MASTER OF DESIGN
(INDUSTRIAL DESIGN)

SCHEME OF EXAMINATION

1st YEAR - SEMESTER I									Marks			
Classification of Course	Code	Course	Hours/ Week	L	T	S	Credits	External Exam Type	Internal Assessment	External Examination	Total	Duration of (Theory) Exam
Core	ID1.01	Design History & Design Theory	2	2	0	0	2	Written-Exam	50	50	100	2 hrs.
	ID1.02	Research Methods & Critical Writing	2	2	0	0	2	Written-Exam	50	50	100	2 hrs.
	ID1.03	Manufacturing Processes & Techniques	2	1	1	0	2	Written-Exam	50	50	100	2 hrs.
	ID1.04	Design Methods	2	1	1	0	2	Viva/ Practical Exam	50	50	100	-
	ID1.05	Communication & Presentation Techniques	2	0	2	0	2	Viva/ Practical Exam	50	50	100	-
Studio	ID1.06	Studies in Form	2	0	0	2	2	Jury	50	50	100	-
	ID1.07	Design Project 1	10	0	0	10	10	Jury	250	250	500	-
Department Elective	ID1.08	Mechanics & Electronics in Industrial Design	2	2	0	0	2	Internal Only	100	0	100	-
	ID1.09	Digital Presentation Methods										
	ID1.10	Applied Arts & Crafts										
TOTAL			24				24		650	550	1200	

List of Abbreviations

L = Lecture; T = Tutorial/ Seminar/ Research/ Lab; S = Studio; NC = Non-Credit

1st YEAR - SEMESTER II									Marks			
Classification of Course	Code	Course	Hours/ Week	L	T	S	Credits	External Exam Type	Internal Assessment	External Examination	Total	Duration of (Theory) Exam
Core	ID2.01	Human Factors in Design	2	1	1	0	2	Written-Exam	50	50	100	2 hrs.
	ID2.02	Advanced Manufacturing Techniques	2	2	0	0	2	Written-Exam	50	50	100	2 hrs.
	ID2.03	Design Research	2	1	1	0	2	Written-Exam	50	50	100	2 hrs.
	ID2.04	Computer Aided Industrial Design 1	2	0	2	0	2	Viva/ Practical Exam	50	50	100	-
Studio	ID2.05	Advanced Form Studies	2	0	0	2	2	Jury	50	50	100	-
	ID2.06	Design Project 2	10	0	0	10	10	Jury	250	250	500	-
Department Elective	ID2.07	Advance Rendering Techniques	2	2	0	0	2	Internal Only	100	0	100	-
	ID2.08	Social Design										
	ID2.09	Design for Sustainability										
	ID2.10	Studies in Usability										
	ID2.11	Design Engineering & Prototyping										
Institute Elective	ID2.12	Design Thinking	2	2	0	0	2	Internal Only	100	0	100	-
TOTAL			**24**				**24**		**700**	**500**	**1200**	

List of Abbreviations

L = Lecture; T = Tutorial/ Seminar/ Research/ Lab; S = Studio; NC = Non-Credit

2nd YEAR - SEMESTER III												
Classification of Course	Code	Course	Hours/ Week	L	T	S	Credits	External Exam Type	Marks			Duration of (Theory) Exam
									Internal Assessment	External Examination	Total	
Training	ID3.0	Industrial Training	6 Weeks	-	-	-	1	Internal Only	50	0	50	-
Core	ID3.01	Design Management	2	1	1	0	2	Written-Exam	50	50	100	2 hrs.
	ID3.02	Product Detailing	2	1	1	0	2	Written-Exam	50	50	100	2 hrs.
	ID3.03	Systems Thinking & User Experience Design	2	2	0	0	2	Written-Exam	50	50	100	2 hrs.
	ID3.04	Computer Aided Industrial Design 2	2	0	2	0	2	Viva/ Practical Exam	50	50	100	-
	ID3.05	Design Project 3	10	0	0	10	10	Jury	250	250	500	-
Department Elective	ID3.06	Interaction & Interface Design	2	2	0	0	2	Internal Only	100	0	100	-
	ID3.07	Mobility Design										
	ID3.08	Contemporary Technology in Design										
	ID3.09	Branding & Marketing										
Institute Elective	ID3.10	Universal Design	2	2	0	0	2	Internal Only	100	0	100	-
TOTAL			**22**				**23**		**700**	**450**	**1150**	

List of Abbreviations

L = Lecture; T = Tutorial/ Seminar/ Research/ Lab; S = Studio; NC = Non-Credit

2nd YEAR - SEMESTER IV									Marks			
Classification of Course	Code	Course	Hours/ Week	L	T	S	Credits	External Exam Type	Internal Assessment	External Examination	Total	Duration of (Theory) Exam
Core	ID4.01	Intellectual Property Rights, Professional Practice & Entrepreneurship	2	1	1	0	2	Viva/ Practical Exam	50	50	100	-
Studio	ID4.02	Thesis Project	12	0	0	12	12	Jury	300	300	600	-
Design Degree Show	ID4.03	Design Degree Show	1	0	1	0	1	Internal Only	50	0	50	-
TOTAL			**15**				**15**		**400**	**350**	**750**	
GRAND TOTAL OF ALL SEMESTERS			**85**				**86**		**2450**	**1850**	**4300**	

List of Abbreviations

L = Lecture; T = Tutorial/ Seminar/ Research/ Lab; S = Studio; NC = Non-Credit

SUMMARY OF COURSE

	Credits			Marks		
Semester	**Core**	**Other**	**Total**	**Core**	**Other**	**Total**
Semester I	22	2	24	1100	100	1200
Semester II	20	4	24	1000	200	1200
Semester III	18	5	23	900	250	1150
Semester IV	14	1	15	700	50	750
Total	**74**	**12**	**86**	**3700**	**600**	**4300**

SYLLABUS

FIRST YEAR: SEMESTER I

ID1.01: Design History & Design Theory

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	0	2	Written-Exam	50	50	100	2 hrs.

The history of cultures and lifestyles, as a study of objects of human use. The period before the birth of industrial design – craft- and years of design. Conception of design from Bauhaus, Ulm, the American style of the late 60's, the revivals of the 80's, the present. The intellectual leanings of design and the pragmatic view. Methodology and scientific approaches to analysis, and solution seeking. The History of Ideas.

ID1.02: Research Methods & Critical Writing

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	0	2	Written-Exam	50	50	100	2 hrs.

In this module, the challenge is to address the wide disparity amongst the students of verbal expression skills in the English language. The objective is not only to introduce students to the necessity of appropriate research, as well as to the methods of conducting research and the conventions of writing a research paper, but also how to write correctly. Additionally, the students are exposed to different styles of writing to show how the same content can be expressed by different writers and how this affects communication and reception of such content. This is done through directed readings on diverse subjects such as environment, civil society, technology, poetry, history, culture and design. A range of issues, opinions, exhibitions and writings pertaining to the students' own regional context as well as a national and global canvas, enable an awareness of the development of design as part of a larger whole. The assignments specifically help the students in:

- recognizing the subjective and objective aspects of research,
- identifying objectives and working out methodologies,

- recognizing the relative value of primary and secondary sources, putting together and rationalizing the structure of a research paper,
- and finally presenting it in a clear and concise format easily accessible to a range of reader.

ID1.03: Manufacturing Processes & Techniques

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	1	1	0	2	Written-Exam	50	50	100	2 hrs.

Processes from low investment handcraft to high tech 'no hands' processes of production.

Cane, bamboo, metal smithy, wrought iron, bell metal, fabrication, pipe working, carpentry, lacquer, glass blowing and glass working, furniture, sheet metal, hand working sheets, ceramics, pottery.

Spinning, sand casting, machining, die casting, press working, slotting, shearing, gas welding, arc welding, milling, pipe rolling, sheet rolling, drawing, extrusion.

ID1.04: Design Methods

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	1	1	0	2	Viva/ Practical Exam	50	50	100	-

Understanding Design Methods, Processes and approaches toward solution seeking. Methods of exploring situations through Research (Ethnographic, Participatory and Evaluation), Understanding of user behaviour, Persona Profiling, data logging, data reduction techniques, specification writing, and Stakeholder Mapping.

ID1.05: Communication & Presentation Techniques

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	0	2	0	2	Viva/ Practical Exam	50	50	100	-

Free Hand Drawing: Refresher in, drawing objects, form and nature. Treatment techniques in pencil, use of - charcoal, pen & ink, pastels, brush work and markers. Studies, in line, shading and texture.

Rendering: Two-dimension representation of concepts and detailed designs. Surface representation, colour and surface quality representation. Quick renderings, concept renderings and detailed renderings. Simulating environment of use. Exercises in rendering glass, chrome, plastic, metal, paint. Concave, convex, reflectivity, glass, mat and texture representation. Media studies - sketch pen, paints, airbrush, pencil, marker, inks, photo inks, and miscellaneous media like collage, transfers etc. Use of digital rendering media using latest software.

Technical Drawing: Engineering conventions for products. Component drawings, fabrication drawings, drawings for tooling, sections, cut-away and exploded views. Tolerances and specifications. Dimensioning for manufacture. Production processes and related conventions like draft, 1st angle reversed drawings for tooling, jig specific definitions.

Model Making: The ability to make 3 dimensional representations of ideas, concepts and complete designs. Quick models, studies in paper, card board, foam models, plastic, wood, plaster and models in mixed media, metal constructions. Hand working in various materials, tools usage and development, cutting, filing, sanding and buffing. Machine working on wood, plastic, metals and mixed media. Functional models, links, details, fastening, joining, moving models. Surface treatments, painting, polishing, filling, masking, etc. Finishing - text, graphics, application, available materials, techniques and practices.

ID1.06: Studies in Form

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	0	0	2	2	Jury	50	50	100	-

To develop awareness of form, its experiencing and creation. A bridge course that enables architects — designers of buildings — to shift their perspective from large sized artefacts to small artefacts using their existing methodologies of design and processes of decision making. The concept of visual excellence, detailing, overall form and details, object colour and texture. An existing product will be chosen analysed critically on aspects of proportion, form, colour, and texture and redesigned.

Spatial analysis, spatial organization, depth illusion. Spatial composition in 2D & 3D space. Introduction to 2 dimensional and

3-dimensional form. Radii manipulation in 2D and 3D form. Exploration of surface textures in different materials. 2 and 3D Form transition. Exploration of form to develop imagination and insight. Use of metaphors to generate new forms. Concept of family of forms. Introduction to 3D geometry. Basic 3D Forms: cube, tetrahedron, octahedron etc. and their imaginative use in generating complex forms and structures.

ID1.07: Design Project 1

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
10	0	0	10	10	Jury	250	250	500	-

Design of an object from the perspective of cultural thinking.

CONTEXT: Design would have to reflect, traditions of use and cultural factors determining criteria of design, sociological perspective of products, user projection through ownership, life style patterns of products, comprehension: contemporary trends, fashion, style, and images of the next generation. Concentration on human - complexity rather than functional complexity. Marketing concepts, buying motives, design trend plots, fashion and style studied from psycho-graphic data, definition of market.

Development of product brief, user interviews ace studies, market visits and studies, product placement, life style - product relationship, cost-price optimization, exclusive versus mass objects, image boards.

ID1.08: Mechanics & Electronics in Industrial Design

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	2	2	Internal Only	100	0	100	-

ID1.09: Digital Presentation Methods

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	2	2	Internal Only	100	0	100	-

ID1.10: Applied Arts & Crafts

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	2	2	Internal Only	100	0	100	-

FIRST YEAR: SEMESTER II

ID2.01: Human Factors in Design

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	1	1	0	2	Written-Exam	50	50	100	2 hrs.

To develop awareness, acquire information, and experience human factors in design. Basic principles, anthropometry, scale models, and testing. Measuring the human body, tools, devices, static and dynamic anthropometry, force, pull and actuation comfort zones. Test rigs, testing parameters, evaluation of comfort, nature of use and intimacy, display and controls, grips, force & movement, body supports, comfort parameters. Perceptual comfort, visual reaction and cultural parameters. Safety and design. Ceremony, tradition and use of discomfort. Parameters of culture and tradition on comfort, relaxation, postures, and behaviour of use.

ID2.02: Advanced Manufacturing Techniques

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	0	2	Written-Exam	50	50	100	2 hrs.

Die making, EDM, hardening & annealing, tool design, tool manufacture, die trials, etching, wire cutting, boring, polishing.

Plastic industries, FRP, foaming of plastics, PU moulding, thermoforming, injection moulding, vacuum forming, compression moulding, extrusion, pultrusion, casting, calendaring, ultrasonic welding, vacuum metallizing.

Wood, seasoning, steam bending, thickening, planning, moulding, surface finishes, joining, combination, press working.

ID2.03: Design Research

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	1	1	0	2	Written-Exam	50	50	100	2 hrs.

The Semester is structured with the understanding that it is essential to encourage students of Design in India to participate, learn from and respond to the design and manufacturing skills relevant to our culture and society. The Design Research Theme thus aims to encourage them to research within the context of the Indian civilization which is one of the oldest, in the context of the challenges faced by Indian Design today in an increasingly standardized and homogenized world.

The thrust in this Semester is to help students build on their strengths and overcome their weaknesses.

The exercises over the last semester are devised to increase proficiency in research, particularly with respect to interpreting information, and organizing it in an overall holistic context. Simultaneously, students are guided in 'reading' between the lines (how much should you believe/ how do you decide what to believe and what not to believe/ how the same facts can be interpreted differently depending on the orientation of writer/ reader) to authentically assess designs shown of any marketing hype and encouraged to recognize true innovations. In class-discussions, students are expected to question conventions and accepted ideas, to think independently, and to not toe any official line. They are also encouraged to inspire their vision of design by interacting with skilled craftspeople, who are repositories of primary sources of cultural information. Suggested thrust area: Product Services, Systems & Environments in the indigenous context.

ID2.04: Computer Aided Industrial Design 1

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	0	2	0	2	Viva/ Practical Exam	50	50	100	-

Introduction to computer aided industrial design. Using database for material selection. Structure of CAD programmes and hardware. Relation of object space and screen space, 2D & 3D database.

Introduction to solid modelling. Detailed study of solid modelling software, studio exercises in solid modelling applications. Animation techniques and product animation. Product design task, communication of designs using CAD.

ID2.05: Advanced Form Studies

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	0	0	2	2	Jury	50	50	100	-

To develop insight into form, design and develop sophistication in its application to cultural products. Detailed study of the structural, perceptual and spatial properties of well-ordered three-dimensional orientable and non-orientable forms, their composition and the process of designing them. Experience of working in an area where objects convey information through formal 'qualities.

Qualitative characteristics; analogies; gestalt psychology, perception, responses and subliminal codes. Form, colour, order, symmetry, tension, texture, concavity, convexity, rectilinear/ curved form, mathematically definable and indefinable forms, Information theory, fractals, simplicity and complexity, scale, miniaturization, integration and articulation.

A tutorial where an existing product is chosen and reworked to express a certain quality. The presentation is to be as explanation/ through metaphor/ analogy into formal criteria - the final product would be a finalised model in foam, plaster or other easily workable material.

ID2.06: Design Project 2

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
10	0	0	10	10	Jury	250	250	500	-

Design of an object from the perspective of individual expression.

CONTEXT: Arts, expressive, tendencies, design motives, product differentiation, need, cost optimization. Objects of low intimacy and historical styles individual expressions.

ID2.07: Advance Rendering Techniques

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	2	2	Internal Only	100	0	100	-

ID2.08: Social Design

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	2	2	Internal Only	100	0	100	-

ID2.09: Design for Sustainability

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	2	2	Internal Only	100	0	100	-

ID2.10: Studies in Usability

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	2	2	Internal Only	100	0	100	-

ID2.11: Design Engineering & Prototyping

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	2	2	Internal Only	100	0	100	-

ID2.12: Design Thinking

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	2	2	Internal Only	100	0	100	-

SECOND YEAR: SEMESTER III

ID3.0: Industrial Training

Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
6 Weeks	-	-	-	1	Internal Only	50	0	50	-

To provide exposure to working in a real-life situation - in the industry - to comprehend role of designer and processes of object development and manufacture.

The student will spend his Summer Vacation - a period of 6 week in an industry. The department will aid in the placement of the student. This experience need not result in the student designing a product. The student would have to submit a report about his experience and draw conclusions about the functioning of the industry and the role of the designer.

ID3.01: Design Management

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	1	1	0	2	Written-Exam	50	50	100	2 hrs.

Management, Marketing & Innovations: The course analyses the innovations which have occurred in the worlds of fashion and design with respect to their competitive markets: strategic positioning, marketing, distribution and image. The aim is to give the designer a better understanding of the issues and terminology of the commercial context in which he will be working.

Design Management: Through the examination of company case studies, drawn from leaders in the design sector, factors influencing design management and company design policy are examined in depth.

The Concept of quality: The intention is to arrive at a new concept of 'Quality' based on the direct sensory response of the user. The course aims to develop critical awareness in the areas to light, colour, and acoustic properties, tactile and factory aspects which form the specification matrix of the modern product.

ID3.02: Product Detailing

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	1	1	0	2	Written-Exam	50	50	100	2 hrs.

To develop creative conceptualization capabilities in form and structural integration and its implications to user society and the producer. Product in its context, family of products, interchangeability of parts, Indian and foreign standards, market availability. Detailing plastic products while using processes like injection moulding, compression moulding, blow moulding and FRP moulding using hand laying and compression processes. Detailing for fabricated products in sheet metal, steel tubes and channel sections, aluminum sheets and extruded sections of different materials. Detailing for die casting and die design. Detailing for fabrication involving combination of materials like fabric, foam leather, cloth, rubber, plastic, metal, wood, adhesives, rivets, welding, brazing and mechanical fasteners. Selection of control panel elements, graphics and typography, colour schemes, safety and maintainability, operating manuals.

Study of well detailed products, product design task Visual creativity and communication. Product design task, selecting a product with wide configuration options and alternative options.

ID3.03: System Thinking & User Experience Design

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	0	2	Written-Exam	50	50	100	2 hrs.

ID3.04: Computer Aided Industrial Design 2

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	0	2	0	2	Viva/ Practical Exam	50	50	100	-

To develop proficiency of use of computers for industrial design. Introduction to surface modelling. Studio exercises in surface modelling applications.

ID3.05: Design Project 3

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
10	0	0	10	10	Jury	250	250	500	-

The role of the Designer as an interventionist to bring about social change through technological and sustainable thinking

CONTEXT: Total Design - Information collection, existing product analysis, market research, development of brief, concept generation as an audit of possibilities.

Ergonomic studies, cost analysis, Social environment impact analysis value engineering, optimization, productivity improvement, product improvement. Block modelling, technical analysis, production methods analysis, operational analysis, manufacturing methods, pilot production. Team working, decision strategies, coordination of management and technical parameters, maintenance and service analysis.

D3.06: Interaction & Interface Design

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	2	2	Internal Only	100	0	100	-

D3.07: Mobility Design

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	2	2	Internal Only	100	0	100	-

D3.08: Contemporary Technology in Design

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	2	2	Internal Only	100	0	100	-

D3.09: Branding & Marketing

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	2	2	Internal Only	100	0	100	-

ID3.10: Universal Design

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	2	2	Internal Only	100	0	100	-

SECOND YEAR: SEMESTER IV

ID4.01: Intellectual Property Rights, Professional Practice & Entrepreneurship

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	1	1	0	2	Viva/ Practical Exam	50	50	100	-

Nature of Intellectual Property; Patents, Designs, Trademarks and Copyright; Process of patenting and development; technological research, innovation, patenting, development; International cooperation on Intellectual Property; International treaties on IPRs; Patenting under PCT. Procedure for grants of patents.

Scope of Patent Rights; Licensing and transfer of technology; Patent information and databases; Geographical Indications.

Administration of Patent System. New developments in IPR; Case Studies; IPR and Design.

ID4.02: Thesis Project

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
12	0	0	12	12	Jury	300	300	600	-

The student has to undertake a project to demonstrate his abilities as a designer. Of particular importance would be to carry the project up to completion as a prototype or productionized product. The project should be chosen with care and should have scope and potential to demonstrate the Student's maturity, attitude and approach as a professional. The project should reflect the students' ability to Study, research; analyse concepts and solutions in terms of sketches, prototypes or products. A guide with experience in the particular product area would have to be chosen by the student. He will be required to submit progress reports to his guide and keep him informed about the progress of his project: seek advice about retaining his academic perspective. The evaluation of the final project will be through assessment by the guide and a final jury on his successful completion of the project.

ID4.03: Design Degree Show

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
1	0	1	0	1	Internal Only	50	0	50	-

The students would be required to organize a Design Degree Show and present their work to the public. They also need to initiate the Placement process for their respective batch. They are required to plan & design various product elements needed for their own placement in the industry and preparation of exhibition/ literature needed for exhibitions of their work.