

**Maulana Abul Kalam Azad University of Technology, West Bengal**  
*(Formerly West Bengal University of Technology)*  
**Syllabus for B. Sc. In Interior Design**  
**(Effective for Academic Session 2019-2020)**

**SEMESTER IV**

**BID491**

**Full Marks:100**

**Architectural Landscape Design (Practical)**

<b>Objectives</b>	
<ul style="list-style-type: none"> <li>• To develop an understanding about the importance of functionality and aesthetics of landscaping.</li> <li>• To enhance knowledge about its planning, various plant types &amp; care &amp; maintenance.</li> <li>• To become aware of the various materials related to landscaping.</li> <li>• To communicate effectively in graphic, written, and verbal formats.</li> <li>• To understand the relationship of the history and theory of landscape architecture.</li> <li>• To acquire knowledge of the basic fundamentals of environmental design, particularly the implications of social and natural factors.</li> <li>• To apply design principles in a range of sites and scales.</li> </ul>	
<b>Units</b>	<b>Course Content</b>
1	<b>Introduction to architectural Landscaping &amp; Research</b> <ul style="list-style-type: none"> <li>• Historical &amp; Contextual References.</li> <li>• Architectural Landscape designers &amp; their work.</li> <li>• Exemplar visual works of Architectural Landscape design.</li> <li>• Research of: Materials, plants and furniture.</li> </ul>
2	<b>Fundamentals of Landscape design</b> <ul style="list-style-type: none"> <li>• Contextualize the outdoor space.</li> <li>• Scale, part 1: The landscape to the existing house</li> <li>• Scale, part 2: Humans to the landscape</li> <li>• Lines, shapes, Forms, Textures, colours and Rhythm</li> </ul>
3	<b>Topographic Form &amp; Design Technique</b> <ul style="list-style-type: none"> <li>• The interpretation of the shape and features of the surface of the Earth to enable Visualisation of designs and design ideas.</li> </ul>
4	<b>Landscape Drawing</b> <ul style="list-style-type: none"> <li>• Creation of sketches, visual ideas and initial diagrams/plans</li> <li>• Development of designs through process</li> <li>• Materials and art &amp; design techniques</li> </ul>
5	<b>Factors Affecting Planning of Landscaping</b> <ul style="list-style-type: none"> <li>• Location &amp; orientation, climatic conditions, land profile, soil type, water sources, drainage, elements &amp; principles of design</li> </ul>
6	<b>Planning of Landscaping (Residential &amp; Commercial)</b> <ul style="list-style-type: none"> <li>• Planning codes &amp; procedures</li> </ul>
7	<b>Dimensions of Landscape Space</b> <ul style="list-style-type: none"> <li>• Foreground area (boundary, pathways, parking, arches, porch etc.)</li> <li>• Private living area (recreational area, play area, outdoor seating etc.)</li> <li>• The service area (cleaning area, drying area, garbage area, disposal, water supply, kitchen, garden)</li> </ul>
8	<b>Plant Forms and Types</b> <ul style="list-style-type: none"> <li>• Trees, plants, hedges, flowers, lawns, vines, creepers, Indoor plants, bonsai)</li> </ul>
9	<b>Outdoor Furniture</b>
	<b>Final Drawings &amp; Technical Drafting of Plans</b> <ul style="list-style-type: none"> <li>• Final Drawings and plans</li> <li>• Drawings showing a variety of viewpoints and perspectives</li> </ul>
10	<b>Critic &amp; Presentation</b> <ul style="list-style-type: none"> <li>• Presentation of project &amp; research</li> <li>• Written evaluation against intentions</li> <li>• Action plan for future improvements</li> </ul>

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**References**

1. Bose T K, *Tropical Garden Plants*, Kolkata, Horticulture & Allied Publishers, 1991
2. Cedric Crocker, *All About Landscaping*, Ortho Books.
3. Faulkner R & Faulkner S, *Inside Today's Home*, New York, Holt Rinehart & Winston Inc., 1960
4. Hooguet Fickle, *The Garden*, The Netherlands, Rebo Production, Lisse 1977
5. Learner J M, *The Complete Home Landscape Designer*.
6. Trivedi, P & Chawdhury B, *Home Gardening*, New Delhi, India, Council of Agricultural Research, 1983
7. The Fundamentals of Landscape Architecture 2nd Edition by Tim Waterman (Author)

**Websites**

<https://www.curbed.com/2016/5/23/11700166/landscape-garden-design-101>

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**BID401**

**Full Marks: 100**

**Estimation & Costing (Theory)**

<b>Objectives</b>	
To enable the students to:	
<ul style="list-style-type: none"> <li>• To be aware of the cost of various materials used in interiors.</li> <li>• To enable students to estimate the cost of a product / interior by learning calculation methods.</li> </ul>	
<b>Units</b>	<b>Course Content</b>
1	<b>Importance of Estimation &amp; Costing In Interiors</b> <ul style="list-style-type: none"> <li>• Individual item</li> <li>• A room</li> <li>• A full apartment</li> <li>• A house</li> </ul>
2	<b>Main areas of Cost Estimation</b> <ul style="list-style-type: none"> <li>• Walls (plastering, white washing, painting, textured finish, panelling etc.)</li> <li>• Flooring: material, laying</li> <li>• Ceiling: false ceiling, painting etc.</li> <li>• Wood work (material, polishing, varnishing &amp; other applied finishes)</li> <li>• Furniture &amp; furnishing</li> <li>• Plumbing</li> <li>• Drainage</li> <li>• Electrical fittings &amp; layout</li> <li>• Other special features</li> </ul>
3	<b>Rules &amp; Methods of Measurement</b>
4	<b>Procedure of Estimating</b> <ul style="list-style-type: none"> <li>• Metric system and primary units</li> <li>• International system of units</li> <li>• Degree of accuracy</li> <li>• Calculations</li> </ul>
5	<b>Analysis of Rates</b> <ul style="list-style-type: none"> <li>• Overhead costs</li> <li>• Task or out turn work</li> <li>• Rates of material and labour (quantity take off schedule of item, schedule of rates, schedule of quantities)</li> <li>• Preparing analysis of rates</li> </ul>
6	<b>Specifications</b> <ul style="list-style-type: none"> <li>• General specifications</li> <li>• Detailed specification of cement, concrete, R.C.C, brickwork, plastering, painting, white washing, colour washing snowcem, decorative cement colour washing, wood work, varnishing etc.</li> </ul>
<b>References</b>	
<b>Books</b>	
<ol style="list-style-type: none"> <li>1. Arora B D, <i>Electrical Wiring, Estimation &amp; Costing</i>, New Heights, Karol Bagh, New Delhi.</li> <li>2. Basu, <i>Economical Building designs</i>, Basu Publications, Kolkata.</li> <li>3. Hungtington&amp; Whitney Clark, <i>Building Construction</i> John Wiley &amp; Sons Pvt. Ltd.</li> </ol>	

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**BID492**

**Full Marks: 100**

**Computer Aided Design Studies II - AUTOCAD (Practical)**

**Objectives**

To enable the students to:

- Digital drawing production through the use of AutoCAD,
- Digital visualisation skills through the use of Adobe Photoshop and the Adobe Creative Suite
- To design and develop a plan with all the detailing through the use of this software
- To help in formulating and customizing designs with proper presentations

Units	Course Content
1	Re-Cap of principles of AUTOCAD software
2	Introduction to 3 Dimension digital drawing & 3Dimension Model Space
3	Working with 3D Primitives, Understanding Camera Trucking, Panning & Dolly.
4	3D Object Transformation, Designing Simple 3D Architectural Blocks.
5	Modifying 3D Block with Boolean Operations.
6	Designing Complex 3D Architectural Accessories with Dimensions.
7	Shading & Texturing With Interior Materials.
8	Placing Virtual Light (Exterior & Interior) within a Final Scene.
9	Rendering Various Perspective Views.
10	Managing Project File, File Import Export, Interoperability Between Autocad & 3D Max.
11	Conversion of Freehand sketch designs for plan and elevation into Computer Aided Designs
12	Points, Lines, Types of Lines, Angles, Triangles, Circles and other types of pictorial projections

**References**

1. Book on Latest Version of Auto CAD
2. Parker, Charles. Understanding Computers Today & Tomorrow. Fort Worth, TX: Dryden Press, 1998.
3. Sabot, Gary. High Performance Computing Problem Solving with Parallel and Vector Architectures. Reading, MA: Addison-Wesley Publishing Company, 1995.
4. Taylor, Dean. *Computer-Aided Design*. Reading, MA: Addison-Wesley Publishing Company, 1992.

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BID402

Full Marks: 100

**Introduction to VAASTU and FENG SHUI (Theory)**

**Objectives**

- To introduce students to various ancient concepts & principles on Vaastu and Feng Shui and their present relevance in Interior and Architectural Design.
- To develop research and analytical skills
- To develop skills in applying learnt knowledge.

Units	Course Content
1	<b>What is Feng Shui?</b> <ul style="list-style-type: none"> <li>• History &amp; Traditions</li> <li>• Principles</li> <li>• Meanings</li> <li>• Perceived Benefits</li> </ul>
2	<b>What is Vaastu?</b> <ul style="list-style-type: none"> <li>• History &amp; Traditions</li> <li>• Principles</li> <li>• Meanings</li> <li>• Perceived Benefits</li> </ul>
3	<b>Various Principles of Indian Vaastu Shastra</b>
4	<b>Various Principles of Chinese Feng Shui and their application in modern building construction and interior design</b>

**References**

1. "GOLDEN PRINCIPLES OF VASTU SHASTRA Vastukarta". [www.vastukarta.com](http://www.vastukarta.com). Retrieved 2016-05-08.
2. Acharya P.K. (1946), An Encyclopedia of Hindu Architecture, Oxford University Press
3. Vibhuti Sachdev, Giles Tillotson (2004). Building Jaipur: The Making of an Indian City. p. 147. ISBN 978-1861891372.
4. Vasudev (2001), Vastu, Motilal Banarsidas, ISBN 81-208-1605-6, pp 74-92
5. Sherri Silverman (2007), Vastu: Transcendental Home Design in Harmony with Nature, Gibbs Smith, Utah, ISBN 978-1423601326
6. Gautum, Jagdish (2006). Latest Vastu Shastra (Some Secrets). Abhinav Publications. p. 17. ISBN 978-81-7017-449-3.
7. BB Dutt (1925), Town planning in Ancient India at Google Books, ISBN 978-81-8205-487-5; See critical review by LD Barnett, Bulletin of the School of Oriental and African Studies, Vol 4, Issue 2, June 1926, pp 391
8. Vibhuti Chakrabarti (2013). Indian Architectural Theory and Practice: Contemporary Uses of Vastu Vidya. Routledge. pp. 1–2. ISBN 978-1-136-77882-7
9. Dunning, Brian. "Feng Shui Today". [Skeptoid.com](http://Skeptoid.com). Retrieved 30 October 2016.
10. Cheng Jian Jun and Adriana Fernandes-Gonçalves. *Chinese Feng Shui Compass: Step by Step Guide*. 1998: 21

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<https://www.teresahwang.com/services/feng-shui-objectives>  
<https://galaxydraperies.com/psychology-interior-design-decor-affect-emotions/>  
<http://www.mahavidya.ca/2015/06/26/the-vastu-tradition-in-hinduism/>  
<http://www.vastu-design.com/introduction/>

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**BID481**

**Full Marks:100**

**Computer Graphics (Practical) SESSIONAL**

**Objectives:**

To enable the students to:

- This module aims to provide students with a working knowledge of basic engineering drawing and the software tools that can be used to produce various drawings.
- Create opportunity for the students in gaining skills using modern CAD – InDesign software.

Units	Course Content
1	<ul style="list-style-type: none"> <li>• The module is designed to enable students to create their own concept designs using industrial standard Computer Aided Design (CAD) software - InDesign. These computer representations will be required to explore digital design for small and large batch components and products. Students will be able to explore the software, according to the design and manufacturing requirements of the design.</li> </ul> <p><b>Adobe Indesign: Getting started with Adobe Indesign, working with adobe InDesign to create Mood &amp; Trend Presentation</b></p> <ul style="list-style-type: none"> <li>• Boards, Creating textile patterns and layouts, Creating invitation card, visiting cards and greeting cards, books layouts. (Selection, layering and masking, painting, editing, filing, distortion, rotation, scaling, copying, repetition, colour changes and image adjustment techniques.)</li> <li>• Introduction to Interior Graphics on InDesign.</li> <li>• Introduction to print development on InDesign</li> </ul>

**ADOBE INDESIGN**

Adobe InDesign CC Classroom in a Book (2018 release) by Kelly Kordes Anton and Tina Dejarld

Adobe InDesign CS6 Classroom in a Book by Adobe Creative team

Adobe Indesign 2018: An Easy Guide to Learning the Basics by Dale Michelson

Adobe Creative Suite 6 Design and Web Premium All-in-One For Dummies by Jennifer Smith and Christopher Smith

Learn Adobe InDesign CC for Print and Digital Media Publication: Adobe Certified Associate Exam Preparation (Adobe Certified Associate (ACA) by Jonathan Gordon and Rob Schwartz

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**BID482**

**Full Marks: 100**

**DESIGN STUDIO - IV - Commercial Interior Design Project (Practical)**  
**SESSIONAL**

**Overview**

This module focuses on the design of commercial interior spaces. Students will research existing creative commercial spaces and explore the core elements of the design process for a given interior space. The project will touch on all aspects of interior design such as interior architecture and space design.

Interior designers need to develop a broad range of skills and abilities to support them in their creative design and problem solving processes. Being aware of, and understanding how the built environment is used, occupied and constructed, is invaluable in helping initiate this. Selecting appropriate knowledge of key practical skill sets and techniques, and using professional standards and conventions to portray their technically and visually, is crucial to ensuring that these processes are developed and facilitated efficiently and effectively.

**Objectives**

- To develop the skill in visualizing and designing spaces of commercial interiors considering the principles of designs, anthropometric data and ergonomic criteria.
- To understand the criteria for selection of appropriate material for different surfaces taking into consideration of ergonomic factors, aesthetics and cost.
- To develop creative and practical design skills for creating interior spaces.
- To develop research and written analytical skills for specific topics and processes.

Units	Course Content
1	<p><b>Research &amp; Study of Commercial Interior Design with the Perception of Purpose, Function &amp; Aesthetics:</b></p> <ul style="list-style-type: none"> <li>• Basic needs: ergonomic consideration, psychological, aesthetic, occupational and professional development</li> <li>• Analysis of clients' specific requirements</li> <li>• Location</li> <li>• Space requirement</li> <li>• Availability of materials</li> <li>• Design principles</li> <li>• Budget</li> </ul>
2	<p><b>Research Current Trends in Commercial Interior Design</b></p> <ul style="list-style-type: none"> <li>• Design Innovations</li> <li>• Regional and genre trends</li> </ul>
3	<p><b>Interior Design of Commercial Spaces with Their:</b></p> <ul style="list-style-type: none"> <li>• Types</li> <li>• Planning considerations: functions, orientation, circulation, grouping, light, ventilation, privacy, Climatic and ergonomic factors, aesthetics &amp; cost.</li> <li>• Standards</li> <li>• Service (electrical, lighting, water supply, drainage, air conditioning)</li> <li>• Materials &amp; finishes (wood, glass, plastic, metals, acoustical boards, floor covering, panelling materials, false ceiling material)</li> <li>• Furniture details</li> </ul>

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<b>Research &amp; analyse the work of a range of professional Interior Designers with a focus on Commercial Space design:</b>	
4	<ul style="list-style-type: none"> <li>• Restaurants &amp; Cafeterias</li> <li>• Educational Facilities</li> </ul>
<b>Working Design Drawings &amp; Sketches</b>	
5	A range of initial designs, sketches, drawings and illustrations to show your conceptual design ideas.
6	<b>Service Drawings and symbols</b>
7	<b>Developing simple models</b> Explore form and space through model making
8	<b>Typical Commercial Interior Project Formulation</b> Implementation plan for project and management of.
9	<b>Design Development</b> Development of visual design idea through the exploration of layouts, concepts and interior plans.
<b>Exploration and investigation of materials</b>	
10	Exploration and investigation of materials, techniques and technologies for interior spaces and surface designs.
<b>Technical Drafting and drawing</b>	
11	Technical Drafting and drawing of layouts and plans including correct symbols and scale, within the constraints for given interior design project brief.
12	<b>Application of media and drawing techniques</b> to illustrate different viewpoints of a given interior including perspective drawings, orthographic drawings of views and sections.
13	<b>Quantification, Reporting, Presentation.</b> Budget Provision and Project Schedule
<b>Final Technical Drafting</b>	
14	<ul style="list-style-type: none"> <li>• Plans &amp; Layouts</li> <li>• Viewpoints</li> </ul>
<b>Organisation and Presentation</b>	
15	Organisation of the working drawings for the same including service drawing with professional guidance.
<b>Group Design Critic, Evaluation and Action Planning</b>	
16	Written evaluation against brief objectives and intended outcomes. Action plan based on critic feedback from others and own informed evaluations.



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2. Cerver F A, *Commercial Space, Office Design & Layout*, Rotovision SA
3. Cerver F A. *Commercial Space, Bars, Hotels & Restaurants*, Rotovision SA, Switzerland
4. Cerver F A., *Shops, Malls & Boutiques*, Rotovision SA
5. De Chiara Joseph & Callender John, *Time Saver Standards for Architectural Types & Interior Design & Space Planning*, McGraw Hill Book Co.
6. Gustafsan K & Yes Robert, *Corporate Design*, Thames & Hudson, London
7. *National Building Code of India*, Bureau of Indian Standards, New Delhi, 1999
8. Reznikoff S C, *Specifications for Commercial Interiors*, Whitney Library of Design.

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<https://www.hatchdesign.ca/commercial-interior-design-for-project-types/>

<https://www.architonic.com/en/projects/interior-architecture/0/5910002/1>

<https://www.forbes.com/sites/yjeanmundelsalle/2017/12/14/the-worlds-best-interior-designers-hot-list/#74bedfe93312>

<http://www.martynlawrencebullard.com/>

<http://mydesignagenda.com/interior-design-and-architecture-projects-need-inspired/>