



### Details of Certificate Courses for Academic Year 2019-20

Course Code	BARE121 ELECTIVES CS		
Course Name	<b>Communication Skills</b>		
Course Instructor	Mr. Pillai		
Year of Studies	1st Year B. Arch	Semester	I
Max. no. of Students	50	Duration	16 Weeks
Course Content	Communication is defined as the ability to convey or share ideas and feelings effectively. In Architectural practice narrative building is an essential process to justify and convey the intent and impact of architectural design. This course aims to provide students with a foundational training regarding effective and eloquent communication skills.		
Expected Outcomes	Students are expected to participate in the class discussions and weekly individual assignments based on the various aspects of communication skills.		
Assessment Procedure	Weekly assessments based on a progressive improvements in communication skills, along with one assessment for a final speech		
Course Code	BARE121 ELECTIVES SR		
Course Name	<b>Architectural Sketching &amp; Rendering</b>		
Course Instructor	Ar. Mukund dalvi		
Year of Studies	1st Year B. Arch	Semester	I
Max. no. of Students	50	Duration	16 Weeks
Course Content	Architectural sketching & rendering is the process of creating two-dimensional and three-dimensional images of a proposed architectural design. The aim of this course is to make students aware about the various hand rendering techniques which can be used to enhance the presentation of the architectural drawings.		
Expected Outcomes	Students are expected to render the given architectural sketch/design in various mediums of rendering taught in the studio.		
Assessment Procedure	Progressive weekly assessment for each kind of rendering technique taught		

  
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### Details of Certificate Courses for Academic Year 2019-20

Course Code	BARE221 ELECTIVES SK		
Course Name	<b>Learning through Sketching</b>		
Course Instructor	Ar. Prachitee Lad		
Year of Studies	1st Year B. Arch	Semester	II
Max. no. of Students	40	Duration	12 Weeks
Course Content	The core intent of the course is to encourage visualisation and observation in the everyday object. The chosen object was further dissembled to understand the mechanism and fixity.		
Expected Outcomes	The assembly of the chosen object was illustrated as an exploded isometric view. In addition the components were rendered based on the materials and textures		
Assessment Procedure	Progressive weekly assessment for each kind of rendering technique taught		
Course Code	BARE221 ELECTIVES BA		
Course Name	<b>Bio-climatic approach to Design</b>		
Course Instructor	Ar. Neeta Sarode		
Year of Studies	1st Year B. Arch	Semester	II
Max. no. of Students	40	Duration	16 Weeks
Course Content	The electives was designed to sensitize students about the Bio-climatic approach to design. The students were started off with case studies of animal/ bird homes from nature to understand how animals and birds design their shelters (burrows, nests etc.) in response to climate, activities, uses of the shelter, safety and survival etc. Later students were introduced to various parameters of Bioclimatic architecture. At the end, the students did case studies of Bioclimatic architecture and tried checking which parameters were in place.		
Expected Outcomes	Understanding parameters of Bioclimatic architecture so that they can be applied to their own architectural design projects sensitively.		
Assessment Procedure	Assignment based assessment of analysis reports at various stages of the study		

  
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### Details of Certificate Courses for Academic Year 2019-20

Course Code	BARE221 ELECTIVES MN		
Course Name	<b>Mechanism in Nature</b>		
Course Instructor	Ar. Sachin Vedak		
Year of Studies	1st Year B. Arch	Semester	II
Max. no. of Students	40	Duration	12 Weeks
Course Content			
Nature never fails to show us its beautifully articulated mechanism or systems which can withstand any kind of situation. This elective is based on the various types of naturally evolved mechanisms which have become a part of any living creature or have been created or constructed by a living creature for example; Chameleon's retractable tongue, bayaweaver bird's nest or retractable wings of bats. The idea of this elective 'Mechanism in nature' is to study these various mechanisms and use it for the benefits of the human race in the form of a shelter or as an extension.			
Expected Outcomes			
Students are expected to make a 1:1 scale working model using the mechanisms which they have selected from nature to make shelter or an extension for themselves.			
Assessment Procedure			
Progressive assessment of process of creating the model			
Course Code	BARE321 ELECTIVES CO		
Course Name	<b>Computer Training Part 1 (Autocad)</b>		
Course Instructor	Mr. Mate		
Year of Studies	2nd Year B. Arch	Semester	III
Max. no. of Students	60	Duration	16 Weeks
Course Content			
Learning architectural softwares is an essential skill set for contemporary architectural practices. Learning AutoCAD for the complex architectural drafting and SketchUP for the digital 3D form modulation enhances the creative ability of architectural students to understand space. This course aims to study basic commands for AutoCAD and SketchUP.			
Expected Outcomes			
Students are expected to produce computer aided 2D and 3D drawings for a small residential house designed in their previous semester.			
Assessment Procedure			
Progressive weekly assessment for small assignments to understand various commands in AutoCAD and SetchUp.			

  
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### Details of Certificate Courses for Academic Year 2019-20

Course Code	BARE321 ELECTIVES CT		
Course Name	<b>Computer Training Part 2 (Autocad)</b>		
Course Instructor	Mr. Mate		
Year of Studies	2nd Year B. Arch	Semester	IV
Max. no. of Students	60	Duration	16 Weeks
Course Content	Learning architectural softwares is an essential skill set for contemporary architectural practices. Learning AutoCAD for the complex architectural drafting and SketchUP for the digital 3D form modulation enhances the creative ability of architectural students to understand space. This course aims to study advance commands for AutoCAD and SketchUP.		
Expected Outcomes	The students at the end of the course are expected to be able to use the software in design and other subjects and develop their skills during the course.		
Assessment Procedure	Assessments at stages dealing with drafting of previous years design on the software in 2D and 3D		
Course Code	BARE521 ELECTIVES LL		
Course Name	<b>LCA-LCC</b>		
Course Instructor	Ar. Harish Borah, Ar. Swanand and Ar. Mridula		
Year of Studies	3rdYear B. Arch	Semester	V
Max. no. of Students	60	Duration	16 Weeks
Course Content	Introducing students the concept of sustainable development and the concept of Life Cycle Assessment and Life Cycle Costing of materials. Understand concept of embodied energy and carbon emissions related to building industry		
Expected Outcomes	Students are expected to draw inferences on given readings on sustainable strategies and environmental issues. Learn how to calculate LCA and LCC with basic computer software		
Assessment Procedure	Assessments based on assignments for calculation of LCA and LCC		

  
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### Details of Certificate Courses for Academic Year 2019-20

Course Code	BARE621 ELECTIVES DL		
Course Name	<b>Daylighting</b>		
Course Instructor	Ar. Swanand Mahashabde		
Year of Studies	3rd Year B. Arch	Semester	VI
Max. no. of Students	60	Duration	12 Weeks
Course Content	The elective course introduces students to the use of daylighting in architecture space with help of basic simulation techniques		
Expected Outcomes	Understand importance of daylighting in building design. Understanding use of natural light through works of master architects. understand design solutions through analysis with basic software		
Assessment Procedure	Assessment of critical analysis of case studies of master-architect buildings, assessment of use and inference of assignment done using software in a stagewise manner		
Course Code	BARE721 ELECTIVES GL		
Course Name	<b>Effective use of Glass in the Built Environment</b>		
Course Instructor	Ar. Mridula Pillai		
Year of Studies	4th Year B. Arch	Semester	VII
Max. no. of Students	80	Duration	12 Weeks
Course Content	Understanding the manufacturing process of glass , so as to understand the embodied energy in its manufacture. Factors affecting the choice of Glass in the built environment through point of view of various stakeholders. Understand the Mechanical, Thermal & optical properties of glass. Understanding the Value Addition to the Glass- Tints, Coatings, fretting, toughening and lamination. Understanding the Glazing types. Energy Performance of Coated Glass for various Glazing type and comparison with the ECBC standards. understanding the choice and assembly of glazing type through LBNL's Window software.		
Expected Outcomes	Students are taught to choose the glazing type for various climatic conditions, based on the data available through the LBNL's Window software. Using the data set from the above mentioned exercise is further used to analyse the performance in a conventional building using the spreadsheet calculations. These calculations takes into an Window to Wall Ratio (WWR) for all the cardinal directions. In addition these parameters are isolated to check the change in the building performance for the cooling loads.		
Assessment Procedure	Assessment of 3 set assignments - 1. Effect of change in gap in the U-value and optical properties of a glazing system 2. Creation of Glazing Systems and Window systems for 2 diverse climatic conditions 3. Calculation of change in Annual Space-conditioning load using spreadsheet for change in Glazing System and change in WWR		

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### Details of Certificate Courses for Academic Year 2019-20

Course Code	BARE921 ELECTIVES PM		
Course Name	<b>Project Management</b>		
Course Instructor	Tasmeen Dhoondia		
Year of Studies	5th Year B. Arch	Semester	IX
Max. no. of Students	20	Duration	16 Weeks
Course Content			
Project management focuses on planning and organizing a project and its resources. This course includes identifying and managing the lifecycle to be used, applying it to the user-centered design process, formulating the project team, and efficiently guiding the team through all phases until project completion.			
Expected Outcomes			
Students are expected to make a report at the end of the course based on the topics covered during the lectures.			
Assessment Procedure			
End of course assessment based on the final report submitted			
Course Code	BARE921 ELECTIVES HC		
Course Name	<b>Heritage Conservation</b>		
Course Instructor	Ar. Vikas Dilawari		
Year of Studies	5th Year B. Arch	Semester	IX
Max. no. of Students	20	Duration	12 Weeks
Course Content			
<ol style="list-style-type: none"> <li>1. Know your heritage</li> <li>2. Introduction to Conservation</li> <li>3. Vocabulary of Conservation Process</li> <li>4. Role of a conservation architect</li> <li>5. Heritage walk in or near the city of Mumbai</li> <li>6. Framework of conservation</li> <li>7. Guest Lecture on conservation practice</li> <li>8. Decay and Material</li> <li>9. Scale of conservation</li> <li>10. Studio Interactions and Discussions</li> </ol>			
Expected Outcomes			
Students are expected to identify and document the existing heritage in India. Based on that they are expected to generate value assesment document for the same.			
Assessment Procedure			
End of course assessment based on the final value assessment document submitted			

  
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### Details of Certificate Courses for Academic Year 2019-20

Course Code	BARE921 ELECTIVES RF		
Course Name	<b>Redevelopment &amp; Feasibility</b>		
Course Instructor	Ar. Anmol Warang		
Year of Studies	5th Year B. Arch	Semester	IX
Max. no. of Students	20	Duration	12 Weeks
Course Content	<p>Redevelopment' implies demolition of existing structure and building completely new structure. It is the most widely used tool for the upgradation of infrastructure and urban regeneration in Mumbai. The elective on Redevelopment discusses the importance of thoughtful redevelopment through an understanding of processes, rules and regulations, current trends and practices, etc. The student participants gain knowledge of various aspects that impact and issues that plague the redevelopment system.</p>		
Expected Outcomes	<ol style="list-style-type: none"> <li>1. Understand the processes, rules and regulations governing the redevelopment of buildings in Mumbai.</li> <li>2. Understand various clauses and sections of the MCGM DCPR 2034.</li> <li>3. Gain knowledge about the historic development of Mumbai and the impact of past development strategies on the current status of Redevelopment.,</li> <li>4. Understand financial feasibility calculations to infer the possibility of success for redevelopment projects.</li> </ol>		
Assessment Procedure	Assignment based assessment for small exercises done for each aspect of understanding through the course.		

  
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