urban spaces in the city and their hierarchy- Spaces for residential, commercial, recreational and industrial use: Special focus on streets; Expressive quality of built forms, spaces in the public domain	5hrs
III.	Urban Design Process:	Urban Design Process: Survey techniques; Evolution analysis; Townscape analysis; Perceptual structure; Permeability study (privacy & accessibility) & visual analysis. Constraints & possibilities; Designing in a context and site planning; Articulation of spaces; Multi-functionality, flexibility, adaptability; Generating alternatives; Formulation of issues for intervention.	8hrs
IV.	Study Of Urban Spaces Through History	A brief analysis of urban spaces in history – in the West (Greek, Roman, Medieval and Renaissance towns) and the East (Vedic, temple towns, medieval and Islamic towns); Relevance of the historical concepts in the present context; Critical analysis of some Indian cities like New Delhi, Chandigarh	8hrs

Chairperson
Board of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya,Indore

Chairperson
Faculty of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Controller of Examination
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Joint Registrar
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore



ARCH 606: Urban Design

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
PC	AR	THEORY	ARCH 606	URBAN DESIGN	50	20	30			100	2			2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

- V. Application of Urban Design 5hrs
- Application of Urban Design: Examples of good urban design; Urban design in history, aspects of heritage and historical continuity; Applications of urban design principles in existing developments as well as in news proposals; Theories & protocols of Urban Design -New Urbanism; Case studies of modern & contemporary urban interventions.
- Renewal, Redevelopment And Formulating Urban Design Policies: Understanding urban renewal and the need for it, Scope, challenge and Implementation methods; Public participation; Townscape policies and urban design guidelines for new developments- Case studies
- Urban Design Problem: Conducting an urban design survey, Analysis of data, Formulating urban design guidelines for an area - practical problem solving

Sessional work:

Guidelines

Emphasis should be laid on understating building evolution and form. The continuous evaluation shall be made of students' work based on various models, assignments and sketching

Assignments /Tasks are to be set from the entire syllabus; The topic of the project is to be displayed on the Institute Notice Board fifteen days - a week time in advance OF the commencement of the classes

Continuous Evaluation shall be made of students' work based on various models, sketch assignments, and market surveys.

One Major And the rest minor tasks are to be set from the entire syllabus

Assignments:

Simple exercises in urban design exercise using elements, Studio exercises emphasizing the relationship between built form and outdoor areas, and site planning issues. design of a neighbourhood open space (area of 2000 to 3000 sq. metres)

Note:

Evaluation is to be done through viva voce by an external examiner appointed by the university at the Institute. Portfolios, after the university exam, shall be retained at the Institute level for the viva-voice

Suggested Readings :

- Gordon Cullen, The Concise townscape- The Architectural Press,
- Kevin Lynch, Image of the city -,
- Paul D. Speriregon, The architecture of town and cities - The MIT Press,
- Cliff Moughtin, Urban design – Ornament and decoration, Bath Press,
- Cliff Moughtin, Urban design – street and square, Bath Press,-
- Paul Zucker Town and square, Arthur B Gallion The urban pattern -, CBS publishers,
- Raymond J Curran. Architecture and the urban experience - Van Nostrand Reinhold Company,
- Kulbhashan Jain, an Indian city in the arid West - Aadi Centre,
- A.K.Jain, Indian megacity and economic reforms - Management Publishing Company



ARCH 607: Structural Design -III

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
BS& AE	TE	THEORY	ARCH 607	STRUCTURAL DESIGN III	50	20	30			100	2			2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

ARCH 607: Structural Design -III

Course Educational Objectives (CEOs)::

To create skills among students to apply the knowledge gained regarding structural design in an applied project and to make buildings safe against natural/ manmade disasters

Course outcomes (COs):

At the end of the course, students will be able to

- Explain the concept of indeterminate structure and its application in construction.
- Outline the types of indeterminate structures and explain various methods of analysis.
- Analyze different indeterminate structures and compare their structural behavior.
- Outline the basic design criteria for disaster-resistant structures
- Prepare working drawings for a project and resolve complex aspects in the buildings with appropriate materials and design details.
- to impart skills related to the preparation of drawings meant for construction work on the site and to improve the students’ ability to detail.

Expected Skills / Knowledge Transferred:

Focus: Structural Design

Course Overview:

The focus of the course is to impart skills related to the preparation of drawings meant for construction work on the site and to improve the students’ ability to detail.

To impart training in the preparation of working drawings for buildings with specific reference to the code of practice as per IS Code No. 962 of 1969 and incorporating specifications as complementary to the working drawings.

To sensitize the students in preparing finer design details required for buildings.

The student shall prepare a report consisting of the Detailed Structure Design of a building considering all safety factors including fire, earthquake, cyclone, floods, etc.

Report being prepared in bound form with drawings attached.

Course Contents:

Unit	Syllabus: Topic	Subtopic	Teaching Hours:
I.	Overview	Working Drawing, of a project.the design of the structure of a project from the foundation to the final structural plans of slabs beams and columns and structural drawings	8 hrs
II.	Details	• Detailed Structural Design & Drawings of a Public /Residential Building, (R.C.C. frame structure) with emphasis laid on practical design considerations.	8 hrs
III.	disasters design safety factors from	• Earthquake Resistant Design. • Introduction to Codal provision, IS- 4326 and IS- 1893 for Earthquake Resistant Design of Buildings.	8 hrs
IV.	disasters	• Earthquake Resistant provisions for Brick Masonry& R.C.C. Buildings.	6 hrs

Sessional work:

Guidelines

Assignments /Tasks are to be set from the entire syllabus; The topic of the project is to be displayed on the Institute Notice Board fifteen days - a week time in advance OF the commencement of the classes

Continuous Evaluation shall be made of students' work based on various models, sketch assignments, and market surveys.

One Major And the rest minor tasks are to be set from the entire syllabus

Assignments:

Students shall prepare at least two structural drawing sets and design the structures, one for a small

Chairperson
Board of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya,Indore

Chairperson
Faculty of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Controller of Examination
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Joint Registrar
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore



ARCH 607: Structural Design -III

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
BS& AE	TE	THEORY	ARCH 607	STRUCTURAL DESIGN III	50	20	30			100	2			2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

residence and one for a large building than the other

Evaluation is to be done through viva voce by an external examiner appointed by the university at the Institute. Portfolios, after the university exam, shall be retained at the Institute level for the viva-voice

Note:

Suggested Readings:

- IS -456 CODEBOOK
- IS -800 CODEBOOK
- IS- 4326 CODEBOOK
- IS- 1893 CODEBOOK
- Rani Vazi, "RCC, Khanna Publishers New Delhi. 2000
- Jain A.K., "RCC, Lakshmi Publication (P) LTD



ARCH 608: Specification, Estimation, Costing, Budgeting & Valuation

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
SEC	SK	THEORY	ARCH 608	SPECIFICATIONS , ESTIMATION , COSTING , BUDGETING AND VALUATION	50	20	30	20		100	2			2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

ARCH 608: Specification, Estimation, Costing, Budgeting & Valuation

Course Educational Objectives (CEOs)::

To understand and impart the knowledge of estimate costing budgeting and valuation

Course outcomes (COs):

At the end of the course, students will be able to

- Choose Methods of Estimation, Measurement Units.
- Develop Costing of Material, Labour, etc. & Rate Analysis.
- Develop Specification of materials, Specification of workmanship & Specification Writing.
- Identify Types of Tenders & Contracts.

Expected Knowledge / Skills Transferred: / Techniques of estimating and costing and writing specifications related to building construction.

Focus: estimating , costing and writing specifications Skills / The course deals with various methods of quantity surveying, rate analysis of buildings and valuation and specifications for different materials used.

Course Overview:

The course deals with various methods of quantity surveying, rate analysis of buildings and valuation and specifications for different materials used.

Course Contents:

Unit	Syllabus: Topic	Subtopic	Teaching Hours:
I.	Introduction	Quantity Surveying:	2 hrs
II.	Estimation	Detailed Building Estimation:	4 hrs
III.	Detailed estimation	Detailed estimation for load-bearing structures framed structure (ground floor only) Example and exercise in obtaining all items from excavation to finishes. Preparing approximate estimates for services like water supply, plumbing, electrical work, mechanical equipment and air conditioning. (For residential buildings).	4 hrs 10hrs
IV.	Rate analysis	Rate analysis:	
V.	Valuation	Valuation – Introduction – state the purposes of the valuation of the building explain the terms, market value, book value, capital cost, capitalized cost, and years of purchase, list out various methods of estimating the depreciation of building properties, calculate the value of the property by different methods. Specifications:	10hrs

Sessional work:

Guidelines Assignments /Tasks are to be set from the entire syllabus; The topic of the project is to be displayed on the Institute Notice Board fifteen days - a week time in advance OF the commencement of the classes
Continuous Evaluation shall be made of students' work based on various models, sketch assignments, and market surveys.

Assignments: One Major And the rest minor tasks are to be set from the entire syllabus
Site Studies – with a major minor project detailed estimation and rate analysis to be done as a project.

Note: Evaluation is to be done through viva voce by an external examiner appointed by the university at the Institute. Portfolios, after the university exam, shall be retained at the Institute level for the viva-voice



Shri Vaishnav Vidyapeeth Vishwavidyalaya
Shri Vaishnav institute of Architecture
 Choice Based Credit System (CBCS) Scheme in the light of NEP-2020 by COA
B. ARCH (2021-26)

ARCH 608: Specification, Estimation, Costing, Budgeting & Valuation

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
SEC	SK	THEORY	ARCH 608	SPECIFICATIONS , ESTIMATION , COSTING , BUDGETING AND VALUATION	50	20	30	20		100	2			2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Suggested Readings :

- Datta, B.N.** Estimating and Costing in Civil Engineering: Theory and Practice, 23rd ed. UBS Pub. Distributors Ltd., New Delhi, 1993.
- The bride, G.S.** Estimating and Costing, 2nd ed. Dhanpat Rai and Sons, Delhi, 1982.
- Rangwala, S.C.** Valuation of real Properties, 6th ed. Charotar Pub. 6 House, Anand, 2003.
- Standard Specification and rates**, Government of Andhra Pradesh, government press, Hyderabad
- Indian Standards Institution.** National Building Code of India 1983. Indian Standards Institution, New Delhi, 1984.
- Leers, Jack.** Engineering Construction Specification.
- Macey, W. Frank.** The specification in Detail, 5th ed. Technical Press Ltd, London, 1955.
- Lewis, R. Jack.** Building Construction Specifications. Prentice-Hall, Inc., New Jersey, 1975.
- Govt. of Maharashtra.** Standard Specifications, Government Press, Nagpur, 1972.
- M. Chakraborti,** Estimation, Costing, Specification and Valuation in Civil engineering.
- PWD** Specifications of Tamil Nadu State Government
- CPWD** Specifications of Government of Ind

Chairperson
Board of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya, Indore

Chairperson
Faculty of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Controller of Examination
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Joint Registrar
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore



ARCH 609: Core Elective I

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
PC	AR	THEORY /STUDIO	ARCH 609	CORE ELECTIVE I				50	50	100			2	2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

ARCH 609: Core Elective I

CORE ELECTIVE I	
6 sem	609.1 Colour in Architecture
	609.2 Culture & Architecture
	609.3 Environmental Design
	609.4 MOOC : Architecture 101(Nothingness-Place-Space(Iversity))

Course Educational Objectives (CEOs):

overall nurturing of the student with issues in practice and field outside

Course outcomes (COs):

At the end of the overall nurturing of the student with issues in practice and field outside

course, students will

be able to

Expected Skills / better grooming than just books and theories.

Knowledge

Transferred:

Focus: Manual Skills The creative electives provide an opportunity to express talents that are different from architecture but related to imagination, visualization & creation. They offer hands-on experience of unique ingenuity & workmanship. The essence of a creative domain can be achieved by exploring different materials, techniques, and processes; developing creative products; and finishing & presenting the product for the concepts that evolved. The outcome will be through portfolio & presentations. As Per Pool Electives Choices Stage I odd semester pool

Course Overview:

The following is a representative list of Institute projects: Seminars, Tutorials/ additional classes for any course, Guest Lectures, Workshops, Providing knowledge to support students being sensitive to design;

Sessional work:

Guidelines

The topic of the project is to be displayed on the Institute Notice Board fifteen days in advance OF the commencement of the classes

Assignments /Tasks are to be set from the entire syllabus; The topic of the project is to be displayed on the Institute Notice Board fifteen days - a week time in advance OF the commencement of the classes

Assignments:

One Major And the rest minor tasks are to be set from the entire syllabus

Evaluation is to be done through viva voce by an external examiner appointed by the university at the Institute. Portfolios, after the university exam, shall be retained at the Institute level for the viva-voice

Note:

Evaluation: Stages: Proposal and on final submission of the paper /DOCUMENTATION of places visited Students contribute to the topic/area is of critical importance. Evaluation is to be done through viva voce, Portfolios after the university exam shall be retained at the Institute level for the viva-voice

ARCH 609.1 : Colour In Architecture

Course Educational Objectives (CEOs):

Chairperson
Board of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya,Indore

Chairperson
Faculty of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Controller of Examination
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Joint Registrar
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore



ARCH 609: Core Elective I

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
PC	AR	THEORY /STUDIO	ARCH 609	CORE ELECTIVE I				50	50	100			2	2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

The students will have knowledge and significance of colour in architecture

Course outcomes (COs):

- At the end of the course, students will be able to
 - The student will develop sensitivity towards colour
 - The student will develop the capacity for Critical appraisal of the colour used in buildings
- Expected Skills / Knowledge Transferred:
 - Define the role, importance, and impact of colour in architecture
 - Demonstrate colour as a medium of sensory perception and its physiological, and psychological effect in architecture.
 - Analyze and explain the effect of different colours in the design to create specific effects in spaces
 - to convey the importance of colour and its influence on human behaviour
- Focus: Colour in architecture
 - Define the role, importance, and impact of colour in architecture

Course Overview:

The student will be able to understand the impact of colour in architecture;

Course Contents:

Unit	Syllabus: Topic	Subtopic	Teaching Hours:
	Theory and systems, role and effects of colour and texture in spaces.; Analysis of space using monochromatic or achromatic abstractions in Two Dimension; Behaviour and effects of colour compositions		
I.	Introduction	Introduction to Colour in Architecture , Understanding colour, colour wheel, and types of colour , Colour in architecture	6hrs
II.	Role of colour	Role of colour in Architecture Impact of colour on architecture Theory and systems of using colour in architecture Role and effect of colour and texture in spaces Colour Symbolism	6hrs
III.	Analysis of spaces w.r.t colour	Analysis of Space w.r.t. colour Analysis of space using monochromatic or achromatic abstractions in 2-Dimension Analysis / Difference in space using colour Examining the difference in space with and onward different colours	6hrs
IV.	Colour as a Sensory Tool	Colour in Architecture as a Sensory Tool Perception of colour in space Architectural psychology Visual Ergonomics Psychosomatics	6hrs
V.	Colour Psychology	Colour Psychology in a spatial context Behaviour and effects of colour composition Impression of colour and how it supports the function of a space	6 hrs

Sessional work:

Chairperson
Board of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya,Indore

Chairperson
Faculty of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Controller of Examination
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Joint Registrar
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore



ARCH 609: Core Elective I

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
PC	AR	THEORY /STUDIO	ARCH 609	CORE ELECTIVE I				50	50	100			2	2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Guidelines

Assignments /Tasks are to be set from the entire syllabus; The topic of the project is to be displayed on the Institute Notice Board fifteen days - a week time in advance OF the commencement of the classes
 Continuous Evaluation shall be made of students' work based on various models, sketch assignments, and market surveys.

Assignments:

One Major And the rest minor tasks are to be set from the entire syllabus
 Emphasis should be laid on understating building evolution and form. The continuous evaluation shall be made of students' work based on various models, assignments and sketching

Note:

Evaluation is to be done through viva voce by an external examiner appointed by the university at the Institute. Portfolios, after the university exam, shall be retained at the Institute level for the viva-voice

NOTE:-Emphasis should be laid on understating building evolution and form. The continuous evaluation shall be made of students' work based on various models, assignments and sketching

SUGGESTED READINGS:

As relevant

Holtzschue, Linda. (2017). Understanding colour: an introduction for designers. John Wiley & Sons (New Jersey)
 Chijiwa, Hideaki. (1987). Colour harmony: a guide to creative colour combinations. Rockport Pub. Inc. (Massachusetts)
 Gerritson, Frans. (1975). Theory and practice of colour: a colour theory based on laws of perception. Studio Vista Pub. (London)
 Renner, Paul. (1964). Colour: order and harmony. Reinhold Book Corp. (New York)
 Feisner, Edith Anderson (2014). Colour studies. Fairchild Books (New York)
 Porter, Tom Ed. (2009). Colour for architecture today. Taylor & Francis (New York)

ARCH 609.2: Culture & Architecture

Course Educational Objectives (CEOs)::

Understanding of the various issues of culture involved in design solutions. Students of architecture have to be sensitized to various cultural aspects such as fine arts and the performing arts of a particular country and have to understand the symbolism, patterns and forms that manifest themselves in the architecture of that place.

Course outcomes (COs):

At the end of the course, students will be able to	sensitizing students to culture-specific architecture and space planning
Expected Skills / Knowledge Transferred:	To understand the techniques of incorporating culture and sensitizing students to culture-specific architecture and space planning
Focus: architecture and space –place relationships	To impart knowledge about this relatively new field, born out of the synthesis between architecture and Culture

Course Overview:

To establish the linkages between the culture of a particular race of people and its manifestation in the architecture of that region.

Course Contents:

Unit	Syllabus: Topic	Subtopic	Teaching Hours:
	Culture	<ul style="list-style-type: none"> Cultural influences in ancient India: architecture & 	30 hrs

Chairperson
Board of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya,Indore

Chairperson
Faculty of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Controller of Examination
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Joint Registrar
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore



ARCH 609: Core Elective I

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
PC	AR	THEORY /STUDIO	ARCH 609	CORE ELECTIVE I				50	50	100			2	2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

&Architecture

culture in China & Cambodia: Japanese traditional architecture & contemporary expressions: traditional art &architecture of Tamilnadu, Madhya Pradesh: traditional art & architecture of Kerala :

Sessional work:

Guidelines

Assignments /Tasks are to be set from the entire syllabus; The topic of the project is to be displayed on the Institute Notice Board fifteen days - a week time in advance OF the commencement of the classes

Continuous Evaluation shall be made of students' work based on various models, sketch assignments, and market surveys.

One Major And the rest minor tasks are to be set from the entire syllabus

Assignments:

Emphasis should be laid on understating building evolution and form. The continuous evaluation shall be made of students' work based on various models, assignments and sketching.

Note:

Evaluation is to be done through viva voce by an external examiner appointed by the university at the Institute. Portfolios, after the university exam, shall be retained at the Institute level for the viva-voice

Suggested Readings:

As relevant House, Form & Culture, Amos Rappoport, Prentice Hall Inc, 1969.

ARCH 609.3: Environmental -Human Design

Course Educational Objectives (CEOs)::

- to the study of the planning, design, and management of the built environment and its effects on those using it.

Course outcomes (COs):

At the end of the course, students will be able to

To impart knowledge about this relatively new field, born out of the synthesis between architecture and behavioural psychology

to the study of the planning, design, and management of the built environment and its effects on those using it.

Expected Skills / Knowledge Transferred:

Human-Environment Relations, Human Behavior and Design

Focus: Human-Environment Relations, Human Behavior and Design

Understanding the multiplicity of living patterns, activities, and geometric patterns in space and designing for the same. Knowledge about the behavioural design process, techniques and design contexts.

Course Overview:

The Field of Design and Environmental Analysis brings together some of the world's leading experts in interior design, human factors and ergonomics, facility planning and management, and environmental psychology into a single field and department.

Course Contents:

Unit	Syllabus: Topic	Subtopic	Teaching Hours:
		<ul style="list-style-type: none"> to the study of the planning, design, and management of the built environment and its effects on those using it. 	

Chairperson
Board of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya,Indore

Chairperson
Faculty of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Controller of Examination
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Joint Registrar
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore



ARCH 609: Core Elective I

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
PC	AR	THEORY /STUDIO	ARCH 609	CORE ELECTIVE I				50	50	100			2	2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

- I. **Design:** design + health
design for interaction ; emerging technology for design; sustainable design studies ; Human Behavior and Design ; human behaviour and design
- II. **Human-Environment Relations** Human-Environment Relations : environmental psychology and human factors , facility planning and management, sustainable design studies
- III. **Introduction to Behavioral Architecture** **Introduction** to Behavioral Architecture Designing for pattern and activities, Archetypal activities/Archetypal spaces: planning of public spaces concerning age groups and activities
- IV. **Building Behavioral Interface** – Building – Behavioral Interface Geometry of spaces, their meaning & connotations, Social organization of buildings, Behavioral assumptions in the planning of new towns and neighbourhoods, borrowed space
- Behavioral Design Process** Behavioral Design Process organization chart, affinity matrices, pictograms: behavioural design process model, design context, activity/adjacency relationship, evaluation chart, Area use frequency program, simultaneous use, community utilization map, occupancy load profile, defensible space, EDRA etc.,
- V. **Urban Environment Patterns** Urban Environment Patterns of activity in time and space, the ecology of a neighbourhood park and playground, cross-cultural issues, social & psychological issues in the planning of new towns, environmental perceptions and migration, awareness and sensitivity to open spaces, environmental cognition

Sessional work:

Guidelines

Assignments /Tasks are to be set from the entire syllabus; The topic of the project is to be displayed on the Institute Notice Board fifteen days - a week time in advance OF the commencement of the classes

Continuous Evaluation shall be made of students' work based on various models, sketch assignments, and market surveys.

One Major And the rest minor tasks are to be set from the entire syllabus

Assignments:

Emphasis should be laid on understating the Principle that continuous evaluation shall be made of students' work based on various models, assignments and sketching

Note:

Evaluation is to be done through viva voce by an external examiner appointed by the university at the Institute. Portfolios, after the university exam, shall be retained at the Institute level for the viva-voice

Chairperson
Board of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya,Indore

Chairperson
Faculty of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Controller of Examination
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Joint Registrar
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore



ARCH 609: Core Elective I

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
PC	AR	THEORY /STUDIO	ARCH 609	CORE ELECTIVE I				50	50	100			2	2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Suggested Readings:

As relevant

Burnette, C. (1971). Architecture for human behaviour. Philadelphia Chapter: AIA
 Canter, D. and Lee, T. (1974). Psychology and the built environment. New York: Halstead Press.
 Christopher, A. et al. (1977). A Pattern Language. New York: Oxford University Press.
 Clovis, H. (1977). Behavioural Architecture. McGraw Hill.
 Lynch, K. (1973). The image of a city. Cambridge: MIT.
 Sanoff, H. (1991). Visual Research Methods in Design. New York: John Wiley & Sons.
 Zeisel, J. (1984). Enquiry by design: Tools for Environment-Behaviour Research. Cambridge: Cambridge University Press.
 Zeisel, J. and Eberhard, J. P. (2006). Inquiry by Design - Environment/Behaviour/Neuroscience in Architecture, Interiors, Landscape and Planning. New York: W. W. Norton & Company.

ARCH 609.4 MOOC

Course Educational Objectives (CEOs)::

overall nurturing of the student with issues in practice and field outside

Course outcomes (COs):

At the end of the course, students will be able to

- The student will learn different methods and techniques to represent an idea & thoughts
- The student will have various representation techniques at her disposal
- The student will be able to represent a design idea 3 dimensionally
- Use of presentation software

Expected Skills / Knowledge Transferred:

- Dexterity; Knowledge of materials and their properties; craft skills; visualization skills;

Focus: Manual Skills

- The student will learn different methods and techniques to represent an idea & thoughts
- The student will have various representation techniques at her disposal
- The student will be able to represent a design idea 3 dimensionally
- Use of presentation software

Course Overview:

The following is a representative list of what may :
 Tutorials/ additional classes for any course on online mode of platforms, Provides knowledge to support student being sensitive to design;

- a paper presentation

Course Contents:

Unit	Syllabus: Topic	Subtopic	Teaching Hours:
•	The creative MOOC provide an opportunity to access a different form of architecture related to imagination, visualization & creation. They offer the experience of unique ingenuity, theory or workmanship. The essence of the creative domain can be achieved by exploring different materials, techniques, and processes; developing creative products/theories; finishing & presenting the product for the concepts evolved. The outcome will be through portfolio & presentations. Where these workshops or MOOCs help them explore the different topics relevant to individual		



ARCH 609: Core Elective I

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
PC	AR	THEORY /STUDIO	ARCH 609	CORE ELECTIVE I				50	50	100			2	2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

interests and in the palette of choices for the semester

Sessional work:

Guidelines

Assignments /Tasks are to be set from the entire syllabus; The topic of the project is to be displayed on the Institute Notice Board fifteen days - a week time in advance OF the commencement of the classes

Continuous Evaluation shall be made of students' work based on various models, sketch assignments, and market surveys.

One Major And the rest minor tasks are to be set from the entire syllabus

Assignments:

Site Studies – Plot, site, land and regions, size and shape of the site, Analysis of accessibility, Topography, Climate, landforms, Surface Drainage, Soil, Water, Vegetation, Ecology, and Visual aspects.

Note:

Evaluation is to be done through viva voce by an external examiner appointed by the university at the Institute. Portfolios, after the university exam, shall be retained at the Institute level for the viva-voice



ARCH 610: Internship III

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50% OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30% OR 20%)	End Sem University Exam (50% OR 10%)	Teachers Assessment* (50% OR 10%)					
SEC	SU	INTERNSHIP	ARCH 610	INTERNSHIP III				50	50	100			2	2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

ARCH 610: Internship III

Summer Internship: 4-5 Weeks (6 Hours/Day)

Course Educational Objectives (CEOs):

To allow the student to see how classroom concepts and skills are professionally practised.

To expose students to aspects of landscape architecture, planning, and design that are best experienced in practice.

Course outcomes (COs):

At the end of the course, students will be able to

Gain an understanding of workplace dynamics, professional expectations, and the influence of culture on both.

Build proficiency in a range of business or industry skills appropriate to the field of the internship placement, including professional and intercultural communication through written, verbal, and non-verbal means. ; Refine and clarify professional and career goals through critical analysis of the internship experience or research project; Give academic value to the internship. ; Add an analytical dimension to the overall experience; Encourage a professional approach to academic work

Expected Skills / Knowledge Transferred:

Ability to translate skills and knowledge of architecture acquired at university into a professional setting.; Knowledge of the professional practice of architecture.; Increased skills in performing tasks in a professional office; Increased ability to communicate in a professional setting; Increased understanding of the social and ethical role of the architect; Advanced skills in using software applications in a professional context

Focus: Professional training

By the end of this course, students will be able to articulate a reflection and draw personal insights related to their own beliefs and worldviews about individuals and society, based on the cultural and professional dimensions of their experience, namely:

what makes their company succeed – or not – in its field, how it operates as a community and in the community, what main issues it has to face, both internally and on the market;

what it takes to work in/with other cultures (and/or languages) and to adapt to an unfamiliar environment to be part or at the service of a new community, how to approach cultural differences in their daily experience and what they can learn from them, both about themselves and others – as individuals but also as part of a global world;

what they can bring to a professional environment, how they can draw skills from experience and process challenges, how they can contribute to a company’s project and community ;

who they are as a result of this growing process, in terms of civic-mindedness, cultural awareness, professional goals, and personal aspirations.

Course Overview:

Students will develop professional skills & understanding.

Course Contents:

Unit Syllabus: Topic Subtopic

Teaching Hours:

This course provides an opportunity for students to experience a working environment in an architecture firm in which to observe and apply their knowledge and skills for the degree. Projects will be negotiated between the School and the host organisation, involving students in a variety of design stages from preliminary design, design development, documentation, and presentation to a client. Students may also be involved in meetings, clerical work and administration to gain insight into the day-to-day functioning of a business. ;

Chairperson
Board of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya,Indore

Chairperson
Faculty of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Controller of Examination
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Joint Registrar
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore



ARCH 610: Internship III

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
SEC	SU	INTERNSHIP	ARCH 610	INTERNSHIP III				50	50	100			2	2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

The course will be offered to students based on academic merit through a competitive application and interview process. Students must complete the course to the satisfaction of the host organisation and academic supervisor

- I **Analytical Approach** The general idea for this course is to encourage students to truly reflect on the varied subjects it covers, and not merely state facts and observations. The first crucial step for this consists in raising the right questions. Investigation (within the company, through research, through self-questioning) follows, allowing to find nuanced answers or further questions. Organized Outline This writing process is the opportunity to put into practice, a method consisting of organizing ideas in a structured outline. The format includes visible titles and subparts with explicit titles for all sections. Specific angles General Introduction The introduction will present the student’s background, motivations and initial goals for the internship.
- The Company and its Sector:** In this section, the student must show an insider’s understanding of the organization, not only through a clear description of the company, what it does/offers, and how it operates internally, but also through an analysis of its strengths and weaknesses, of the general context in which it operates, of the challenges it faces, of its identity as a community and position in a border community. It should NOT be written in the first person.
- The Intercultural Experience:** In this section, the student will account for his/her experience and understanding of cultural differences, both on a general scale, as a process of adjustment, and through specific examples related to human relationships, work environment and ethics, the vision of life or society and issues related to the sector.
- The Professional Experience:** In this section, the student will recount his/her internship experience in terms of missions and tasks, but also in terms of accomplishments, challenges, lessons, developed skills or competencies, and contribution to the community.
- General Conclusion** The conclusion will focus on the outcomes of this experience, how the student has evolved, what kind of professional they aspire to be and how this experience will impact future professional or personal choices. Assignments will be emailed as Microsoft Word documents. Methodological handouts and readings are available on Blackboard. Please note: it is the student’s responsibility to organize their time and respect deadlines.

Sessional work:

Guidelines

The place of the internship is to be finalised and displayed on the Institute Notice Board fifteen days in advance of the commencement of the vacation
 Internship: During the internship phase (last four to five weeks of the program), students will be working at their internship placement for around 30 hours a week, from Mondays to Saturdays

Employment Requirements and Internship Initiation Summary:

1. Minimum of 4-5 weeks (summer semester) of full-time work. For summer interns, this allows securing a position as late as June 1st, and working until fall classes begin. Note that internships may begin as early as the year schedules can be arranged, providing a 7-8 Weeks opportunity as part-time
2. Must be under the supervision of a graduate Architect or other design professional. Registered Architects, Engineers, and Certified Planners also qualify.
3. Submit 2 copies of the Internship Program Application to the Internship Coordinator, before starting the internship.

Assignments:

The student will maintain field observations/record books.

Chairperson
Board of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya,Indore

Chairperson
Faculty of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Controller of Examination
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Joint Registrar
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore



ARCH 610: Internship III

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
SEC	SU	INTERNSHIP	ARCH 610	INTERNSHIP III				50	50	100			2	2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

At least two exercises are to be done in the construction yard.

Each Unit should include a market survey and construction site to visit compulsorily with the studio working on sheets a minimum of 12 to 15 Nos A-1 Sheets the internship should be supervised by a licensed or registered design professional (LA, Architect, Planner, Engineer). However, the qualification as a graduate design professional is also acceptable. • For Design-Build settings, there must be another landscape architect on the staff (if not registered, then someone with an LA degree). Internship work must have a design/office component, preferably at least 50% of the time. Credit is not given for “build” work only.

Arboretum/Botanical Garden settings must be supervised by an LA or professional horticulturist. An office component is desirable, but if the internship involves outdoor training, etc., there should be no problem.

- With unusual internship opportunities, it’s required to talk with the Intern Coordinator ahead of time.
- If you are having trouble locating an internship, contact the Intern Coordinator. For year students and Grads: even if an internship has not been secured for the summer, advance enrolls. If an internship is not secured, an incomplete will be given in the fall, allowing an additional year to satisfy the requirements. If you fall in this category, talk to the Internship Coordinator.

- Intended primarily to give students office experience, the program is flexible enough to allow a balance of both in the field and the office situations, if appropriate. Positions involving only site construction or maintenance, while valuable in their own right, are not permitted for internship credit.

Evaluation is to be done through viva voce by an external examiner appointed by the university at the Institute. Portfolios, after the university exam, shall be retained at the Institute level for the viva–voce

Evaluation: Stages: Proposal and on final submission of the paper /DOCUMENTATION of places visited Students contribute to the topic/area is of critical importance. detailed out as per the academic calendar

a paper presentation on any subject of interest in the core or elective subjects.

The student needs to identify an area for research and in consultation with a guide propose first. On approval, this is to be developed through the summer and culminate as a research paper. Requirements (from students): Proposal, reviews, final presentation and paper.

a summer case study where the student has to select a built building by one of the architects and have a live document of the building and analyse the building and a word of the concept according to the architect.

Students are reminded that to maintain the academic integrity of all programs and courses, the university has a zero-tolerance approach to students offering money or significant value goods or services to any staff member who is involved in their teaching or assessment. Students offering lecturers tutors or professional staff anything more than a small token of appreciation is unacceptable, in any circumstances. Staff members are obliged to report all such incidents to their supervisor/manager, who will refer them for action under the university's student disciplinary procedures.

1 absence from a workshop = 1 point off the course's final grade

1 absence from work (internship placement) = 1 point off the course's final grade

more than 3 unexcused absences = f for the course

unsubmitted written work* = f (0 points) for the assignment in question

work handed in late = 1 point off the assignment per day

unsubmitted midterm evaluation = 2 points off the course's final grade

poorly filled out midterm evaluation = 1 point off the course's final grade

plagiarism = f (0 points) for the assignment in question

* past Friday – week 15 (11:59 pm), no written work will be accepted (grade for the assignment = 0).

Total length for all assignments combined: 15 pages in English General goal These written assignments will cover all aspects of the internship experience: the company, the sector,

Note:

Evaluation

Fraud Awareness

Attendance Penalties For This Course*

Written Work

Chairperson
Board of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya,Indore

Chairperson
Faculty of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Controller of Examination
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Joint Registrar
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore



ARCH 610: Internship III

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
SEC	SU	INTERNSHIP	ARCH 610	INTERNSHIP III				50	50	100			2	2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

the intercultural experience, and the individual professional development. The final result will be a comprehensive account of the experience and its impact. Each section must incorporate elements related to the student’s internship credits.

Requirements:

Submit at least bi-weekly reports during the internship (the form will be sent to the internship location, by the intern coordinator).

2. Paper – A 2-page, single-spaced, paper describing your experience, specifically discussing office structure, clients, responsibilities, and accomplishments, is due the first Monday of the Month.

3. An 8 1/2” x 11” graphic brochure describing your place of employment with appropriate contact information is due the first Monday of the Month.

4. Mentoring – Work with at least one student and assist them in focusing their search and acting as a resource. Identify students, contact them and meet with the Internship coordinator. Work with them to create a one-page plan by the first Monday of the Month.

5. Panel display – A panel will be assigned for you to create an interesting display describing your internship and place of employment. This will be up for 2 weeks beginning It is the responsibility of the student to display and remove it promptly.



ARCH 619: Elective – VI

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
SEC	SU	THEORY /STUDIO	ARCH 619	ELECTIVE- VI (POOL II)				50	50	100			2	2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

ARCH 619: Elective – VI

6 Sem	Elective VI
619.1	Reuse of building materials
619.2	Intelligent buildings
619.3	Design with Ferro cement
619.4	MOOC : Building Stories / Psychology Behind Designs; ACEDGE

Course Educational Objectives (CEOs):

overall nurturing of the student with issues in practice and field outside

Course outcomes (COs):

At the end of the overall nurturing of the student with issues in practice and field outside course, students will be able to

Expected Skills / better grooming than just books and theories.

Knowledge Transferred:

Focus: Manual Skills The creative electives provide an opportunity to express talents that are different from architecture but related to imagination, visualization & creation. They offer hands-on experience of unique ingenuity & workmanship. The essence of a creative domain can be achieved by exploring different materials, techniques, and processes; developing creative products; and finishing & presenting the product for the concepts that evolved. The outcome will be through portfolio & presentations. As Per Pool Electives Choices Stage I odd semester pool

Course Overview:

The following is a representative list of Institute projects: Seminars, Tutorials/ additional classes for any course, Guest Lectures, Workshops, Providing knowledge to support students being sensitive to design;

Sessional work:

Guidelines

The topic of the project is to be displayed on the Institute Notice Board fifteen days in advance OF the commencement of the classes

Assignments /Tasks are to be set from the entire syllabus; The topic of the project is to be displayed on the Institute Notice Board fifteen days - a week time in advance OF the commencement of the classes

Assignments:

One Major And the rest minor tasks are to be set from the entire syllabus

Evaluation is to be done through viva voce by an external examiner appointed by the university at the Institute. Portfolios, after the university exam, shall be retained at the Institute level for the viva-voice

Note:

Evaluation: Stages: Proposal and on final submission of the paper /DOCUMENTATION of places visited Students contribute to the topic/area is of critical importance. Evaluation is to be done through viva voce, Portfolios after the university exam shall be retained at the Institute level for the viva-voice

ARCH 619.1 : Reuse of building materials

Reuse of building materials	Course Outcomes At the end of the course, students will be able to –
	Apprise waste material as a resource for building construction
	Understand methods of reuse of materials
	Design and construct using recycled building materials
	Introduction ; Meaning of reducing, reusing & recycling ; Importance of reuse of material



Shri Vaishnav Vidyapeeth Vishwavidyalaya
Shri Vaishnav institute of Architecture
 Choice Based Credit System (CBCS) Scheme in the light of NEP-2020 by COA
B. ARCH (2021-26)

ARCH 619: Elective – VI

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
SEC	SU	THEORY /STUDIO	ARCH 619	ELECTIVE- VI (POOL II)				50	50	100			2	2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

- Waste Prevention ;Concept of waste prevention ;Resource Efficiency & Resource Efficient BuildingMaterials Case study and presentation to explain the same
- Construction and Demolition Recycling; Construction and Demolition Materials Recovery & Debris Analysis ; Recycling Economics ; Architectural Reuse i.e. Architectural Reuse, Design for Reuse Case study and presentation to explain the same
- Design from used materials ; Prepare design drawings & models from used materials • Large-scaled model of design ;Prepare installation
- Wann David. (1996). Deep Design: Pathways to a Livable Future. Washington: Island Press.
- Sim Van der Ryn and Stuart Cowen. (1996). Ecological Design. Washington: Island Press

ARCH 619.2: Intelligent buildings

- Course Outcomes** At the end of the course, students will be able to –
- Understand the concept of intelligent buildings.
 - Explore features of intelligent buildings and service systems.
 - Develop the capacity of Experiencing Space in Time & Motion.

Intelligent buildings

Intelligent building characteristics: - Features and benefits of intelligent buildings. - The anatomy of intelligent buildings. - Environmental aspect. - The marketplace and other driving forces behind the emergence of intelligent buildings.

Building automation systems & controls - Philosophy, system configuration, system modules, distributed systems, communication protocol and online measurements. - Fire protection, security and energy management. Control objectives. Sensors, controllers and actuators. Control system schematics system design. Microprocessor-based controllers & digital controls. Examples of sub-systems such as Digital - Addressable Lighting Interface (DALI)

Modern intelligent vertical transportation systems: -Sky lobby, double-deck lifts, twin lifts, advanced call registration systems, large-scale monitoring systems, applications of artificial intelligence in supervisory control, energy-saving measures related to lifting systems/escalator systems, and other modern vertical transportation systems such as gondola systems, materials handling systems, etc.

Communication and security systems: -Voice communication systems, local area network, wireless LAN, - Digital TV, CCTV, digital CCTV, teleconferencing, cellular phone system, and CABD. SMART. Data networking. Short- and long-haul networks. -Wideband network. Office automation. Public address/sound Reinforcement systems. Digital public address system. Modern security systems

Structured cabling systems: Characteristics and benefits. Standards, configurations and physical media. EMI/EMC issues, grounding problems. System design. Different Categories of cables.

Integrating infrastructure technologies and systems: The impact of information technology on buildings and people. Shared tenant services. Interaction and integration between building structure, systems, services, management, control and information technology.

Application & design software packages.

Horne R., Grant T., Verghese K.: LIFE CYCLE ASSESSMENT – Principles, Practice and Prospects, CSIRO PUBLISHING, Horne, Grant and Verghese 2009, Collingwood VIC 3066, Australia

Clements-Croome, Derek, Intelligent Buildings: An Introduction, Routledge, 2014

Shengwei Wang, Intelligent Buildings and Building Automation, Spon Press, 2010

Jim Sinopoli, Smart Building Systems for Architectures, Owners and Builders, Elsevier, 2010

P. Manolescu, Integrating Security into Intelligent Buildings, Cheltenham, 2003

A. Dobbeltstein, Smart Building in a Changing Climate, Techné Press, 2009

D. Clements-Croome, Intelligent Buildings: An Introduction, Routledge, 2014

Chairperson
Board of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya,Indore

Chairperson
Faculty of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Controller of Examination
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Joint Registrar
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore



Shri Vaishnav Vidyapeeth Vishwavidyalaya
Shri Vaishnav institute of Architecture
 Choice Based Credit System (CBCS) Scheme in the light of NEP-2020 by COA
B. ARCH (2021-26)

ARCH 619: Elective – VI

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50%OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30%OR 20%)	End Sem University Exam (50%OR 10%)	Teachers Assessment* (50%OR 10%)					
SEC	SU	THEORY /STUDIO	ARCH 619	ELECTIVE- VI (POOL II)				50	50	100			2	2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

- A. Oliviero, Cabling [electronic resource]: The Complete Guide to Copper and Fiberoptic
- Networking, John Wiley & Sons, 2014
- W.T. Grondzik, & A.G. Kwok, Mechanical and Electrical Equipment for Buildings, Wiley, 2015

ARCH 619.3 : Design with Ferro cement

Course Outcomes At the end of the course, students will be able to –
 Explore behavior and structural property of Ferro-cement
 Learn about the Ferro-cement structures from concept to actual construction
 Apply knowledge to design the Ferro-cement structures

Design with Ferro cement

Process of building structure Structure and Structure form What are Structure and its importance in Architecture? Structural form - solid, Surface, skeleton, Membrane, hybrid Structural form - in Nature Structural form - man-made Structural material strength, stiffness, shape

The broad categorization of structural system Structure types Membrane - Cable/membrane surface, cable nets, pneumatics Hybrids - Tension-assisted structures

States of stresses Vertical, Horizontal, Rational settlement and earthquake behavior

Basic requirements of structure Structural Element behaviour Tensile, compressive, shear, torsion, bending Model testing and discussion on why it fails?

Types of loads & supports Load on Structure Permanent – Temporary dead load, imposed load, thermal load, Dynamic load

Gargiani, R., & Bologna, A. (2016). The rhetoric of Pier Luigi Nervi. Forms in reinforced concrete and Ferro-cement. Andover: Routledge Ltd.

Ferro-cement: illustrated construction manual. (1971). Long Beach, CA: Romack Marine.

Nervi, P. L. (1956). Ferro-cement: its characteristics and potentialities. London: Cement and Concrete Association.

Yates, C. (1970). Ferro cement. Sydney.

Sandaker, Bjorn N. (2011) Structural Basis of Architecture, UK, Taylor & Francis

Charleson, Andrew., (2015) Structure as Architecture: Sourcebook for architects and structural engineers, London, Taylor & Francis

Schodek, Daniel L., (2014) Structures, New Delhi, PHI Learning Private Limited

Seward, Derek, (2014) Understanding structures: analysis materials design, London, Palgrave

Levy, Matthys, (2002) Why Buildings Fall: How Structures Fail, New York, W. W. Norton and Co.

Salvadori, Mario. Structure in Architecture. Englewood Cliffs, NJ: Prentice-Hall, (1963)

Deplazes, and Söffker. (2013) Constructing Architecture: Materials, Processes, Structures. Basel: Birkhäuser Verlag

Hunt, Tony. (2003) Tony Hunt's Structures Notebook. Oxford: Architectural

Muttoni, A. (2011) The Art of Structures: Introduction to the Functioning of Structures in Architecture. Abingdon, Oxford, UK: EPFL/Routledge

Salvadori, Mario, Saralinda Hooker, and Christopher Ragus. (1980) Why Buildings Stand Up: The Strength of Architecture. New York: Norton

Gordon, J. E. (1984) The New Science of Strong Materials, Or, Why You Don't Fall through the Floor. Princeton, NJ: Princeton UP

ARCH 619.4. MOOC

Course Educational Objectives (CEOs):

overall nurturing of the student with issues in practice and field outside

Course outcomes (COs):

At the end of the course, students will be able to

- Tell different types and techniques of collages and/or manages
- Illustrate the importance of collages and/or montages as a tool to represent and communicate ideas
- propose a collage/montage

Expected Knowledge / Skills Transferred: / better grooming than just books and theories.

Chairperson
Board of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya,Indore

Chairperson
Faculty of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Controller of Examination
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore

Joint Registrar
Shri Vaishnav Vidyapeeth
Vishwavidyalaya Indore



ARCH 619: Elective – VI

Course Core	Course Area	Course Typology	Course Code	Course Name	EXAMINATION SCHEME					TOTAL MARKS	TEACHING SCHEME/WEEK			CREDITS
					THEORY			STUDIO			L	T	S	
					End Sem University Exam (50% OR 40%)	Two Term Exam (20%)	Teachers Assessment* (30% OR 20%)	End Sem University Exam (50% OR 10%)	Teachers Assessment* (50% OR 10%)					
SEC	SU	THEORY /STUDIO	ARCH 619	ELECTIVE- VI (POOL II)				50	50	100			2	2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; S – Studio; C - Credit;

Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Focus: Manual Skills

The creative electives provide an opportunity to express talents that are different from architecture but related to imagination, visualization & creation. They offer hands-on experience of unique ingenuity & workmanship. The essence of a creative domain can be achieved by exploring different materials, techniques, and processes; developing creative products; and finishing & presenting the product for the concepts that evolved. The outcome will be through portfolio & presentations. As Per Pool Electives Choices Stage I odd semester pool

Course Overview:

The following is a representative list of what may :

Tutorials/ additional classes for any course on online mode of platforms, Provides knowledge to support student being sensitive to design;

- a paper presentation