



DEMAND

PAVIATH INTEGRATED SOLUTION

ENGG ALLIED

MECHANICAL

DESIGN OF MACHINE ELEMENTS

Paviath ONLINE

◆ MECHANICAL UNIVERSITY ◆ SEMESTER – V ◆ ENGINEERING CODE ME9305

COURSE AIM

TO IMPART KNOWLEDGE ON DESIGN PRINCIPLES OF VARIOUS COMPONENTS IN MECHANICAL ENGINEERING APPLICATION.

1. IS 10260 - PART 1: 1982 TERMS, DEFINITIONS AND CLASSIFICATION OF PLAIN BEARINGS PART 1: CONSTRUCTION.
2. IS 10260 - PART 1: 1982 TERMS, DEFINITIONS AND CLASSIFICATION OF PLAIN BEARINGS PART 2: FRICTION AND WEAR.
3. IS 10260 - PART 1: 1982 TERMS, DEFINITIONS AND CLASSIFICATION OF PLAIN BEARINGS PART 3: LUBRICATION.

COURSE OBJECTIVE

- ◆ TO FAMILIARIZE THE VARIOUS STEPS INVOLVED IN THE DESIGN PROCESS
- ◆ TO UNDERSTAND THE PRINCIPLES INVOLVED IN EVALUATING THE SHAPE AND DIMENSIONS OF A COMPONENT TO SATISFY FUNCTIONAL AND STRENGTH REQUIREMENTS.
- ◆ TO LEARN TO USE STANDARD PRACTICES AND STANDARD DATA
- ◆ TO LEARN TO USE CATALOGUES AND STANDARD MACHINE COMPONENTS

COURSE CONTENT

UNIT I STEADY STRESSES AND VARIABLE STRESSES IN MACHINE MEMBERS. UNIT II DESIGN OF SHAFTS AND COUPLINGS. UNIT III DESIGN OF TEMPORARY AND PERMANENT JOINTS. UNIT IV DESIGN OF ENERGY STORING ELEMENTS. UNIT V DESIGN OF BEARINGS AND MISCELLANEOUS ELEMENTS.

REFERENCE BOOKS

1. SHIBLEY J.E AND MISCHKE C. R., "MECHANICAL ENGINEERING DESIGN", SIXTH EDITION, TATA MCGRAW-HILL, 2003.
2. BHANDARI V.B. "DESIGN OF MACHINE ELEMENTS", SECOND EDITION, TATA MCGRAW-HILL BOOK CO. 2007.
1. SUNDARARAJAMOORTHY T. V, SHANMUGAM .N. "MACHINE DESIGN", ANURADHA PUBLICATIONS, CHENNAI. 2003.
2. ORTHWEIN W. "MACHINE COMPONENT DESIGN", JAICO PUBLISHING CO. 2003.
3. UGURAL A.C. "MECHANICAL DESIGN - AN INTEGRAL APPROACH, MCGRAW-HILL BOOK CO. 2004.
4. SPOTTS M.F., SHOUP T.E "DESIGN AND MACHINE ELEMENTS" PEARSON EDUCATION. 2004.

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

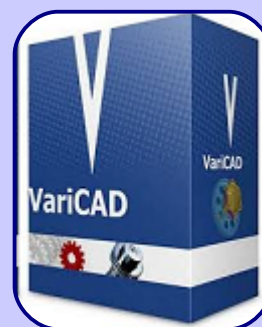
APM CAM/APM PLAIN/APM SCREW/APM STRUCTURE3D/APM DYNAMICS/APM BEAM/APM GRAPH/APM STUDIO APM DRIVE/APM TRANS/APM SHAFT/APM BEAR/APM JOINT/APM SPRING/APM BASE/APM MECHANICAL DATA/APM MATERIAL DATA/APM SECTION DATA/APM CONSTRUCTION DATA/APM BOOK



APM WINMACHINE



KOMPAS 3D



VARICAD

DESCRIPTION	ONLINE	TRAINING CENTRE	WEBINAR	REMARKS
DESIGN OF MACHINE ELEMENTS	REGISTRATION	DOCUMENTS	COUNSELLING	OWN LAPTOP
ONLINE	2/UNIT TRAINING	4/UNIT ASSIGNMENT	2/UNIT ASSIGNED	SCHEDULE
PRESENTATION	WEBINAR	NETWORK	PRESENTATION	2/UNIT ASSIGNED
PERIOD	2 HRS/1/UNIT IN SEQUENCE	NETWORKING/HRS*	PRESENTATION	* BROWSING FEE
PRICE (SEMESTER)	BY MAIL	* BROWSING FEE	NO COST	CERTIFICATE

info@paviathintegratedsolution.com -www.paviathintegratedsolution.com www.paviathjobportal.com