



SHRI MATA VAISHNO DEVI UNIVERSITY
SCHOOL OF ARCHITECTURE & LANDSCAPE DESIGN
(Faculty of Engineering)

Sub Post Office, Katra-182320, Jammu & Kashmir, INDIA

Ref No.: SMVDU/SoALD/21/185

Dated: 4 August, 2021

Minutes of Meeting

Board of Studies (BOS) meeting was convened by the HoS, SoALD on 24 May, 2021 at 12:00 Noon through online Google Meet Link meet.google.com/cvj-qyzj-mzd to discuss the Agenda Items pertaining to the concerned BOS.

Following External Expert members were present:

- | | |
|------------------------------|----------------------------|
| 1. Ar. Sanjeev Maheshwari | External BOS Expert member |
| 2. Dr. Karamjit Singh Chahal | External BOS Expert member |

Following Internal BOS members were present:

- | | |
|------------------------------------|-----------------------|
| 1. Ar. Aditya K. Singh, HoS, SoALD | Chairman, BoS |
| 2. Ar. (Dr.) Rajeev Garg | Member |
| 3. Er. (Dr.) V.K. Dogra | Member |
| 4. Ar. Abhiney Gupta | Member Secretary, BoS |
| 5. Ar. Navin Gupta | Member |
| 6. Ar. Abhimanyu Sharma | Member |
| 7. Ar. Anoop Sharma | Member |
| 8. Ar. Vinod Kumar | Member |
| 9. Ar. (Dr.) Sourojee Dutta | Member |
| 10. Ar. Satyanshu Kumar | Member |

In the beginning of the meeting, the HoS apprised the External members about various milestones & laurels achieved by the school in the recent past and then the following agenda items were discussed and resolved over the meeting:

S.No	Agenda Item	Resolution
1	Ratification and approval of the recently modified and AAC approved syllabus pertaining to Fourth- and Fifth-year B.Arch. program which is applicable to Batch 2018 onwards from 2021-2022 session.	The External Expert members of the BOS expressed satisfaction towards the agenda point and hence the BoS approved the syllabus pertaining to Fourth and Fifth year B.Arch. program for its implementation from 2021-2022 session.
2	Proposal to form New syllabus in place of the recently modified syllabus of B.Arch. Program considering the New Education Policy (NEP) 2020 and CoA (Minimum Standards of Architectural Education) Regulations 2020 recommendations.	The External members expressed their views about the new syllabus for teaching B.Arch. program considering NEP 2020 and CoA (Minimum Standards of Architectural Education) Regulations 2020 and suggested to wait for the directions to be issued by CoA in this regard in relation to NEP 2020 so that necessary modifications can be incorporated. However, advised that the School/



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		Department of any autonomous University is still free to bring changes in its syllabus in order to improve the teaching-learning process. Thus, the BoS resolved that the preparations for the New Syllabus of B.Arch. program shall be initiated to make it effective from the session 2022-23. Also, as per CoA 2020 recommendations, the EXIT option and the equivalence of the courses shall also be looked into for the benefit of the laggard students.
3	Proposal to prepare P.G. syllabus for starting the P.G Program in SoALD, SMVDU.	The Chairman, BoS briefed about the proposal of introducing M. Arch. (Trans-disciplinary Design) program with trans-disciplinary approach in SoALD, SMVDU. The school shall collaborate with the University departments for trans-disciplinary teaching learning process to achieve vertical growth and to tap the need of trans-disciplinary professional Architect in the professional & research field. The BoS approved the initiative for preparation of the syllabus that would be effective from the session 2022-23.
4	Ratification of MoM of AAC	It is advised by external members that only those MoM of AAC should be discussed in BoS which pertains to major academic issues of the School. The day-to-day routine academic matters should be confined to AAC deliberations and should be approved by the Chair of AAC.

Meeting ended with vote of thanks to the Chair.

Member Secretary, BoS

37115
4.8.21

Chairman, BoS

Head / अध्यक्ष

School of Architecture & Landscape Design / वास्तुकला एवं भूदृश्य संरचना विद्यालय
Shri Mata Vaishno Devi University / श्री माता वैष्णो देवी विश्वविद्यालय
KATRA, Jammu & Kashmir (INDIA) / कटरा, जम्मू व कश्मीर (भारत)



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Ref No.: SMVDU/SoALD/

Dated: 12 May, 2021

Minutes of Meeting

An online faculty meeting of Academic Affairs Committee (AAC) was conducted on 11 May, 2021 at 12:00 Noon through Google Meet link to discuss the various issues pertaining to the School.

Following members were present;

1. Ar. Aditya K.Singh, HoS, SoALD	Convenor AAC
2. Ar. (Dr.) Rajeev Garg	Member
3. Er. (Dr.) V.K. Dogra	Member
4. Ar. Abhiney Gupta	Co-Convenor AAC
5. Ar. Navin Gupta	Member
6. Ar. Abhimanyu Sharma	Member
7. Ar. Anoop Sharma	Member
8. Ar. Vinod Kumar	Member
9. Ar. (Dr.) Sourojee Dutta	Member
10. Ar. Satyanshu Kumar	Member

The following points were discussed and resolved over the meeting:

S.No.	Point/ Agenda Item	Resolution
1	Extension of Practical Training semesters of the Batch-2017 and Batch-2018.	The Practical training (Semester-VII) of the Batch 2017 which was due in July 2020 was already delayed due to last year's covid-19 wave and thus it was proposed to conduct their practical training in Jan 2021. But due to ongoing COVID situation, it is further extended to July 2021. Again, since the situation is still persisting, therefore it is proposed to further extend it to Jan 2022. Similarly, the Practical training of Batch 2018 (Semester-VII) is also affected and hence postponed to Jan 2022 keeping in view the current covid-19 scenario in the country. Therefore, the batch 2017 shall register for Semester X and the batch 2018 shall register for Semester VIII respectively in July 2021. Further, CoA advisory shall be perused for the modalities of the Practical training as and when received.
2	Postponement of Thesis schedule of final year Batch-2016	Regarding Thesis submission and jury of final year Batch 2016, the Thesis coordinator stressed upon the postponement of the Thesis schedule owing to COVID situation which may be intimated after getting necessary approval. All the faculty supported the same.
3	Final Review of the New Syllabus of fourth and fifth year of the B.Arch. program.	The new syllabus pertaining to fourth and fifth year B.Arch., which was prepared much in advance after lot of deliberations and discussions with faculty members over various faculty meetings though few faculty members has not participated owing to their respective



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		reservations. Despite that, majority of the faculty members duly participated & worked generously and hence was finally presented for the last review. The structure & the content was finalised and accepted. However, the copy of the prepared syllabus shall be circulated for any last minute observation, if any, before the review of BoS members. The observation shall only be considered subject to the duly documented justification and approval of HoS.
4	Introducing M. Arch. program in SoALD	The HoS very well presented the proposal of the introduction of M. Arch. program in SoALD along with due factual reasonings. The school shall offer M. Arch. (General) program with an option to pursue Thesis major in transdisciplinary area which shall be beneficial to the career of the aspirant as well as and the society at large. SoALD has proposed to generate Trans-disciplinary research by collaborating with the other departments of the University like Energy Management, Business, Economics, Biotechnology, Mechanical, Civil, Electrical etc. through the conduct of the PG program. The comprehensive exercise for the same shall commence from July 2021 by seeking advisory from PG qualified faculty & practitioners and shall be completed by Dec 2021.
5	Modalities for the Major Examination of continuing students.	Regarding the examination of continuing batches, the modalities has been circulated by the University Exam Section and were duly accepted. However, HoS advised to create two separate links on LMS for conducting MCQs (Section-A) and Essay type questions (Section-B) respectively in order to minimise the opportunity of the use of unfair means by the students. The maximum time shall be 15 minutes to be allotted to attempt MCQs only. Such approach shall ensure the seriousness of the exam in more effective manner.
6	Postponing of the Schedule of Jury	Faculty members agreed upon the postponement of the jury schedule after the Major exam schedule for all the batches for which due approval shall be sought accordingly.

Meeting ended with vote of thanks to the chair.

Sd-

Co-Convenor AAC

Sd-

Head - SoALD

ALE 5916			Disaster Mitigation & Management				Pre Requisites		Nil	
Version R-02							Co-requisites			
L	T	S/P	C	Minor Duration	Major Duration	Internal Marks	Minor-I Marks	Minor-II Marks	Major Marks	Total Marks
2	1	0	3	1.5 Hours	3.0 Hours	10	20	20	50	100

COURSE OUTCOMES:

After successful completion of this course, students shall be able to;

- Understand the disaster management as cyclic process.
- Apprise natural disasters & factors that causes them.
- Appreciating strategies for disaster prevention and management.

COURSE CONTENTS

Unit-I: Disaster types, characteristics and their causes (10 Contact Periods)

Understanding of disasters, hazard and its classification, vulnerability, capacity, risk. Types of Disaster (natural and manmade): to understand in detail for the cause, adverse effects, distribution patterns, mitigation measures of Earthquake, Fire, Cyclone, Flood, Landslide, Tsunami etc. Disaster Management cycle. Disaster occurrence in the world, plate tectonics, Multi hazard maps in India, Case Studies to understand above mentioned disasters (National as well as international) occurred in the past & their inferences.

Unit-II: Elements of disaster resilient building design (10 Contact Periods)

Building shapes, Architectural features and design of building in seismic zones. Indian Seismic Codes. Different types of Building such as structures of - Brick Masonry, Stone Masonry, Reinforced concrete etc. Flood & Cyclones: Design of building for flood and cyclone zones. Disaster safe construction practices for different types of hazards.

Unit-III: Disaster management, mitigation and preparedness (08 Contact Periods)

Disaster management, mitigation and preparedness; techniques of monitoring and design against the disasters Management issues related to disaster, mitigation through capacity building, legislative responsibilities. various role players in disaster management – Disaster Management Act, guidelines NDMA, SDMA, NGOs / CBOs and NDRF; Community Based Disaster Preparedness (CBDP), Disaster Risk Mitigation; Disaster Preparedness Forecasting and early warning systems for various types of disasters; pre-disaster risk and vulnerability reduction.

Unit-IV: Post disaster recovery and rehabilitation (08 Contact Periods)

Post Disaster Management and Cross Cutting Issues, Post disaster management; rehabilitation and reconstruction of disaster affected areas; disaster related infrastructure development. Urban, disaster mitigation; safe hill area development guidelines and coastal zone regulations for safe habitation; human settlement planning for consequence mitigation of global warming and climate change. Remote-sensing and GIS applications in real time disaster monitoring, prevention and rehabilitation.

SUGGESTED BOOKS

1. Building Configuration and Seismic Design-Christopher Arnold.
2. Handbook of Planning security Planning & Design-Peter S. Hopf.
3. S. Rajagopal – Problems of housing in cyclone prone areas – SERC, Vol.2, Chennai, 1980.
4. Disaster Management In India GoI-UNDP Disaster Risk Reduction Programme (2009-2012)
5. National Disaster Management Plan, 2016. National Disaster Management Authority, Government of India. May 2016, New Delhi

School of Architecture and Landscape Design
SYLLABUS of **B. Arch.** Fifth Year (2018 Batch onwards)

ALE5933			Housing				Pre-requisites			
							Co-requisites			
L	T	S/P	C	Minor Duration	Major Duration	Internal Marks	Minor-I Marks	Minor-II Marks	Major Marks	Total Marks
2	0	2	3	1.5 Hours	3.0 Hours	10	20	20	50	100

COURSE OUTCOMES

After successful completion of this course, students will be able to;

1. Understand about the causes and consequences of housing problems in India.
2. Analyze the various issues involved in urban and rural housing and look for various solutions at urban and rural level.
3. Apply the knowledge about the planning and design solutions for low income groups and sensitize the end-user.

COURSE CONTENTS

Unit 1: Introduction: Housing as Architecture basic need, housing as an integral part of urban & rural development, housing problem and statistic, etc. Housing Surveys and Standards: Sources of Data and information, methods and techniques of housing surveys, housing standards, etc.

Unit 2: Housing Design and Policies: Qualitative and quantitative demands of housing, housing estimates, various government policies and programmes. Objectives & regulations by various Housing Agencies.

Unit 3: Housing Cooperative and Financing Agencies: Objectives and general principles of cooperatives, self-help housing, financing agencies and their functions etc.

Unit 4: Housing Design Study: Introduction to methods and approaches to housing design. Study analysis and design of housing schemes. Redevelopment of slums and squatter settlements.

Teaching Methodology: Illustrated Lectures in the form of presentations, short videos, and case study.

SUGGESTED REFERENCES

1. Babur Mumtaz and Patweikly, Urban Housing Strategies, Pitman Publishing, London, 1976.
2. Geoffrey K.Payne, Low Income Housing in the Development World, John Wiley and Sons, Chichester, 1984.
3. John F.C.Turner, Housing by people, Marison Boyars, London, 1976.
4. Miglani O.P., Urban Housing in Developing Economy.
5. Jain A.K., Urban Housing and Slums.
6. HUDCO guidelines , MoHUA

School of Architecture and Landscape DesignSYLLABUS of **B. Arch.** Fifth Year- IX semester (2018 Batch onwards)

ALE5923			Architectural Conservation (Studio Elective-I)				Pre-requisites					
							Co-requisites					
L	T	S/P	C	Minor Duration	Major Duration	Internal Assign ment	Minor-I Marks	Minor-II Marks	Major Marks	Internal Assess ment	Total Marks	
2	0	2	3	1.5 Hours	3.0 Hours	10	20	20	50	100	200	

COURSE OUTCOMES

After successful completion of this course, students will be able to

1. Understand significance of historical precincts into mainstream development.
2. Familiarise with heritage assets & conservation processes.
3. Encourage community outreach towards participatory approach.

COURSE CONTENTS

Unit-I: Introduction: Appreciating historical precincts, cultures & identifying the tangible & intangible heritage in relation to archaeology, cultural landscape & heritage tourism.

(2 Contact hours)

Unit-II: Conservation principles & practices : Rationale for conservation, Interventional practices such as reuse, rehabilitation, retrofitting, revitalization, preservation & redevelopment. Regulations & Role of ASI, INTACH, UNESCO & other allied bodies.

(3 Contact hours)

Unit-III: Conservation science, technology & management: Diagnosis & remedial measures for historic structures & fabric. Technological measures for distressed buildings. Maintenance & monitoring systems for management of heritage.

(3 Contact hours)

Unit-IV: Conservation Studio: Case study & conservation interventions based on integrated approach for safeguarding cultural resources.

(4 Contact hours)

Teaching Methodology: A combination of class-room interactions, assignments and lab/studio projects.

SUGGESTED BOOKS

1. Marie Lousie Stig Sorensen, John Carman. Heritage Studies: Methods and Approaches
2. Sengupta, Gautam (ed.). Archaeology in India: Individuals, ideas and institutions, 2009
3. Stolton, Sue (ed.) & Dudley, Nigel(ed.). Arguments for protected areas: Multiple benefits for conservation and use, 2010
4. Forsyth, Michael. Material and Skills for Historic building Conservation, Blackwell Publishing, 2008.
5. Watt,D & Swallow P., Surveying Historic Buildings, Donhead, 1996
6. Glendinning, Miles., The Conservation Movement: a History of Architectural Preservation(ROUTLEDGE 2013)
7. Feilden, B.M. & Jokilehto, J., Management Guidelines for World Cultural Heritage Sites. 2nd ed. Rome: 1998
8. Singh, Rana P.B., ed., Heritagescapes and Cultural Landscapes, 2011
9. Beckmann, Poul., Structural Aspects of Building Conservation
10. John R. Pendlebury., Conservation in the Age of Consensus, Routledge, 2009

School of Architecture and Landscape DesignSYLLABUS of **B. Arch.** Fifth Year- X semester (2018 Batch onwards)

ALE5924			Building Simulation (Optional Open Studio Elective-IV)				Pre-requisites				
							Co-requisites				
L	T	S/P	C	Minor Duration	Major Duration	Internal Assignment	Minor-I Marks	Minor-II Marks	Major Marks	Internal Assessment	Total Marks
2	0	2	3	1.5 Hours	3.0 Hours	10	20	20	50	100	200

COURSE OUTCOMES

After successful completion of this course, students will be able to;

1. Understand building performance role for effectivity of architectural design.
2. Analyse the contextual performance of building functions.
3. Apply the simulation tools for evaluation of thermal building performance.

COURSE CONTENTS

Unit-I: Introduction: Review of topics on thermal comfort, Classification of climate zones, Review of traditional architecture. (3 Contact hours)

Unit-II: Heat flow calculations in building : Unsteady heat flows through walls, roof, windows etc., Direct heat gains through windows, Convective gains/losses, air exchange rates, Gains from people, appliances etc., Air conditioning load calculations. (3 Contact hours)

Unit-III: Passive and low energy concepts and applications: Passive cooling/heating concepts, Building form and orientation, Internal and external shading devices, Ventilation, passive concepts for composite climates, evaporative and nocturnal cooling, Earth-air tunnel, sky-therm system, Solar chimney-based hybrid system. (3 Contact hours)

Unit-IV: Building performance simulation: Use of different building simulation software for modelling of non-air conditioned spaces such as TRNSYS, ECOTECT, EQUEST etc. (3 Contact hours)

Teaching Methodology: A combination of class-room interactions, assignments and lab/studio projects.

SUGGESTED BOOKS

1. Givoni, B., 1969. Man, Climate and Architecture. Elsevier Publishing Company Ltd.
2. Krishnan,A.,Baker,N.,Yannas,S.,Szokolay,S.,(Eds)2001.ClimateResponsiveArchitecture- A Design Handbook for Energy Efficient Buildings, Tata McGraw-Hill, New Delhi
3. N. K. Bansal, Gerd Hauser, Gernot Minke, 1994. Passive building design: a handbook of natural climatic control, Elsevier Science B.V.
4. Givoni, B., 1994. Passive and Low Energy Cooling of Buildings, John Wiley & Sons Inc., New York
5. Karlen, M and Benya, J., 2004. Lighting Design Basics, John Wiley & Sons Inc., New York
6. Richard R Janis and William K Y Tao, 2008. Mechanical and Electrical Systems in Buildings, Prentice Hall
7. TERI, 2004. Sustainable Building Design Manual, Vols 1 & 2.
8. Ministry of Power, 2017. Energy Conservation Building Code.

ALL 5514			Professional Practice				Pre Requisites		Nil	
Version R-01							Co-requisites			
L	T	S/P	C	Minor Duration	Major Duration	Internal Marks	Minor-I Marks	Minor-II Marks	Major Marks	Total Marks
2	0	0	2	1.5 Hours	3.0 Hours	10	20	20	50	100

Settings & contact hours

COURSE OUTCOMES:

CO1: To understand the various aspects of architectural profession.

CO2: To emphasize on Architect's role in governance for creation of a sustainable built environment and the onus they owe to the profession, to their clients and to the society.

CO3: To understand the implications of various laws and regulations for Architectural practice in India.

COURSE CONTENTS

Unit-I: Role of Regulatory bodies:

Importance of Architecture Profession, role of Architects in the society, Architects' Act 1972, registration of architects, relations with clients, contractors, consultants, public authorities. Types of works which can Architect can take; conditions of engagement.

Role of Council of Architecture and Indian Institute of Architects and allied regulatory bodies, functions, constitution, and rules & regulations. Code of professional conduct & Ethics, Social responsibility.

Unit-II: Practicing Architecture:

Scope of work of an architect, Schedule of services, Terms & conditions of engagement, letter of appointment. Private practice, types of offices/firms, responsibilities & liabilities. Architectural Competitions procedure. Tender, Contract, Scale of charges, applicable building byelaws, municipal approvals, development controls, zoning regulations, National Building Code, Master plan, Zonal plan.

Unit-III: Arbitration, Valuation and Easements

Need/Scope of Arbitration, Indian Arbitration act, arbitrators, umpires, appointment, conduct, powers, duties, Sole/Joint arbitrators, Arbitration procedure, awards & impeachment. Techniques/elements of valuation, factors affecting valuation of land/building, compensation on acquisition, lease renewal/extension, standard rent, Cost of sale, Purchase & Mortgage. Easements, types, rights & features; acquisition/extinction/protection; Interim/permanent/ mandatory injunctions. dilapidation, insurance, estate development. Consumer protection act.

Unit-IV: Office Organization & Management

Architect's office management, organization structure, responsibility towards employees, consultants & associates, maintenance of accounts, filing of records, balance sheet, Types of taxes. Copy rights and patenting, correspondence, documentation, drawings, conducting meetings, Clerk of works, inspection, works measurement, certificate of payment to contractors, applicable legislations, registration of properties, stamp duty; insurance for new work and additions; insurable value of property, claim for damages.

Teaching Methodology:

SUGGESTED BOOKS

1. Apte, V. S. (2008); Architectural Practice and Procedure, Pune
2. Chappell, D. M. And Willis, A. (2005); The Architect in practice. 9th Ed. Oxford

3. *Prof. S.C.Garg, Dr.YogeshK.Garg*; Professional practice in Architecture
4. *Madhav Deobhakta*; Architectural Practice in India
5. *Council of Architecture* ; Professional handbook

DRAFT for REVIEW

ALL 4524			Green Buildings				Pre-requisites		nil	
							Co-requisites		nil	
L	T	S/P	C	Minor Duration	Major Duration	Internal Marks	Minor-I Marks	Minor-II Marks	Major Marks	Total Marks
2	1	0	3	1.5 Hours	3.0 Hours	10	20	20	50	100

COURSE OUTCOMES

After successful completion of this course, students will be able to;

1. Understand concept and significance of green buildings.
2. Understand various parameters of green building rating systems.
3. Address environmental issues with due consideration to occupant's health and wellbeing while carrying out architectural design.
4. Apply energy saving measures as recommended by Energy Conservation Building Code.

COURSE CONTENTS

Unit-I: Introduction to Green Buildings

(09 Contact Periods)

Concept, definition, history and evolution, benefits/significance of green buildings.

Study of features which make the building green. Sustainability and green buildings.

Examples of green buildings in India and the world (case studies to be presented by the students).

Unit-II: Green Building Rating Systems

(09 Contact Periods)

Introduction to various rating systems (LEED, GRIHA, CASBEE, IGBC etc)

Study of green building rating criteria of IGBC for new buildings with holistic approach to create environment friendly buildings, through architectural design, water efficiency, effective handling of waste, energy efficiency, sustainable buildings, and focus on occupant comfort & well-being. Mandatory requirements and credit points, various levels of rating, process of certification.

Unit-III: Principles and Design Strategies

(09 Contact Periods)

Efficient use of resources (land, water, energy and materials), waste reduction and handling.

Passive heating and cooling systems. Use of renewable energy and its generation on site, Eco-friendly building materials, Case studies on green buildings designed with passive cooling techniques (to be presented by the students).

Unit-IV: Energy Conservation Building Code

(09 Contact Periods)

Building typologies, Energy Performance Index (EPI), mandatory and prescriptive requirements for building envelop (like fenestrations, daylighting, roof and walls), thermal comfort systems and controls, lighting, electrical and renewable energy systems.

Teaching Methodology: Faculty shall impart teaching by lecture & presentations; students shall prepare reports/presentations on Case Study and/or Green Building Ratings as an individual or group exercise.

SUGGESTED BOOKS : ADD 2 MORE REFERENCES

1. IGBC Green New Buildings Rating System (3.0 or latest version).
2. Energy Conservation Building Code of India (2017 or latest version).
3. Handbook of Green Building Design and Construction (ISBN 978-0-12-385128-4).

ALT 4511			Professional Training				Pre Requisites	Nil
Version R-02							Co-requisites	
L	T	S/P	C	Training Duration	Major Duration	Sessional Assessment	External/Jury Assessment	Total Marks
0	0	0	20	18 weeks	NA	100	100	200

Course Objectives:

- To learn ethics and interpersonal skills for interaction with co-workers, clients, consultants, contractors, service providers, industry representatives and other allied stakeholders.
- Understand the real time Office Management and Site Management practices.
- To enhance knowledge, attitudes and skills towards better practical employability in the profession.

Guidelines for course coordinator

1. Criteria for selection of a Training Office

- The said architect shall have at least 10 years (registered with COA or governing authority of the country) of working experience and the organization should have a variety of projects. In case of a 'Public-sector' / 'State or Central Government office / Academic institute or a multinational organization', there shall be a separate wing for architectural consultancy works.

2. Duration of Professional Training

- The duration of practical training is *18 weeks*. The dates to start and finish the practical training shall coincide with the starting and finishing dates of the respective semester, in accordance to academic calendar of Shri Mata Vaishno Devi University, Katra. However, the candidate can start his/her practical training before the said schedule i.e. during summer vacations.

3. Joining and Leaving the Training Office

- The trainee is expected to join the training office on the scheduled date, and submit his 'Joining Report' on the letterhead of the office duly signed by Head of the Training to the Institute in the Performa prescribed for the purpose.
- The trainee must obtain a '*professional training completion report (confidential)*' and "*professional training completion certificate*" duly signed by Head of the Training and get relieved from the office at the end of the training period or before changing the 'Training Office'. The trainee must submit these Certificates along with the *Log Book and employer feedback form*.

4. Change of Training Office

- In case of any emergency, a trainee may be permitted to change the training office/place of training once only during the entire period of training. He/she shall inform the Head of School/Faculty in- charge and seek prior permission for such a change.
- The total duration of the practical training shall be the sum of the period of stay in different offices. It shall be in conformity with the 'Duration of Training' as prescribed in the 'Ordinances, Scheme of Examination & Syllabus' of the Shri Mata Vaishno Devi University, Katra.

5. Final Submissions

After completion of practical training, the trainee is required to submit the following to the parent Institute.

- 'Professional training completion report (confidential)' and "*professional training completion certificate*", of successful completion of the practical training, from the architect, in original copies.
- 'Daily Diary' with details of the day to day work record, which will be returned to the

student after assessment and viva voce examination.

- 'Log-Book' in the prescribed format, duly filled up and signed by the 'Supervisor'.
- 'Training report' supplemented with the prints and documents of work done during practical training. The prints and documents shall be obtained with the permission of the Training office and shall be duly signed by the 'Supervisor'.
- Training report shall be submitted in two original copies. One copy shall be returned to the student after assessment of sessional marks and viva voce examination. The second copy shall be retained by the Training and Placement Cell/library. These shall be presented in A-3 or larger size with binding.

6. Failures

- In case the student/trainee remains unsuccessful or fails in completing his/her Professional Training or viva-voce examination, the matter shall be dealt with in accordance with the relevant 'Rules and Regulations' of the Shri Mata Vaishno Devi University, Katra

COMPOSITION OF JURY PANEL FOR EVALUATION / SESSIONAL OF PROFESSIONAL TRAINING

- Practical training shall be evaluated by external panel. The external panel shall consist of at least two members, one senior practicing architect and one senior academician. The evaluation shall be coordinated by practical training internal coordinator. The assessment shall be made out of 100 marks (60 marks for Understanding of work, 30 marks for Training report, 10 marks for Log-Book and Daily Diary) by the panel.
- Sessional assessment report (confidential) having a weightage of 100 marks, shall be obtained on a prescribed format, from the training office. The report should be signed by the head of respective office and shall be submitted to Practical training coordinator in a confidential sealed envelope.

School of Architecture and Landscape DesignSYLLABUS of **B. Arch.** Fourth Year VIII Semester (2018 Batch onwards)

ALU 4521			Architectural Design-VII				Pre-requisites		Nil	
							Co-requisites		Nil	
L	T	S/P	C	Minor	Major Duration	Internal / Assignment	Internal Assessment	External Assessment/Jury	Major Marks	Total Marks
2	0	6	5	NA	12 hours	50	50	50	50	200

COURSE OUTCOMES

After successful completion of this course, students will be able to;

1. To understand architectural design in its larger context of the city / urban area, design buildings with contextual approach.
2. To analyse the design principles & site planning for large scale projects.
3. To apply site and building level services, parking, fire-fighting etc. and the other essential components of high-rise building design.

COURSE CONTENTS

The design studio intends to provide knowledge and understanding of larger context while designing for an area / campus / complex within an urban setting. The studio attempts to develop large scale campus planning as well as architectural design of buildings within it. The studio is also focused to design buildings with contemporary technology, multi-storied building with use of elevator, escalator, centralized HVAC system, building management system (BMS), fire-fighting measures, multi-level parking and other associated services. The studio can be carried out as a two-stage project: one with the master plan for the given area / campus planning and the second could be a detailed design of one of the identified high-rise buildings. Topics like Mixed-Use Development in a TOD Zone, IT Hubs, High-Rise High Density Housing, Hospital in an urban setting etc. can be introduced as design problems of this studio.

SUGGESTED BOOKS

1. Pandya, Yatin; (2007); Elements of Spacemaking, Mapin Pub., ISBN: 1890206792, 9781890206796.
2. Alexander, Christopher; A Pattern Language, Oxford University Press, London.
3. Ching, Francis D.K.; Architecture: Form, Space and Order, Van Nostrand Reinhold Co., New York.
4. Bachelard, Gaston; The Poetics of Space, Penguin Classics, ISBN-13: 978-0143107521.
5. Unwin, Simon; (2003); Analysing Architecture, Psychology Press, ISBN: 041530685X, 9780415306850.
6. Curtis, William J.R.; (1996); Modern Architecture since 1900, Phaidon Press, ISBN: 0714833568, 9780714833569.
7. Marriage, Guy; (1st Edition, 2019); Tall: The Design and Construction of High-Rise Architecture, Routledge, ISBN: 9781138350762.
8. Mehta, Jaimini; (2011); Rethinking Modernity: Towards Post Rational Architecture, Niyogi Books, ISBN: 9788189738723.
9. Eisele, Johann; Kloft, Ellen; (Illustrated Edition, 2003); High-Rise Manual: Typology and Design, Construction and Technology, Birkhauser Publishers for Architecture, ISBN: 9783764302740.
10. Ascher, Kate; (Illustrated Edition, 2013); The Heights: Anatomy of a Skyscraper, Penguin Books, ISBN: 978-0143124085.

School of Architecture and Landscape DesignSYLLABUS of **B. Arch.** Fourth Year VIII Semester (2018 Batch onwards)

ALU4522			Advanced Building Const. Technology				Pre-requisites						
							Co-requisites						
L	T	S/P	C	Minor Durati on	Major Durat ion	Int. Mark s	Minor- I Marks	Minor- II Marks	Major Mark s	Assig nmen t	Int. Ass.	Ext. Ass. / Jury	Total Marks
2	0	4	4	1.5 Hours	3.0 Hours	30	20	20	50	10	50	50	200

COURSE OUTCOMES

After successful completion of this course, students will be able to

1. Understand the system to be adopted for construction of large span / advanced structure in pre-fabrication along with various roofing products used for construction work.
2. Familiarize with the various construction equipment required for speedy and effective construction works.
3. Analyze and apply the advanced building construction on site practices.

COURSE CONTENTS

Unit 1: Pre-fabrication: Forms of Steel for Industrial construction & Roofing products. Classification, Availability, Characteristics and Uses of forms of steel and importance of steel roofing products. Industrial Construction Structural Steel Works - Portal Frame Construction, North-light truss and Lattice girder roof, with various roof coverings (corrugated metal sheets as roof panels- first to fourth generation sheets), Castellated Beams, Grillage footings, Vierendeel Girder construction.

(3 Contact hours)

Unit 2: Pre-stressed/Post-tension: Advanced Structural Concretes. Materials for Pre-stressing Structural Light weight Concrete, High Strength Concrete-Classification, Availability, Characteristics and Uses. Classification, Availability, Characteristics and Uses. Pre-stressed Concrete Introduction, methods of pre-stressing, types of post-tensioning systems. Types of pre-stressed concrete structures- Beams (Short span, medium span, long span), Girders & Joists. Slabs (one way, two way, flat slabs, hollow core slabs, planks), Channel sections, folded plate structures. Composite construction.

Unit 3: Advanced Formwork : Forms & Materials for Speedy Construction Reinforcement types, RMC. Advanced Formwork systems - Table Form / Flying Form, Column Formwork Systems, Horizontal Panel Systems, Vertical Panel Systems, Jump Form, Slip Form & Tunnel Form. Classification, Availability, Characteristics and Uses.

Unit 4: Advanced Construction Technology: Mass production, transportation, storage and handling of materials. Characteristics, performance and application of mechanized construction equipment.

Teaching Methodology: Illustrated Lectures in the form of presentations, seminars, and Introduction of study material on Construction technology along with modelling. Site visits and construction yard activities.

SUGGESTED REFERENCES

1. McKay, W.B., "Building Construction Volume I, II, III and IV", Longmans, 1955.
2. Ching, Francis D. K. and Adams, Cassandra, "Building Construction Illustrated", Wiley and Sons, 2000.
3. The Construction of Buildings – Barry Volume I, II, III and IV
4. Chudley, Roy, "Construction Technology", Longman, 2005.

5. Building Construction_Mitchell (Elementary and Advanced)
6. Prestressed Concrete Structures: P. Dayaratnam Prestressed Concrete: J. R. Libby

School of Architecture and Landscape DesignSYLLABUS of **B. Arch.** Fourth Year VIII semester (2018 Batch onwards)

ALU 4524			Urban Design				Pre-requisites		Nil	
							Co-requisites		Nil	
L	T	S/P	C	Minor Duration	Major Duration	Assignment Marks	Minor-I Marks	Minor-II Marks	Major Marks	Total Marks
2	0	2	3	1.5 Hours	3 Hours	10	20	20	50	100

COURSE OUTCOMES

After successful completion of this course, students will be able to;

1. To understand urban context and its various components.
2. To analyse urban dimensions to appreciate architecture in its larger context of city / region.
3. To apply urban design principles & objectives while designing large scale architectural project within an urban context.

COURSE CONTENTS**Unit 1: Introduction and Key Terminologies –****(Contact Hours: 6)**

Definition of Urban Design, Scope of the subject, Integration of Urban Design with Urban Planning and Architecture, Relevant terminologies used in the practice of Urban Design.

Unit 2: Evolution of Urbanity –**(Contact Hours: 9)**

Evolution of settlements through historical era – Urban Design elements, principles and characteristics in evolution of towns and cities of different era, Understanding the underlying growth pattern of these towns, Case examples of Ancient Towns, Temple Towns, Medieval Towns, Colonial Towns, New Towns, Contemporary Towns, Global Cities in Indian context.

Unit 3: Urban Design Elements, Principles and Techniques –**(Contact Hours: 9)**

Elements of 'The Image of The City', city shape, size, density, pattern, grain, texture, movement network, urban activity, orientation, vista, skyline and various non-physical aspects, Principles related to urban scale, urban space, urban mass, urban activity and circulation, Various techniques for the preparation of Urban Design project proposal.

Unit 4: Urban Design Survey Techniques –**(Contact Hours: 6)**

Methods of documenting an urban area, Various survey techniques involved in Urban Design, Aspects covered under physical survey & visual survey, Preparation of Visual Survey Maps and Sketches.

Unit 5: Urban Design Projects & proposals**(Contact Hours: 6)**

Different categories of Urban Design projects – Urban Renewal, Urban Redevelopment, Urban Rehabilitation / Regeneration, Urban Conservation, Green Field and Brown Field projects, Case Study of such projects.

SUGGESTED BOOKS

1. Spreiregen, Paul D.; (1965); Urban Design: The Architecture of Towns and Cities, McGraw-Hill.
2. Lynch, Kevin; (1960); The Image of the City, MIT Press.
3. Sim, David; (2019); Soft City: Building Density for Everyday Life, Island Press.
4. Lang, Jon; (2005); Urban Design: A Typology of Procedures and Products, Routledge.
5. Gehl, Jan; (2013); Cities for People, Island Press.
6. Carmona, Matthew; (2010); Public Places, Urban Spaces: The Dimensions of Urban Design, Routledge.
7. Meeda, Bally; (2nd Edition, 2018); Graphics for Urban Design, ICE Publishing, ISBN: 978-0727761712.
8. Urban Design Associates; (2004); The Architectural Pattern Book: A Tool for Building Great Neighbourhoods, W. W. Norton & Company, ISBN: 978-0393731347.
9. Gindroz, Ray, Urban Design Associates; (Illustrated Edition, 2002); The Urban Design Handbook: Techniques and Working Methods, W. W. Norton & Company, ISBN: 978-0393731064.

(DISSERTATION SYNOPSIS TEMPLATE)

TITLE OF DISSERTATION

STAGE-I

1.0 AIM

*An Architectural Dissertation ‘aim’ expresses the intention or an aspiration of the **research based study**; it summarises in a single sentence what you hope to achieve at the end of the project.*

2.0 OBJECTIVES

OBJECTIVES are expressed as the specific study and/or analysis goals & deliverables (which are within your ‘AIM’ statement) that you intend to achieve. At least three objectives need to be defined.

3.0 SCOPE & LIMITATIONS

*The **scope & limitations** of a **study** explains the extent to which the study area will be explored in the work and specifies the parameters within which the **study** will be operating. Define point wise only.*

4.0 METHODOLOGY

*METHODOLOGY is how you intend to work towards achieving your specific goals or **OBJECTIVES** step by step (Prepare Flow chart).*

5.0 INTRODUCTION

***Introduction** is an initial pitch of an idea; it sets the scene and puts the **Dissertation** in context. The **introduction** should be designed to create interest in the reader about the topic (by clarifying need of the study). **Introduction** should also contain probable outcomes of the study. (A paragraph of not more than 150 words)*

STAGE-II

6.0 DATA COLLECTION , LITERATURE AND CASE STUDY

CASE STUDY TO BE TARGET

*At least **THREE** case studies must be undertaken to sieve out the comparative learnings from pre-existing contextual cases. These could be **LIVE, WEB or PUBLISHED** nature. At least one case study may be LIVE. The selection of Cases must be linked to objectives. Give the PICs/Views of the selected cases.*

STAGE-III

7.0 ANALYSIS, CONCLUSION AND INFERENCES

Analyze you dissertation study to achieve your objectives and conclude about your study. Try to find out your own inference which can be summarized as outcomes of the whole study.

Module 1: SYNOPSIS (to be completed by 3 rd week of February 2021)
Module Contents The synopsis will be a brief introduction of the proposed Dissertation
Module 2: DATA COLLECTION , LITERATURE AND CASE STUDY (to be completed by 1 st week of April 2021)
Module Contents The students have to conduct literature study and case studies – live & literature, to form a basis for their study. Literature Review: It includes gathering the relevant standards and other information from all the available sources related to their dissertation topic. Case Studies: The students have to conduct live and literature studies of similar projects related to their dissertation. Instead of mere documentation of these projects, information must be collected about the requirements; salient design features clearly stating the positive and negative aspects of the design.
Module 3: ANALYSIS, CONCLUSION AND INFERENCES (to be completed by 2 nd week of May 2021)
Module Contents Analyze your dissertation study to achieve your objectives and conclude about your dissertation. Try to find out your own inferences which can be summarized as outcomes of the whole study.

Writing and structuring your dissertation

1. An introduction to your topic.
2. A literature review that surveys relevant sources.
3. An explanation of your methodology.
4. An overview of the results of your research.
5. A discussion of the results and their implications.
6. A conclusion that shows what your research has contributed

School of Architecture and Landscape DesignSYLLABUS of **B. Arch.** Fifth Year X semester (2018 Batch onwards)

ALD 5521			Architectural Thesis (Sem-X)			Pre-requisites	Total Marks
						Co-requisites	
L	T	S/P	C	Major Duration	Internal Assessment	External/Jury Assessment	
0	0	26	13	NA	300	300	600

COURSE OUTCOMES

After successful completion of this course, students will be able to;

1. Combine the systematic/methodological learning from various stages of study and analysis in design process towards culmination of an informed architectural design.
2. Communicate the ideas clearly using writing, verbal and visual presentation along with demonstration of self-reliance when working independently while synthesising creativity and technical knowledge.
3. Deliver an architectural design project, responsive to the context and program requirements by applying design processes/dissertation learnings and various interdisciplinary inputs applicable to the thesis title objectives.

COURSE CONTENT

Architectural Thesis is the final stage of learning Architecture. Through thesis project, students are expected to demonstrate the understanding of a systematic design process which includes identification of project requirements, site study and analysis, case studies, programming, schematic design development & deliverance. It provides the students with an opportunity to culminate the nine semesters of architectural education by demonstrating the body of knowledge and skills gained along with professional training. The main objective of this course is to provide an opportunity to the students to handle a complete design project of their own choice in a practicable manner using their creative abilities. This will prepare them for addressing the challenges in the profession.

Module 1: SYNOPSIS

The synopsis will be a brief introduction of the proposed thesis project and has to be submitted by the student at the end of the previous semester.

Module 2: CASE STUDY, SITE ANALYSIS AND AREA PROGRAMMING

The students have to conduct literature study and case studies – live & literature, to gain an overview for their respective design project.

Literature Review: It includes gathering the relevant standards and other information from all the available sources related to their thesis topics that will help them during the later stages of their thesis programme.

Case Studies: The students have to conduct live and literature studies of similar projects. Instead of mere documentation of these projects, information must be collected about the requirements; salient design features clearly stating the merits & demerits of the case studies.

Site Analysis: The purpose of the site analysis is to record and evaluate information on the site and its surroundings, and to use this evaluation in the design response. The site analysis should identify issues that will influence the development of design in order to make an informed response to both site opportunities and constraints, to provide a good quality living environment, and to respect, acknowledge and improve the character of the area.

Area Analysis and Programme: The students are required to prepare a comparative statement of the various available design standards, areas analysis through the various case studies, so that the

area requirements for the various functional spaces for the proposed building can be finalized. This area programme should be an exhaustive list and will form the basis for the design process to be undertaken in upcoming stages.
Module 3: SCHEMATIC DESIGN
Conceptual framework: The students have to express their ideas generated on the basis of the studies (case studies / literature studies / area analysis) conducted so far in the form of conceptual drawings, sketches and models. The emphasis during this stage shall be on the basic concept explaining the principal ideas / thought process / aspirations of the student for the project in terms of planning / built form / massing of different components, leading to the design, through sketches / 3D images / block models etc.
Module 4: DESIGN FINALIZATION
Detail drawings: The schematic drawings presented in the previous module needs to be detailed out as per the comments/ suggestions received from the guides and the reviewers. The detailed drawings as per the final area programme with due consideration to structural and service requirements of the building needs to be presented at this stage.
Module 5: PRE-FINAL DESIGN
Pre-final drawings: The students are required to submit the final drawings (monochrome), views, models, etc. incorporating the comments received in the previous reviews, to be presented before a panel of internal / external reviewers.
Module 6: FINAL THESIS SUBMISSION& EXTERNAL JURY
Final rendered drawings & Models: The students are required to present all the deliverables (drawings, model, report, etc.) complete in all respects as per the comments and suggestions received from thesis guide and various review members before the final review panel.

Teaching Methodology: The thesis project shall be guided by respective assigned guides by referring tutorials on one to one basis, on related topics such as Site study & Analysis, Case Studies, Building bylaws and standards, Area Programming, structure design, Building services, Drafting conventions and Drawing Coordination and review of each stage before the assigned jury panel.

Books Recommended:

1.

ALU 4325			Landscape Design				Pre Requisites		Nil	
Version R-01							Co-requisites			
L	T	S/P	C	Minor Duration	Major Duration	Internal Marks	Minor-I Marks	Minor-II Marks	Major Marks	Total Marks
1	0	2	2	1.5 Hours	3.0 Hours	10	20	20	50	100

COURSE OUTCOMES:

- 1: To introduce the students to the discipline of Landscape design & its relevance to Architecture.
- 2: To gain an insight into the changing relationship of human with nature, to develop the understanding of site values and site planning.
- 3: To apply the skill of integrating design of built with of open spaces.

COURSE CONTENTS

Unit-I: Introduction to Landscape Architecture, its scope, objectives, design process & profession of landscape architecture in relation to architecture. Elements of landscape architecture. Linkages with nature & built environment.

Unit-II: Introductory history of Landscape Architecture with historical references from Garden design of Babylon, China, Persia. Garden design of Japan, Italy, France and England.

Unit-III: Plant classification and nomenclature, plant identification, selection and design, their typology like shrubs, creepers, climbers, vines. Introduction to horticulture, its importance, vegetative propagation, planting preparation and methods, Landscape design exercise of a small area like courtyard, etc.

Unit-IV: Importance of principles of design in Landscape, visual & spatial significance, balancing structural and land masses, related examples. Ecological approach for landscape design; Landscape design for various building types; Landscaping parks & roads. Formal & informal design; Use of water & man-made elements in landscape.

Teaching methodology: Studio component of the semester may be integrated with Architectural Design of the current semester.

SUGGESTED BOOKS

- Landscape Architectural Graphic Standards : by *Leonard J. Hopper*
- Landscape Design: A Cultural and Architectural History – by *Elizabeth Barlow Rogers*
- The Planting Design Handbook- by *Nick Robinson*
- Principles of Ecological Landscape Design –by *Travis Beck*
- Landscape Graphics – *Grant Reid*
- Design With Nature – *Ian L. McHarg*
- Time-Saver Standards for Landscape Architecture
- Introduction to Landscape Architecture, Michel
- Landscape Architecture, Simonds

School of Architecture and Landscape DesignSYLLABUS of **B. Arch.** Fourth Year, VIII Semester (2018 Batch onwards)

ALU 4526			Town Planning & Building Bye-laws			Pre-requisites						
						Co-requisites						
L	T	S/ P	C	Minor Duration	Major Duration	Minor-I Marks	Minor-II Marks	Major Marks	Assign ment	Int. Ass.	Ext. Ass.	Total Marks
2	0	2	3	1.5 Hrs	3.0 Hrs	20	20	50	10	50	50	200

COURSE OUTCOMES

After successful completion of this course, students will be able:

1. To understand the concept of evolution of Human settlements & Town Planning and their various elements, classifications, techniques and processes.
2. To know about the various govt. schemes & relevant regulatory documents as well as the contemporary issues of urban areas and its possible innovative solutions.
3. To Apply the concepts gained by doing small practical exercise at neighborhood level.

COURSE CONTENTS**Setting revision**

Unit-I: Introduction to Settlement Planning - Evolution of human settlements- man, environment and built structure, Characteristics of settlements, Growth patterns; Ancient rural and urban settlements & its types in India; Planning Concept of Medieval cities in India. (6 Contact Periods)

Unit 2: Introduction to concept of Urban Planning - Evolution of Planning concepts and various theories related to growth and decay of settlements; Definitions related to Planning, Characters, Constituents and classification of town/city; Urban Problems and Issues, Hierarchy of Urban Development; Zoning & types; Participatory and inclusive planning. (6 Contact Periods)

Unit 3: Planning process & Techniques - components and techniques of planning- survey techniques and data collection methods, Methods of non-spatial and spatial data analysis; Application of G.I.S and Remote Sensing techniques in urban and regional planning; Concept, Types, Scales, elements, preparation, implementation and hierarchy of plans. (6 Contact Periods)

Unit 4: Introduction to Govt. Documents, Govt. Schemes, New issues & Concepts in City Planning -URDPFI Guidelines; National Building Code; Building Bye-Laws; Land Acquisition Act; Environmental Impact Assessment (EIA); Social Impact Assessment (SIA); 73rd & 74th Amendment of Constitution of India. (6 Contact Periods)

Unit 5: Study of Existing Settlements- Case studies of Planned Neighbourhoods, Communities, or Cities of the World; Hands-on Exercise related to planning at neighbourhood/community level. (24 Contact Periods)

Teaching Methodology: Illustrated Lectures, Films, and Introduction of Texts on Town Planning & Human settlements. Planning & Designing of a neighbourhood level project through drawing & presentation. Survey, Compilation of Data, Interpretation, Analysis, Proposal Development and Report Preparation as Studio Work.

SUGGESTED REFERENCES

1. Ekistics:An introduction to the science of human settlements (1968) by C.A. Doxiadis,Hutchinson
2. Sustainable Urban Planning (2013) by Joy Sen, The Energy and Resources Institute (TERI)
3. URDPFI Guidelines Vol I, II A-II B -2014 by TCPO, Govt. Of India, MoHUA, New Delhi
4. Model Building Bye-Laws -2016 by TCPO, Govt. Of India, MoHUA, New Delhi
5. National Building Code -2016-Vol 1 & 2 by Bureau of Indian Standards, Govt. Of India
6. Introducing Town Planning (1993) by Clara H. Greed.
7. The Urban Pattern, (1993) by Simon Eisner, Arthur Gallion, Stanley Eisner.
8. Town Planning in Ancient India, (2009) by B.B.Dutt ,Gyan Publishing House.

9. Urban and Regional Planning in India: A Handbook for Professional Practice, (2012) by S.K. Kulsrestha, SAGE India Publication.

School of Architecture and Landscape Design
SYLLABUS of **B. Arch.** Fifth Year- IX Semester (Old Scheme)

ALU 5511			Architectural Design-VIII				Pre-requisites			
							Co-requisites			
L	T	S/P	C	Minor	Major Duration	Internal/ Assignment	Internal Assessment	External Assess/Jury	Major Marks	Total Marks
2	0	6	5	NA	12 hours	50	50	50	50	200

COURSE OUTCOMES

After successful completion of this course, students will be able to

1. Understand the developments in urban context with appropriate scale and use in order to augment user's quality of life.
2. Analyse the contextual architectural expression and amalgamating the reflections of traditional values.
3. Apply the holistic & multi-disciplined architectural design approach on urban scale.

COURSE CONTENTS

Design studio programme in this semester shall be thematic on urban & metropolitan problems and issues of larger environmental contexts. The design problem shall be of large scale, handling of a group of buildings or a cluster of buildings, preferably urban in nature to develop & understanding for problem associated with site planning, layout of roads & services, traffic pollution, land use etc. A visual & functional study of urban space in use, urban activities, services & evolution of various spaces e.g. Mass scale residential, institutional, commercial, transport, healthcare building/centre/campus. This could be a greenfield/ brownfield development, redevelopment or revitalization project in the context of the city understudy. **(12 Contact hours)**

Teaching Methodology: Faculty shall impart teaching by lecture, presentations & visiting the case site along with students; students shall prepare reviews of reading material, case analysis and presentation of design interventions.

SUGGESTED BOOKS

1. Jon Lang; Urban Design: A typology of procedures & products, Architectural Press, Elsevier
2. Moughtin, Cliff; Urban Design: Street & Square, Architectural Press, Elsevier Science
3. Moughtin, Cliff; Urban Design: Green Dimensions, Architectural Press, Elsevier Science
4. Moughtin, Cliff; Urban Design: Method & Techniques, Oxford Architectural Press.
5. Spreiregen, Paul D; Urban Design: The Architecture of Town and Cities, New York McGraw-Hill.
6. Urban Design Associates; Urban Design Handbook, New York McGraw-Hill.
7. Watson, Donald; Time-Saver Standards for Urban Design, New York McGraw-Hill.
8. Cullen, Gordon; Concise Townscape, The Architectural Press, New York.
9. Lynch, Kevin; The Image of the City, The MIT Press, London.
10. Alexander, Christopher; A Pattern Language, London Oxford University Press.

SCHOOL OF ARCHITECTURE & LANDSCAPE DESIGN
Evaluation Scheme for B.Arch. Revised New Syllabus structure of 4th & 5th Year Courses
(Applicable w.e.f. Entry Batch 2018 onwards)

COURSE STRUCTURE					THEORY				PRACT./STUDIO		Total	Exam Duration
S. No.	Course Code	Course Title	L-T-P/S	Credits	Minor-I Marks	Minor-II Marks	MAJOR EXAM MARKS	ASSIGN -MENT	INTERNAL ASSESS-MENT	EXTERNAL ASSESSE MT/ JURY		
B.Arch. 4 th year SEMESTER-7												
1	ALT 4511	Professional Training	18 week	20	NA	NA	NA	NA	100	100	200	JURY
B.Arch. 4 th year SEMESTER-8												
1	ALU 4521	Architectural Design-VII	2-0-6	5	0	0	50	50	50	50	200	12
2	ALU 4522	Advanced Building Construction Technology	2-0-4	4	20	20	50	10	50	50	200	3
3	ALU 4523	Urban Design	2-0-2	3	20	20	50	10	100	NA	200	3
4	ALU 4524	Landscape Design	2-0-4	4	20	20	50	10	100	NA	200	3
5	ALU 4525	Town Planning & Building Bye laws	2-0-2	3	20	20	50	10	100	NA	200	3
6	XXXX	Open Elective	3-0-0	3	20	20	50	10	NA	NA	100	3
B.Arch. 5 th year SEMESTER-9												
1	ALU 5511	Architectural Design - VIII	2-0-10	7	0	0	50	50	50	50	200	12
2	ALL 5512	Professional Practice	2-0-0	2	20	20	50	10	NA	NA	100	3
3	ALL 5513	Green Buildings	3-0-0	3	20	20	50	10	NA	NA	100	3
4	ALC 5514	Dissertation	0-4-0	4	0	0	0	0	50	50	100	JURY
5	ALE 59XX	Elective-I (Theory based)	3-0-0	3	20	20	50	10	NA	NA	100	3
6	ALE 59YY	Elective-II (Studio/Lab based)	2-0-2	3	20	20	50	10	100	NA	200	3
B.Arch. 5 th year SEMESTER-10												
1	ALD 5521	Architectural Design Thesis	0-0-30	15	0	0	0	0	300	300	600	JURY

NOTE: Total Minimum Credits to be earned is 220 in order to become eligible for the award of B.Arch. Degree (Five-year Full Time).

SCHOOL OF ARCHITECTURE & LANDSCAPE DESIGN

List of Elective Courses for B.Arch. 4th & 5th Year

LIST OF PROGRAM ELECTIVES (Theory Based) ALE 59YY						
S. No.	Course Code	Course Title	L	T	S/P	C
1	ALE 5911	Architectural Journalism	2	1	0	3
2	ALE 5912	Art in Architecture	2	1	0	3
3	ALE 5913	Building Automation	2	1	0	3
4	ALE 5914	Building Diseases & Treatment	2	1	0	3
5	ALE 5915	Construction Planning & Management	2	1	0	3
6	ALE 5916	Housing	2	1	0	3
7	ALE 5917	Disaster Mitigation & Management	2	1	0	3
8	ALE 5918	Energy Footprint of Built Environment	2	1	0	3
9	ALE 5919	Environmental Management	2	1	0	3
10	ALE 5920	Research Methodology	2	1	0	3
11	ALE 5921	Infrastructure Planning	2	1	0	3
12	ALE 5922	Human Settlements & Town Planning	2	1	0	3
LIST OF PROGRAM ELECTIVES (Studio/Lab Based) ALE59ZZ						
S. No.	Course Code	Course Title	L	T	S/P	C
1	ALE 5923	Architectural Conservation	2	0	2	3
2	ALE 5924	Building Simulation	2	0	2	3
3	ALE 5925	Building Information Management	2	0	2	3
4	ALE 5926	Product Design	2	0	2	3
5	ALE 5927	Graphic Design	2	0	2	3
6	ALE 5928	Interior Design	2	0	2	3
7	ALE 5929	Landscape Architecture	2	0	2	3
8	ALE 5930	Geographic Information System	2	0	2	3
9	ALE 5931	Structural Design with STADD	2	0	2	3
10	ALE 5932	Transportation & Traffic Design	2	0	2	3
11	ALE 5933	Alternate Building Construction & Designs	2	0	2	3
12	ALE 5934	Smart City Planning	2	0	2	3

NOTE:

1. Elective Courses shall be offered to the students in view of faculty expertise and resources available at that time subject to minimum 10 students registration for a particular elective course. Finalising the offer of elective shall be the sole discretion of HoS based on AAC recommendations.
2. MOOCs offered by NPTEL/SWAYAM or any other approved portal/institution shall be considered equivalent for ELECTIVE subjects offered by the School/University with prior due approval from HoS & duly recommended by AAC.