

Industrial Design Course Content

1st Semester

DE 601 Introduction to Studio Photography

Course Content *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

Lens, Focal Length, Exposure (Shutterspeed, Aperture, ISO), Depth of Field, Histogram, Picture Styles, RAW image, Digital Imaging, Sensor, Crop Factor, Light Meter (Incident, Reflected), Studio Lighting, Flash Photography, Tabletop Photography.

Texts / References

- Andrews, Philip & Langford, Michel, Langford's Starting Photography:
- The Guide to Creating Great Images, Focal Press; 6 edition (24 October 2008)
- Hirsch, Robert, Light and Lens: Photography in the Digital Age, Taylor & Francis Group, 2012.
- Page, David A. & Zakia, Richard D., Photographic Composition: A Visual Guide, Focal Press, 2011
- Hunter, Fil & Biver, Steven & Fuqua, Paul, Light Science and Magic: An
- Introduction to Photographic Lighting, Focal Press, 2012.
- Zakia, Richard D., Perception and Imaging: Photography – A Way of Seeing, Focal Press, 2013.
- Berger, John, Ways of Seeing, Penguin, 1990.
- Child, John, Studio Photography: Essential Skills, Focal Press, 2008.

DE 603 Presentation and communication skills

Course Content *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

- Introduction to presentation methods and technologies. Understanding and creative applications of these media.
- Design principles for creating presentations, slides and report writing.
- Creative writing, articulation, narration exercises.
- Final Project: Documentation and presentation exercise.

Texts / References

- Ludlow, R. And Panton, F., “The Essence of Effective Communication”, Prentice Hall, (June 1993)
- Quirk, Randolph and Sidney, Greenbaum, : “A University Grammar of English;”, Paperback – 1 Jan 2006
- Guffrey, Mary E., “Essentials of Business Communication”, South-Western College Publishing; 9th Revised edition edition (20 February 2012)
- Raman, Minakshi and Sharma, S., Technical Communication: Principles and Practice”, Oxford; Second edition (28 April 2011)
- Rodrigues, M. V., “Effective Communication”, Himalaya Publishing House
- McCarthy, Michael and Felicity O’Dell, “English Vocabulary in Use”, Cambridge University Press, (March 28, 1998)
- Jones, Daniel, “The Pronunciation of English”, Universal Book Stall, 1992.

DE 605 Workshop Skills

Course Content *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

- Introduction to workshop safety, best practices and workshop discipline and rules.
- Introduction to workshop machines and hand on operation of each tool
- Introduction to prototyping materials, processes, and prototyping techniques.
- Modern prototyping technologies and working with CAD.
- Painting and Finishes
- Prototyping a product

Texts / References

It is a lab course. Hands-on and practical experience based exercises to be done by students under expert supervision.

DE 607 Studies in form 1

Course Content *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

- 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.
- Use of combinatorics as a method of 3D form generation.
- Form, material and process relationship.

Texts / References

- Itten, Johannes; The Art of Color: The Subjective Experience and Objective Rationale of Color, John Wiley & Sons; 1 edition (December 1997)
- Hannah, Gail Greet; Elements of Design, Princeton Architectural Press, 1, July 2002
- Byers, Mel; The Design Encyclopaedia, Publisher: John Wiley & Sons Publications, (8 August 1994)
- Livio, Mario; The Golden Ration: The Story of PHL, the World's Most Astonishing Number, Publisher: Broadway, 2003.

DE 609 Product Design 1

Course Content *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

- Design Definitions and Design Spectrum
- Product Attributed – Function and Emotion
- Product configurations and Component relationships (component Matrix)
- Introduction to Design Research
- Product Analysis – Diachronic, Synchronic
- Understanding and Analysis – Diachronic, Synchronic
- Understanding and Analyzing contexts, parallel situations, future situations
- Understanding modularity and modular systems – 3D lattice and structures
- Design of Modular System – abstract design
- Process of conception and its documentation
- Seminar and exercises related to above topics

Texts / References

- Jones, J.C : Design methods: Seeds of human futures, Wiley inter science, London, 1992.
- Gorb, Peter, Ed. Living by Design, Lund Humphries, London 1978.
- M.M Andereasen, Integrated Product Development, IFS Publications Ltd. / Springer Verlag, Berlin, 1987.
- Asimow Morris; Introduction to Design, Prentice Hall, Englewood Cliffs, N.J., 1962.
- Pulos, Arthur, The American Design Ethic, MIT, USA, 1983.
- Roozenburg and Eekels, Product Design: Fundamentals and Methods, Publisher: John Wiley & Sons Inc; New Ed edition, 1995
- Ulrich, Karl T., Eppinger, Steven D.; Product Design and Development, McGraw-Hill 1995, 2000, 2004
- Goodrich, Kristina; Design Secrets: Products: 50 Real- Life Projects Uncovered - Industrial Designers Society of America, Publisher: Rockport Publishers June 2001
- Cagan, Jonathan; Vogel, Craig M.; Creating Breakthrough Products: Innovation from Product Planning to Program Approval, Publisher: Financial Times Prentice Hall; 2002
- Rouse, William B.; Design for Success: A Human- Centered Approach to Designing Successful Products and Systems, Publisher: Wiley-Interscience; January 8, 1991

DE 611 Elements of Design

Course Content *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

- An introduction to basic elements: Line, texture, colour, form, symmetry, balance, scale, mass, unity and variety.
- Concept of visual language and visual design
- Introduction to Gestalt Laws, composition and figure and ground relationship.
- Introduction to concept of negative space.
- Use of symmetry. Generation of patterns and textures using simple elements.
- Introduction to typography and fonts.
- Use of grids in graphic composition.
- Colour circle, colour combinations and its dimensions: hue, value and chroma.
- Colour meanings in traditions and psychological use of colours.

Texts / References

- Gail Greet Hannah, Elements of Design, Princeton Architectural Press (1 July 2002)
- Itten, Johannes; The Art of Color: The Subjective Experience and Objective Rationale of Color, John Wiley & Sons; 1 edition (December 1997)
- Kepes, Gyorgy; Language of Vision, Dover Publications, 1 December 1995
- Elam, Kimberly; Geometry of Design: Studies in Proportion and Composition, Princeton Architectural Press (1 August 2001)
- Lawlor, Robert; Sacred Geometry: Philosophy and Practice (Art and Imagination), Publisher: Thames & Hudson, 1989
- Hall, Edward Twitchell; The Hidden Dimension, Publisher: Anchor; Reissue edition, 1990
- Bachelard, Gaston; Jolas, Maria (Translator); The Poetics of Space, Publisher: Beacon Press; Reprint edition, 1994
- Livio, Mario; The Golden Ratio: The Story of PHI, the World's Most Astonishing Number, Publisher: Broadway, 23 September 2003
- Jute, Andre; Grids : the structure of graphic design. Crans-Pres-Celigny : Rotovision, 1996. Presentation and comm skills (documentation, report, ppt etc)
- Workshop skills (advanced model making and prototyping)

DE 627 Indian thoughts and tradition

Course Content *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

This is an exposure course to Indian thought and traditions which will cover various domains like Indian visual art, oral traditions, music, dance, theatre, science, health and architecture and society that make India stand out uniquely as a nation because of its diversity of cultures, languages, religions and customs

Visual Art – Traditional and contemporary schools of Indian Art, folk art

Oral Traditions from the ancient to the present

Music – Classical (Hindustani & Carnatic), Semi-classical, Folk, Fusion

Dance – Classical, Folk, Contemporary

Theatre – Traditional (Natashastra), Contemporary, Puppet Theatre

Science – An understanding of the scientific approach to everything and the holistic approach to it and how it influenced all aspects like health, architecture, management and even the arts.

Post independence understanding of India as a nation and bridging the wealth of the past with the potential of the future.

Reflection of this exposure to the question – What is or what can be called “Indian” Design

Texts / References

- Iyer Bharatha K., Indian Art-a Short Introduction, Stosius Inc/Advent Books Division; Reprint edition (1 December 1983)
- Gandhi Indira, Eternal India, Allen & Unwin (1 August 1980)
- Boner, Sharma Baumer; Vastusutra Upanishad, Motilal Banarsidass Publishers; 3rd Revised edition edition (2000)

DE 637 User studies

Course Content *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

- Gathering user data through observation and contextual interviews
- Interpreting interviews with team members, creating work models (Flow, sequence, culture, physical, artefact etc.)
- Consolidating data across users with techniques such as affinity diagrams and personas
- Using data in the design process
- Comparison of contextual interview to other techniques such as survey research, focus groups, Rapid Assessment Procedure, task analysis.

Texts / References

- Beebe, James; Rapid Assessment Process; Rowman & Littlefield (2001)
- Beyer, Hugh; Holtzblatt, Karen; Contextual Design: Defining Customer Centered Systems; Morgan Kaufmann (8 December 1997)
- Hackos, JoAnn T; Redish, Janice C., User and Task Analysis for Interface Design; Wile (3 March 1998).
- Handwerker, W. Penn; Quick Ethnography; Altamira Press (2002)
- Mike Kuniavsky; Observing the User Experience, Morgan Kaufmann (2003)
- Wendell J, Holtzblatt K, Wood S, Rapid Contextual Design, Morgan Kaufmann (2004)

DE 663 Sketching 1

Course Content (*List of the topics/sub-topics to be covered in the lectures/practicals/assignments*):

- Exercises on lines, curves to improve the hand mind coordination.
- 1, 2 and 3 point perspectives. Theory and examples form nature.
- Drawing of objects from outdoor.
- Exercises for improving observation and visual memory.

Texts / References

- Edwards, Betty; New Drawing on the Right Side of the Brain, Publisher: Tarcher; 2002
- Powell, Dick; Design Rendering Techniques: A Guide to Drawing and Presenting Design Ideas, Publisher: North Light Books, 1996
- Caplin, Steve; Banks, Adam; The Complete Guide to Digital Illustration, Publisher: Watson – Guptill Publications, 2003
- Demers, Owen; Digital Texturing & Painting, Publisher: New Riders Press; Bk & CD-Rom edition, 2001
- Pogany, Willy; The Art of Drawing, Publisher: Madison Books, 1996.
- McKim, Robert; Experiences in Visual Thinking, Publisher: Brooks/ Cole Publishing Company, 1980.

2nd Semester

DE 602 Product Interface Design

Course Content (*List of the topics/sub-topics to be covered in the lectures/practicals/assignments*):

- Investigations and study of visual, functional and ergonomic requirements of control and display interfaces. Legibility of display elements, character of different typefaces and their readability.
- Study of the process of building interactions.
- The course involves an interdisciplinary approach including User Centered Design Process, Activity Analysis, Structuring of Content, Participatory Design, Experiential Ideation, Scenario Building, Linear and Animatic storyboarding, Soft Physical Prototyping Techniques.
- The students will collaboratively design an interactive product interface.

Texts / References

- Crosby, Fletcher and Forbes; A, Sign Systems • Manual, Studio Vista, London, 1970.
- W.H Mayhall; Machines and Perception in • Industrial Design, Studio Vista, NY, 1968.
- Norman, Donald, A Design of Everyday • Things, MIT press, 1990
- Nielsen, Jakob, Usability Engineering, San • Diego, CA: Academic Press, 1993.
- Deborah J. Mayhew, The Usability Engineering • Lifecycle: :Practitioner 'Handbook for User Interface Design, Academic Press / Morgan Kaufmann, 1999.
- Jenny Preece, Yvonne Rogers, Helen Sharp 'Interaction • Design: Beyond Human- . Computer Interaction' New York, John Wiley & Sons; 4th Edition edition (6 February 2015)
- Shneiderman, Ben; Designing the User Interface: Strategies for Effective Human-Computer Interaction, Pearson; 5 edition (March 8, 2009)
- Laurel, Brenda (Editor); The Art of Human-Computer Interface Design. Reading, MA: Addison-Wesley Publishing Co., 1990. ISBN: 0-201-51797-3.
- Kunkel, Paul; English, Rick (Photographer); Appledesign: The Work of the Apple Industrial Design Group, Publisher: Graphis Press, 1997

DE 604 Introduction to product ergonomics

Course Content *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

- Introduction to the concept of ergonomics in design
- Analysis of MME system design, How to assess the interface design, Design methodology
- Body dimensions and its application in design
- Dimensional optimization for the population and use of percentile
- The musculo-skeletal system and joint motion study, Human body follows the principle of lever
- Basic model on calculation of biomechanical stresses on our body
- Design for the physically challenged
- Mini Project work involving Ergonomic design research for product system.

Texts / References

- M. S. Sanders and Ernest J. McCormick: Human Factors in engineering and Design, McGraw-Hill Education; 7 edition (January 1, 1993)
- P.O. Astrand and K. Rodahl : Textbook of work physiology, McGraw Hill, New York, 1970.
- K. F. Wells and K. Luttgens: kinesiology: Scientific basis of human motion, W.B.Sunders Co., 6th Edi., 1976.
- K.H.E.Kroemer and A.D.Kroemer: Office Ergonomics, Taylor and Francis, 2001.
- P.R.Boyce: Human Factors in lighting, Taylor and Francis, 2003.
- Ken Parsons: Human thermal environment, 2nd Edi., Taylor and Francis, 2003.
- E. Grandjean: Fitting the task to the man, Taylor & Francis Ltd; 3rd edition (January 1980).
- E. Grandjean: Ergonomics of the home, Taylor and Francis, 1973.
- K.L. Andersen & others: Fundamental of Exercise Testing, World Health Organization, Geneva, 1971
- W.E. Woodson, Human Factor Design Handbook, McGraw Hill, New York, 1981
- Human Dimension & Interior Space, Whitney Library of Design, New York, 1979.

DE 606 Studies in form 2

Course Content *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

- Form exploration in the context of products.
- Expressions in Form like soft, hard, warm, cold, precise, gross, delicate, strong, fragile, rugged etc.
- Study of product expressions by analyzing in terms of elements like form, proportion, colour, texture etc.
- Introduction to abstraction in form. Study of 3D abstraction in art and sculpture. Exploration of industrial material and processes as elements of design through 3D abstraction of entities in Nature.

Texts / References

- Kimberly Elam, *Geometry of Design: Studies in Proportion and Composition*, Princeton Architectural Press, 2001
- Thompson, Darcy Wentworth; Bonner, John Tyler (Editor); *On Growth and Form* by D"Arcy Thompson, Cambridge University Press; Reissue edition (31 July 1992)
- Doczi, Gyorgy; *Power of Limits*, Publisher: Shambhala; Shambhala; Reissue edition (12 August 1981)
- Lawlor, Robert; *Sacred Geometry: Philosophy and Practice (Art and Imagination)*, Publisher: Thames & Hudson, 1989
- Kepes, Gyorgy; *Language of Vision*, Dover Publications, 1995
- Abhikalpa : *The journal of Industrial Design Centre, IIT Bombay*, January 1984

DE 608 Product Design 2

Course Content *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

- The emphasis of the course is on group design projects. Selection of the projects is based on the possibility of user interaction leading to innovation. Projects end with a comprehensive presentation through working/mock up models, design drawing and a report.
- The project is supported by detailed discussion on various stages in the design process emphasizing the complementary nature of systematic and creative thinking.
- This is achieved by short supporting assignment in following topics:
Creativity techniques like brain storming & synectics to develop creative attitude and open mind, design opportunity, problem perception, Idea Sketching , clustering of ideas for concept development, exploratory mock up models for concept development, evaluation of concepts, final concept selection, concept development, refinement and detailing.

Texts / References

- Loewy Raymond: Never Leave Well Enough Alone, Published by Johns Hopkins University Press, 2002
- Gordon, W.J.J : Synectics, Harper & Row, .Y., 1968
- Hill, P.H : The Science of engineering design, Holt, Rinehart and Winston, N.Y, 1970
- De Bono Edward, Lateral Thinking, Penguin (UK), 1972
- G.Pahl and W. Beitz: Engineering Design, A Systematic Approach, springer, London, 2001
- Kelly Tom: The Art of Innovation, doubleday, NY , 2001
- Prahalad C.K : The Fortune at The Bottom of The Pyramid, Wharton School Publishing, 2005
- Baxter, Mike; Product Design – Practical Methods for the Systematic Development of New Products, Publisher: Chapman & Hall, 1995

DE 610 Nature of Materials and Processes

Course Content *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

- Properties and usage of thermoplastics, thermosetting plastics. Process of selection and applications of plastics for engineering and consumer products.
- Design Limitations and specific advantages of plastic modelling processes.
- Assembly and Decorative techniques for plastic product
Manufacturing processes and assembly techniques for Ferrous and non ferrous metals.
- Concepts of structure and costing.
- Significance of form in structural strength of products. Influence of materials and processes on product aesthetics.
- Industrial finishes for plastic, wood and metals.
- Properties and use of rubber, ceramics and glass. Properties of nature materials like wood, bamboo, cane, leather, cloth, jute and paper and their use at craft and industrial levels

Texts / References

- Beadle, John D : Product treatment and finishes, Macmillan, London 1971
- Beck R. D.: Plastic Product Design, Van Nostrand Reinhold Co., New York, 1980
- Cleminshaw D., Design in Plastics, Rockport Publishers Inc. (22 February 1994)
- Garratt J.: Design and Technology, Cambridge University Press, UK, 2004
- Thompson R.: Manufacturing processes for design professionals, Thames & Hudson, London 2007
- Ashby, Michael; Johnson, Kara; Materials and Design: The Art and Science of Material Selection in Product Design, Publisher: Butterworth-Heinemann; 2002

DE 612 Design Issues

Course Content (*List of the topics/sub-topics to be covered in the lectures/practicals/assignments*):

This course will contain two predominant approaches. The first is reflective which will help students to ponder on the very basic yet subjective questions like what makes a good designer.

- It will address understanding perceptions & paradigms which enable students to “think outside the box’ by identifying the boxes on creates inadvertently while designing.
- It will deal with the tangible and intangible relevance off broadening one’s perspectives in Arts Aesthetics, Science and Technology to design.
The second is an exposure to different thoughts and perspectives, concerns and issues in the
Context of design.
- The challenges in design, layers or user experience, design process
- Design for the real world
- It will also expose the students to emerging areas of design,
- Relevance of design in the context of India,
- Importance of sustainable design practices, preserving traditional practices & designing for the underserved communities.
- Lastly it will provide an exposure to the design process.

Texts / References

- Covey, S. The Seven Habits of Highly Effective People. Free Press; 1st edition (September 15, 1990)
- Athvankar, Uday, Mental Imagery as a Design Tool, Cybernetics and Systems, Vol 28, No 1, Jan-Feb, 1997, pp 25-42.
- Athvankar, Uday, Learning from the way Designers Model Shapes in their Mind, Cognitive Systems : from Intelligent Systems to Artificial life, ed. J.R. Issac and V. Jindal, Tata McGraw-Hill, New Delhi, 1997, pp 221-232.
- Poovaiah, Ravi and Sen, Ajanta. Design by People within Culturally-rooted Idioms – the new ‘cool’ in a globalised world: - paper at ICSID Educational Conference at Copenhagen, Sept. 2005
- Christopher Jones, Design Methods Seeds of Human Future, Wiley, Interscience (1970)
- Jesse James Garrett, The Elements of User Experience, New Riders (2003)
- Hugh Beyer and Karen Holtzblatt, Contextual Design, Morgan Kaufmann (1998)
- Victor Papanek, Design for the real world, 2nd edition, Academy Chicago Publishers; 2nd edition (15 July 1985)
- Donald Schön, The Reflective Practitioner: How Professionals Think In Action, Basic Books (2 September 1984)

DE 614 Design Workshop

Course Content *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

- An independent one week workshop which involves working on actual design problems with practicing professionals. Study of various techniques used in Design execution like Calligraphy, Pottery and Ceramics, Printmaking, Theatre, Film and Video, Performing Arts Sculpture, Painting, Story Telling and Narrative, Toy Design, Book Design, Sound Design, Exhibition Design, Information Graphics and Way finding, Environment etc.

Texts / References

- Robin Williams, John Tollett, Design Workshop, Peachpit Press; 2nd edition (August 20, 2006)
- Robin Williams, John Tollett, Pearson (2002)

DE 654 Sketching 2

Course Content *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

- Perspectives and Object drawing
- Light and shadow
- Renderings
- Live sketching of people, object, animals
- Exercises in studio lighting

Texts / References

- Edwards, Betty; New Drawing on the Right Side of the Brain, Publisher; Tarcher; 2002
- Powell, Dick; Design Rendering Techniques: A Guide to Drawing and Presenting Design Ideas, Publisher: North Light Books, 1996
- Caplin, Steve; Banks, Adam; The Complete Guide to Digital Illustration, Publisher: Watson – Guptill Publications, 2003
- Demers, Owen; Digital Texturing & Paintin, Publisher: New Riders Press; Bk & CD – Rom edition, 2001
- Pogany, Willy; The Art of Drawing, Publisher; Madison Books, 1996
- McKim, Robert; Experiences in Visual Thinking, Publisher: Brooks / Cole Publishing Company, 1980

3rd Semester

DE 703 Arts Design and Society 1

Course Content (*List of the topics/sub-topics to be covered in the lectures/practicals/assignments*):

- Analysis of history of Art. Traditional Art. Modernity and Post-Modernity.
- Analysis of history of Design, Bauhaus, Ulm.
- Analysis of history of Design in India. Analysis of design in the context of India.
- Cultural studies. Discourse analysis.
- An Introduction to Theatre.
- An introduction to Documentary Films.
- Critical writing in Art, Design, Theatre and Film.
- An Introduction to Humanities and Social Sciences.
- Qualitative methods – ethnographic, historical, philosophical, case study, and interview.

Texts / References

- Mario, Bussagli; Sivaramamurti, C.; 5000 Years of Art in India, L.N.Abrams, NY, 1981.
- Ananda, Coomaraswamy; The Dance Of Siva, Kessinger Publishing, LLC (September 15, 2006)
- Eames, Charles and Ray; The India Report, NID, 1958
- Hylland, Eriksen Thomas; Small Places, Large Issues - Second Edition: An Introduction to Social and Cultural Anthropology (Anthropology, Culture and Society), Pluto Press; 2 edition (April 20, 2001)
- Neil, Gershenfield; When Things Start to Think, Published by Hodder & Stoughton Ltd 07/01/1999
- Gropius, Walter (Author); Pick, Frank (Introduction); Shand, P. Morton; The New Architecture and The Bauhaus, The MIT Press; F First Edition Thus, Later Printing edition (March 15, 1965)
- Morris, William (Author); Kelvin, Norman (Editor); William Morris; on Art and Socialism, Dover Publications (August 9, 1999) ISBN-13: 978-0486409047
- Papanek, Victor; Design for the Real World, Chicago Review Press; 2 Revised edition (August 30, 2005)
- Meggs, Philip; A History of Graphic Design, John Wiley & Sons; 3rd ed. edition (1998)
- Trivedi, Kirti (ed.); Indian Symbolology, IDC, 1987
- Raizman, David; History of Modern Design, Publisher: Pearson Prentice Hall; 2nd edition (July 9, 2010)
- Spitz, Rene; The Ulm School of Design: A View Behind the Foreground, Publisher: Edition Axel Menges (March 20, 2002)
- Lupton, Ellen; Miller, J. Abbott (Editor); The ABC's of Bauhaus, The Bauhaus and Design Theory, Publisher: Princeton Architectural Press (June 15, 2000)

DE 707 Design Research Methodologies

Course Content *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

This course offers an introduction to research methods used in the design process for post-graduate students of all branches of design. Topics which will be covered include: Introduction to qualitative research methods used in design, Introduction to quantitative methods, exploratory, inferential and casual research, Research Design and Introduction to Reading research and Reporting research.

Texts / References

- Doing Research in Design by Christopher Crouch, Bloomsbury Academic (May 8, 2012)
- Visual Research: An Introduction to Research Methodologies in Graphic Design by Ian Noble, AVA Publishing; 2nd edition (November 1, 2011)
- A Designer's Research Manual by Jennifer Visocky O'Grady, Kenneth Visocky O'Grady, Rockport Publishers (October 1, 2006)
- The Handbook of Qualitative Research by Norman K. Denzin and Yvonna S. Lincoln, 1994.
- Research Design: Qualitative, Quantitative, and Mixed Methods Approaches by John W. Creswell 2008.
- The Craft of Research by Wayne C. Booth, 2008.
- Practical Research: Planning and Design by Paul D. Leedy, 1980, January 3, 2015
- Introduction to the Practice of Statistics by David S. Moore, 2012.

DEP 701 M.Des Project 1

Course Content *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

The summer internship provides an opportunity for you to work in rural or urban scenarios, based on your preferences and it hopes let you explore the impact design can have on our society, given the backdrop of socio-economic and cultural context of our country.

The duration of the project is four weeks.

All the students will have to make a presentation after they have completed their internships.

Texts / References

As per project choices.

DEP 703 M.Des Project 2

Course Content (*List of the topics/sub-topics to be covered in the lectures/practicals/assignments*):

The communication design projects are chosen in areas that include film and video, typography, information design, graphic design, illustrated books and book design, animation and interaction design. This is the equivalent of the final dissertation project leading to the degree of M.Des in Communication Design.

- Duration: 4 months from July– Nov.
- This project will be an extension of the project III and should include development of the final design concept. The defence presentations will be held during the month of April and time given till the end of June to complete the jury feedback, final drawings and finer detailing of the project.
- The evaluation of the Stage 2 of Project III is done by a panel of examiners appointed by DPGC. The panel will consist of external jury member along with an internal examiner, the guide and the chairman (A Professor or an Associate Professor from another Department of IIT Bombay)

Texts / References

As per project choices.

4th Semester

DE 702 Arts Design and Society 2

Course Content (*List of the topics/sub-topics to be covered in the lectures/practicals/assignments*):

- Key issues in visual arts (painting and installation art, photography, films), performing Arts public art.
- Concepts and concerns, and discourse on contemporary arts practice.
- The course involves talks by visiting artists, writers, film-makers, theatre artists as well as site visits to organizations and institutions that support arts-based activities and education.

Texts / References

- Huddleston, Edgerton Susan; Translating the Curriculum: Multiculturalism into Cultural Studies, Routledge, 1997, ISBN-13: 978-0415914017
- Norm, Fairclough; Analysing Discourse: Textual Analysis for Social Research, Routledge; 2003. ISBN-10: 0415258936
- Pal, Pratapaditya (ed.); 2000: Reflections on the Arts in India, Marg, 2000
- Subramanyan K. G.; Moving Focus: Essays on Indian Art, Seagull Books, Kolkata, 2006
- ISBN Number : 81 7046 199 5
- Subramanyan K.G.; The Living Tradition, Seagull Books Pvt.Ltd (April 1987)ISBN Number: 8170460220
- Friedman, Thomas L.; The World Is Flat: A Brief History of the Twenty-first Century, Publisher: Farrar Straus Giroux; First Edition edition (30 April 2005)

DEP 702 M.Des Project 3

Course Content *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

The communication design projects are chosen in areas that include film and video, typography, information design, graphic design, illustrated books and book design, animation and interaction design. This is the equivalent of the final dissertation project leading to the degree of M.Des in Communication Design.

- Duration: 5 months from December – May.
- This project could be an extension of the previous project (if the scope of the project justifies the extension) or it could be an independent project with one of the following focus:
 - Design project of student interest and / or faculty interest and / or industry project
 - Re-design project that relooks at an existing problem or situation
 - Research project, delving into methodological or pedagogic issues
 - Exploration project, exploring application possibilities in a new technology or medium or variations
- The evaluation of the Stage 1 of Project III is done internally with a panel appointed by the DPGC in consultation with the guide. The panel will consist of the guide and two other faculty members.

Texts / References

As per project choices.