◆ SYLLABUS PROGRAM ◆ MECHANICAL DESIGN ◆ SPECIALIZED BRANCH

COURSE OUTCOME
- ABILITY TO MAKE THE DESIGN OF TRANSMISSION SYSTEMS USING GEAR
- UNDERSTANDING SHAFT AND COUPLING DESIGN PROCEDURE
- ABILITY TO SELECT BELTS AND BEARINGS FOR GIVEN DESIGN REQUIREMENTS.
- KNOWLEDGE OF FRICTION DRIVES.

COURSE CONTENTS
UNIT I DESIGN OF GEARS.
UNIT II DESIGN OF SHAFTS AND COUPLINGS.
UNIT III SELECTION OF V BELTS AND CHAINS.
UNIT IV ROLLING CONTACT BEARINGS.
UNIT V FRICTION DRIVES.

COURSE OBJECTIVE
TO GAIN KNOWLEDGE IN THE DESIGN OF COMMON TYPES OF MACHINE ELEMENTS

REFERENCE BOOKS
1. ROBERT L MOTT, "MACHINE ELEMENTS IN MECHANICAL DESIGN", MACMILLAN PUBLISHING CO., LONDON, 1992.
2. SHIGLEY AND MISCHE, "MECHANICAL ENGINEERING DESIGN", MCGRAW HILL, INC., NEW DELHI, 2000.
1. BANDARI V B, "DESIGN OF MACHINE ELEMENTS ", TATA MCGRAW HILL PUBLISHERS CO. LTD., NEW DELHI, 2003.
2. ROBERT L NORTAN, "MACHINE DESIGN-AN INTEGRATED APPROACH", PEARSON PUBLISHERS, NEW DELHI, 2003.
3. MAITRA G M, "HANDBOOK OF GEAR DESIGN", TATA MCGRAW HILL, NEW DELHI, 1998
4. FACULTY OF MECHANICAL ENGINEERING, PSG COLLEGE OF TECHNOLOGY, "DESIGN DATA BOOK", M/S. DPV PRINTERS, COIMBATORE, 2000
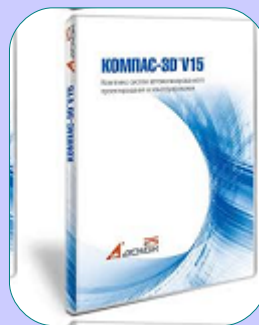
COURSE SOFTWARE
- ◆ APM WINMACHINE (MULTIPHYSICS)
- ◆ KOMPAS 2D/3D/PDM/BOM
- ◆ VARICAD 2D/3D/PDM/BOM
- ◆ UNIVERSAL MECHANISM(MBD).
- ◆ SAM (MECHANISM DESIGN)
- ◆ SALTIRE SOFTWARE
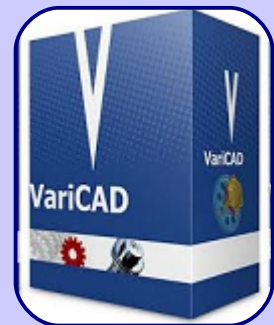- ◆ DOCUMENTATION & PRINTING

APM WINMACHINE
APM CAM/APM PLAIN/APM SCREW/APM STRUCTURE3D/APM DYNAMICS/APM BEAM/APM GRAPH/APM STUDIO
APM DRIVE/APM TRANS/APM SHAFT/APM BEAR/APM JOINT/APM SPRING/APM BASE/APM MECHANICAL DATA/APM MATERIAL DATA/APM SECTION DATA/APM CONSTRUCTION DATA/APM BOOK

APM WINMACHINE

KOMPAS 3D

VARICAD

PRODUCTION ENGG	MECH & AUTOMATION ENGG	MECH ENGG (SANDWICH)	ROBOTICS AND AUTOMATION	MECHATRONICS ENGG
			MECHANICAL DESIGN	
			SEMESTER – V	
			R06503	
DESCRIPTION	ONLINE	TRAINING CENTRE	WEBINAR	REMARKS
MECHANICAL DESIGN	REGISTRATION	DOCUMENTS	COUNSELLING	OWN LAPTOP
ONLINE	2/UNIT TRAINING	4/UNIT ASSIGNMENT	2/UNIT ASSIGNED	SHEDULE
PRESENTATION	WEBINAR	NETWORK	PRESENTATION	2/UNIT ASSIGNED
PERIOD	2 HRS/I/UNIT IN SEQUENCE	NETWORKING/HRS*	PRESENTATION	* BROWSING FEE
PRICE (SEMESTER)	BY MAIL	* BROWSING FEE	NO COST	CERTIFICATE