

TERNA ENGINEERING COLLEGE

**Department of Design**

SEM	SUBJECT CODE	SUBJECT	CO/LO	CO / LO STATEMENT
SEM I	BDC101	Fundamentals of Design-I	CO1	Introduction to design provides the framework for understanding design as a new language by sensitizing students to the conceptual, visual and perceptual issues involved in the design process.
			CO2	To understand the basics elements, principles of design and composition.
			CO3	To understand the theories of color and its impact on our lives.
	BDC102	Materials and Processes in Design-I	CO1	To understand the basic technological and structural aspect of development of Products.
			CO2	To understand the technological aspect of various materials (Plastics, Metals, Ceramics, Glass, Composites and Natural Materials) and their conversion using diverse range of manufacturing processes.
	BDC103	History of Art, Design and Technology	CO1	To intends to provide an appreciation for art and technology as to how they influence design.
			CO2	To overview interrelations between various key movements in Art, Technology and design along with their impact.
	BDC104	Communication Skills	CO1	To introduce students to the basic concepts of Communication Skills and mechanisms involved in developing vocabulary
			CO2	To explore the four basic skills LSRW and develop a practical approach to respond effectively to carry out Communication.
			CO3	To Understand the essence of creative writing and formal writing with appropriate formats
			CO4	To Exploring the aspects of Speaking Skills through listening and speaking drills
			CO5	To make students understand the importance of Soft Skills
	BDC105	Digital Methods-I	CO1	Digital photography and videography
			CO2	Framing/composing pictures
CO3			Narrative through image	
BDL101	Fundamentals of Design-I	CO1	Introduction to design provides the framework for understanding design as a new language by sensitizing students to the conceptual, visual and perceptual issues involved in the design process.	
		CO2	Understand the basics elements, principles of design and composition.	
		CO3	Understand the theories of color and its impact on our lives.	
BDL102	Digital Methods-I	CO1	Digital photography and videography	
		CO2	Framing/composing pictures	
		CO3	Narrative through image	
BDL103	Design Sketching	CO1	Fundamental aspects of freehand sketching	
		CO2	Drawing geometry for design	
		CO3	Improving hand-eye and mind-eye co-ordination for sketching	
BDL104	Workshop & Model Making	CO1	Understand the properties of soft materials	
		CO2	Acquire ability to manipulate soft and pliable material to create new forms	
SEM II	BDC201	Design Methods and Tools	CO1	Develop problem solving skill
			CO2	Explore the various techniques of out of box thinking and selecting appropriate one based on the circumstance and situation
			CO3	Use various principals and methods of design for problem solving
			CO4	Build decision making skills to select feasible/good ideas
	BDC202	Introduction to Ergonomics	CO1	To develop understanding relationship between ergonomics of work and human beings; analytical background for work that is designed around human capabilities and limitations
			CO2	To understand and integrate scientific (Objective) methodology to design products, processes and services more efficient, more comfortable with improved usability. Understand aspects of human safety and comfort for a product design.
			CO3	To develop understanding of physical and cognitive aspects of comfort, efficiency, utility and safety in human machine interfaces, processes and services.
	BDC203	Fundamentals of Design II	CO1	To develop design aptitude through understanding of the elements and
			CO2	Understand the basics elements, principles of design and composition.
			CO3	Understand the theories of color and its impact on our lives.
	BDC204	Materials and Processes-II	CO1	To gain knowledge and skills related to 3D printing technologies
			CO2	To learn the selection of material, equipment and development of a product for Industry 4.0 environment.
			CO3	To understand the various software tools, process and techniques for digital manufacturing
			CO4	To apply these techniques into various applications
BDC205	Digital Methods-II	CO1	To introduce students to tools for creating and manipulating images digitally	
		CO2	To compose forms out of basic forms and Boolean operations, digital solid modeling features for generating parts/components, modeling aspects of assembly of parts and components	
BDL201	Design Methods and Tools	CO1	Develop problem solving skill	
		CO2	Explore the various techniques of out of box thinking and selecting appropriate one based on the	
		CO3	circumstance and situation	
		CO4	Use various principals and methods of design for problem solving	
		CO5	Build decision making skills to select feasible/good ideas	
BDL202	Drawing and Rendering	CO1	Focus of this course is to impart skills related to the preparation of detailed drawings for Design execution.	
		CO2	Emphasizes on aspects of sketching and rendering product ideas for presentation to internal and external clientele	
BDL203	Design Studio – Problem Solving Process	CO1	This course intends to provide an early introduction to methods of soliciting opinion from customers or users that will be required for a design learner to know going further.	
		CO2	To provide a first-hand experience to students working in teams at identifying a problem/opportunity and arriving at ways to (re)solve them through design intervention.	