



DEMAND

PAVIATH INTEGRATED SOLUTION

ENGG ALLIED

MECHANICAL

MECHANICS OF MACHINES

Paviath ONLINE

◆ MECH ALLIED ◆ AERONAUTICAL ENGINEERING ◆ SEMESTER – III ◆ ENGINEERING CODE AT6302

COURSE OBJECTIVE

- ◆ TO UNDERSTAND THE PRINCIPLES IN THE FORMATION OF MECHANISMS AND THEIR KINEMATICS.
- ◆ TO UNDERSTAND THE EFFECT OF FRICTION IN DIFFERENT MACHINE ELEMENTS.
- ◆ TO ANALYSE THE FORCES AND TORQUES ACTING ON SIMPLE MECHANICAL SYSTEMS
- ◆ TO UNDERSTAND THE IMPORTANCE OF BALANCING AND VIBRATION.

COURSE OUTCOME

1. BASICS OF MECHANISMS.
2. KINEMATICS OF LINKAGE MECHANISMS.
3. KINEMATICS OF CAM MECHANISMS
4. GEARS AND GEAR TRAINS.
5. FRICTION.

COURSE CONTENT

- UNIT I KINEMATIC OF MECHANICS.
- UNIT II GEARS AND GEAR TRAINS.
- UNIT III FRICTION.
- UNIT IV FORCE ANALYSIS.
- UNIT V BALANCING AND VIBRATION

REFERENCE BOOKS

11. AMBEKAR A.G., "MECHANISM AND MACHINE THEORY" PRENTICE HALL OF INDIA, NEW DELHI, 2007
2. SHIGLEY J.E., PENNICK G.R AND LIICKER J.J., "THEORY OF MACHINES AND MECHANISMS", OXFORD UNIVERSITY PRESS, 2003
1. THOMAS BEVAN, "THEORY OF MACHINES", CBS PUBLISHERS AND DISTRIBUTORS, 1984.
2. GHOSHIA AND A.K.MALLICK, "THEORY AND MACHINE", AFFILIATED EAST-WEST PVT. LTD., NEW DELHI, 1988.
3. RAD.J.S. AND DUKKIPATTI R.V. "MECHANISMS AND MACHINES", WILEY-EASTERN LTD., NEW DELHI, 1992.
4. RAMAMURTHI. V, "MECHANISMS OF MACHINE", NAROSA PUBLISHING HOUSE, 2002.
5. ROBERT L. NORTON, "DESIGN OF MACHINERY", MCGRAW-HILL, 2004.

COURSE SOFTWARE

- ◆ APM WINMACHINE (MULTIPHYSICS)
- ◆ KOMPAS 2D/3D/PDM/BDM
- ◆ VARICAD 2D/3D/PDM/BDM
- ◆ 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
MECHANICS OF MACHINES	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