

## Syllabus

### Master of Design - Ceramic & Glass

#### Semester - I

Subject Code	Subject	Abstract	Outcome	Nature of Course	Full Marks	Internal Marks	External marks	Credit
MCG-I/01	Aesthetic – I	<p>Aesthetical aspects of India</p> <ul style="list-style-type: none"> <li>• What is Aesthetic? Why do we mean or say something is beautiful? Express how aesthetics were understood by different theory.</li> <li>• History of Indian Aesthetics: Bharata's Natya Shastra, in terms of Music &amp; dance, Painting, Sculpture and folk art.</li> <li>• Eight primary Rasas, Bhava &amp; Rasas, Riti and Guna, Guna and Dosha, Laksanas etc.</li> <li>• Shadanga or Six Limbs of Indian Art (Rupabheda. Pramanam, Bhava, Lavanya, Yojanam, Sadrisyam, Varnikabhanga)</li> <li>• Vernacular Indian Art † (Mouryan, Sunga, Kushana, Gupta Period Arts, Miniature Paintings, Bengal Painting, etc )</li> <li>• Different Iconographies in Indian Art (Buddhist Iconography, Jain Iconography, Saiva Iconography, Vaisnava Iconography, Sakti Iconography, Other Iconography)</li> <li>• Gestures And Postures in Sculptures</li> <li>• Concept of Bengal Painting in context of Santiniketan Schooling</li> </ul>	Develop the aesthetical skill, as well as enhance intellectual ability	Theory	100	20	80	4

MCG-I/02	Ergonomics	<p>Gross human anatomy, Anthropometry, static and dynamic, and work physiology, Static and dynamic work including maximum capacity Bio-mechanics. Environmental condition Biological transducers and nervous system including their limitation. Controls and display Psycho physiological aspects of design. Research techniques in Ergonomic and General data generation, interpretation and application of statistical methods. Case analysis. Project work involving Ergonomic design research for product system.</p>	Skill development	Theory	100	20	80	4
MCG-I/03	Method & Material – I	<p>Theoretical Knowledge of Specialize Subject.</p> <ul style="list-style-type: none"> <li>◆ Bauxite, Diaspore, Pyrophilite, Olivine, Chromite, Talc, Wollastonite, Zircon, Rutile, Fluospar, Graphite, Mica, Baryte, Gypsum and Plaster of Paris.</li> <li>◆ Effect of heat on clay and other ceramic materials.</li> <li>◆ Introduction to glaze Definitions, composition of glaze, classification of different types of glazes, engobe, frit preparation, fritting rules, compounding of lead and leadless glazes, alkaline glazes, calcarius glazes and feldspatic glazes.</li> <li>◆ Raw materials and Processing Glaze raw materials, effect of individual materials, opacifiers, colouring agents, stains, mixed colours, metallic lustures, unit operations and processes, glaze</li> </ul>	Develop the aesthetical skill, as well as intellectual ability	Theory	100	20	80	4

properties, grain size, specific gravity, viscosity glaze control, additives, glaze suitability, fired properties of glazes.

- ◆ Properties and defects  
Glaze body reactions, interface layers, thermal characteristics, mechanical, optical and chemical properties of glazes, glaze defects and remedies, crazing, peeling, crawling, rolling, blisters, pinholes, dunting.
- ◆ Colours  
Definition of ceramic colours, Various type of ceramic colours — Under glaze colour, In glaze colour, Over glaze colour, Enamel colour; Preparation of stain — body stain, glaze stain; Cobalt colours, Copper colours, Iron colours, Preparation of red oxide, Manganese colours, Uranium colours, Chromium colours, Coral reds, Chrome pinks, Influence of raw materials on the pink colour, Antimony colour, Cadmium colour, Gold colour, Ruby red, Platinum colour, Mixed colours, Metallic lusture, Mixed lustures, Liquid Gold, Preparation of gold glance, Preparation of stain fluxes and use, Defects.
- ◆ Decoration  
Classification of decoration methods, advantages, different decorating techniques, painting, spraying, stenciling, stamping, printing, lithographic transferring, silk screen printing, dusting, engobing, liquid gold decoration and decoration techniques.

MCG-I/04	Studio Practice- I	Designing, Concept, Exploration, Prototyping, Visualization (Properties and usage of Specialize Materials Selection and use for consumer products. Design limitations and specific advantages of a particular processes and materials. Properties of ceramics and glass, various processes and assembling techniques. Concepts of structure and costing. Significance of form in structural strength of products. Influence of materials and processes on product aesthetics. )	Skill Development	Practical	150	75	75	6
MCG-I/05	Design Research and Synthesis	Course is focused on design research as it applies in a human-cantered design context for user. Through readings, presentations, and discussions students learn to distinguish and articulate different research strategies, review methods and ways of making sense of data collected. Making sense of complexity by doing and devising actions based on adductive thinking produce meaningful argument that support decision making and iterative design development. Special emphasis is placed on ethnography, communication theory, and interventions in organizational systems and cultures.	Skill Development and enhance entrepreneurship skill	Practical	150	75	75	6
					<b>600</b>	<b>210</b>	<b>390</b>	<b>24</b>

**Semester - II**

Subject Code	Subject	Abstract	Outcome	Nature of Course	Full Marks	Internal Marks	External marks	Credit
MCG-II/01	Aesthetic - II	<p>Aesthetical aspects of Asian and Islamic</p> <ul style="list-style-type: none"> <li>• The Six principles of Chinese painting (Xie He's) (Spirit Resonance, Bone Method, Correspondence to the Object, Suitability to Type, Division and Planning, Transmission by Copying,)</li> <li>• China's major philosophies, significantly including Confucianism, Buddhism, and Daoism.</li> <li>• Brief Definition and Meaning, Main Elements of Islamic Art. Influence of the Religion of Islam on Islamic Art. The Infinite Pattern in Islamic Art</li> <li>• The major Islamic philosophers produced on works dedicated to aesthetics, (Beauty, Rhetoric and poetics, Imitation and imagination )</li> <li>• Aspects of Divine and Human Creation. The Treatment of Language Arts in Islamic Philosophy. A "Pragmatic" Aesthetic Critical Theory</li> <li>• Islamic Decorative Arts, Geometric Design, Islamic Calligraphy, Architecture and It's affect/ influence on other Arts rest of the world</li> </ul>	Develop the aesthetical skill, as well as enhance intellectual ability	Theory	100	20	80	4

MCG-II/02	Product Design - I	<p>Understanding of the factors that directly or indirectly influence the context and the products.</p> <p>Understanding of problem areas and the limitations. Familiarisation studies and synthesis for detailed investigation of context. Developing questionnaires, interviewing users and selecting suitable techniques to study use behaviour and reactions, interviewing and observing user and photographic studies of products in use.</p> <p>Understanding market demands and manufacturing constraints. Documenting and interpreting data and formulating conclusions. Role of creativity in understanding of latent needs.</p> <p>Comparative analytical studies in other creative fields. Product in product design.</p>	Enhance entrepreneurship skill	Practical	200	100	100	8
MCG-II/03	Method & Material-II	<p>Theoretical Knowledge of Specialize Subject.</p> <p>Glass: Glass: knowledge about utilise a range of glass for kiln casting processes and cold working techniques in response to set tasks.</p> <p>The Glass Transition</p> <p>Thermal properties of glass, Kiln formed glass is controlling the temperature of the glass.</p> <p>Annealing thickness and calculation.</p> <p>Kiln formation and specification for the Kiln form Glass.</p> <p>Capably utilise a range of specialised glass blowing and finishing technique,.</p> <p>Different tools processes and equipment for the manual and Automatic glass blowing.</p>	Develop the aesthetical skill, as well as intellectual ability	Theory	100	20	80	4

		Different Glasses their detail property and utilization Detail Furnace structural and their specification. Fuel utilisation and necessary equipment.						
MCG-II/04	Studio Practice-II	Designing, Concept, Exploration, Prototyping, Visualization (Detailing in products, while using processes like throwing, moulding, casting etc. Detailing for fabricated products with other materials like metal, plastic, wood, bamboo etc, detailing while using fabric materials, form and other cushions, leather and cloth in combination with ceramic or glass materials like. )	Develop the aesthetical skill, as well as Enhance entrepreneurship skill	Practical	100	50	50	4
MCG-II/05	Colloquium -I (Art, Design & Society)	Lectures from faculty about their research and paper presentation (The concept of Ceramic & Glass Design starting from the time of the early civilisation Great Exhibition leading to the Bauhaus and after, work of Bauhaus, history of design profession in Europe and America. A survey of major developments of 20th Century painting, sculpture and architecture. Changing cultural pattern and its influence on the above mention medium. Influence of television on films. Urbanization and understanding contemporary urban forms.)	Develop the writing skill, as well as Enhance intellectual ability	Practical	100	50	50	4
					<b>600</b>	<b>240</b>	<b>360</b>	<b>24</b>

**Semester - III**

<b>Subject Code</b>	<b>Subject</b>	<b>Abstract</b>	<b>Outcome</b>	<b>Nature of Course</b>	<b>Full Marks</b>	<b>Internal Marks</b>	<b>External marks</b>	<b>Credit</b>
MCG-III/01	Aesthetic - III	<p>Aesthetical aspects of western Aesthetics and the philosophy of Western Art. Art in terms of an aesthetic spectrum in different periods.</p> <p>The elements of a classical composition. The Greeks, especially in the context of Sixth Century Athens (Socrates, Plato and Aristotle etc on Aesthetics &amp; Beauty)</p> <p>What is the role of "imitation" in the arts, what exactly does art "imitate"</p> <p>Conceptions of beauty in the European Renaissance: The rise of Humanism and its implications for aesthetic theory by philosophers.</p> <p>The European "Enlightenment" origin of a "Science" of Aesthetics.</p> <p>European Romanticism and the definition of the artist</p> <p>Iconography and Colour in western art history, for religious painting in Eastern Christianity.</p> <p>African Art: General characteristics of African Art, Artistic creativity or Expressive individualism, Visual abstraction, Style, tribe, and ethnic identity</p>	Develop the aesthetical skill, as well as enhance intellectual ability	Theory	100	20	80	4



MCG-III/02	Industrial Exposure	This advanced seminar explores contemporary topics in Integrative Design with an emphasis on how integrative designers define their practice in relation to traditional design fields. It also considers future design scenarios. [( 8 weeks)+ 2 week Document)]	Develop the job opportunity	Practical	250	125	125	10
MCG-III/03	Project Abstract / Synopsis	A lecture providing the opportunity for individual candidates to develop and present their thesis in a manner that directly reflects their product as well as career objectives. The thesis project and document must exhibit an in-depth exploration of an approved topic, which addresses an area of importance to the Ceramic & Glass Design field and contributes to the body of knowledge pertaining to that area and detail study about the product sustainability. It may be carried out under industry sponsorship, as a part of a research project, or be independently based.	Develop the proposal writing skill, as well as Enhance entrepreneurship skill	Practical	100	50	50	4
MCG-III/04	Colloquium - II (Historical aspects of product )	Lectures from faculty about their research and paper presentation (Chronological Evolution of Design in particular product )	Develop the writing skill, as well as Enhance intellectual ability	Practical	150	75	75	6
					<b>600</b>	<b>270</b>	<b>330</b>	<b>24</b>

**Semester - IV**

<b>Subject Code</b>	<b>Subject</b>	<b>Abstract</b>	<b>Outcome</b>	<b>Nature of Course</b>	<b>Full Marks</b>	<b>Internal Marks</b>	<b>External marks</b>	<b>Credit</b>
MCG-IV/01	Major Project	Major Project is the academic frame guiding the student towards excellence. In the framework of the project, the students will be required to incorporate the knowledge and creative processes acquired in the program while making a personal statement and taking a personal stand. The project will deal with a topic that the student chooses in the III <sup>rd</sup> Semester Project Abstract / Synopsis to develop and will be accompanied by individual instructional meetings with a personal advisor instructional and enrichment meetings with the project coordinators and sponsored agency or organisation . In the structure of the enrichment meetings the topics of research, criticism, design and management are discussed. There are also Instructional and critical convention with the project guide and sponsor agency. In the course of his/ her studies, every student must submit one final project report in a prescribe format.	Develop the job opportunity	Practical	450	225	225	18
MCG-IV/02	Dissertation	To develop complete ceramic product	Develop the writing skill, as well as Enhance intellectual ability	Theory Presentation	150	75	75	6
					<b>600</b>	<b>300</b>	<b>300</b>	<b>24</b>