PROF. NARESH VARMA DATLA
Department of Mechanical Engineering
IIT Delhi

PROF. S.R. KALE
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INTENDED AUDIENCE : All undergraduate students and other students interested in graphics design and visualization.

INDUSTRIES APPLICABLE TO : All companies across all disciplines work with drawings, hence this course is relevant to all industries of all sizes.

COURSE OUTLINE :
All engineering activities (design/ manufacturing/ operation/ servicing) for any product from any discipline involve a team of people who communicate graphically. Hence, every engineer must have exposure and some competence in presenting ideas as pictures, and be able to unambiguously interpret drawing from others. This course will help develop basic visualization competency as well as ability to representing ideas on both paper and computer.

ABOUT INSTRUCTOR :

Prof. Naresh V Datla is a faculty member in the Department of Mechanical Engineering at Indian Institute of Technology Delhi since 2014. He received his Ph.D. from University of Toronto, Canada, M.E. from Indian Institute of Science Bangalore, and B.Tech. from National Institute of Technology Warangal all in Mechanical Engineering. Prior to starting his Ph.D., he worked for about two years at Indian Space Research Organisation in Bangalore. Before joining as a faculty at IIT Delhi, he worked as a postdoctoral fellow at Temple University, USA. His teaching and research interests are in mechanical design, mechanics of materials, and failure analysis

Prof. Sunil R. Kale has been with the Department of Mechanical Engineering since 1989. He has developed and taught UG courses (thermodynamics, energy conversion, heat and mass transfer, power plant technologies, engineering drawing, and mechanical core laboratory), and PG courses (experimental methods for thermal engineering, multiphase flows). His research, academic and industry-related, is in the fields of heat transfer, fluid mechanics, fire dynamics, combustion, and energy conversion.

COURSE PLAN :

Week 1: Introduction

Week 2: Graphical Representation

Week 3: Projection Basics

Week 4: Orthographics Projections

Week 5: Auxilary And Sectional Projections

Week 6: Isometric Projections

Week 7: Working Drawings

Week 8: Introduction To CAD

Week 9: Part Modelling 1

Week 10: Part Modelling 2

Week 11: Assembly

Week 12: Design Project