◆ SYLLABUS PROGRAM ◆ DYNAMICS OF MACHINES ◆ MECHANICAL ENGINEERING ◆ SPECIALIZED BRANCH

COURSE AIM
TO IMPART THE KNOWLEDGE ABOUT THE EFFECT OF FORCES ON THE MACHINES AND THE METHODS TO CONTROL THEM

COURSE CONTENTS
1. FORCEANALYSIS. 2. BALANCING. 3. FREE VIBRATION. 4. FORCED VIBRATION. 5. MECHANISM FOR CONTROL.

COURSE OBJECTIVE
(I) TO UNDERSTAND THE FORCE-MOTION RELATIONSHIP IN COMPONENTS SUBJECTED TO EXTERNAL FORCES.
(II) TO UNDERSTAND THE FORCE-MOTION ANALYSIS OF STANDARD MECHANISMS.
(III) TO UNDERSTAND THE UNDESIRABLE EFFECTS OF UNBALANCES RESULTING FROM PRESCRIBED MOTIONS IN MECHANISM.
(IV) TO UNDERSTAND THE EFFECT OF DYNAMICS OF UNDESIRABLE VIBRATIONS.
(V) TO UNDERSTAND THE PRINCIPLES IN MECHANISMS USED FOR GOVERNING OF MACHINES.

REFERENCE BOOKS
1. AMBEKAR A.G., "MECHANISM AND MACHINE THEORY", PRENTICE HALL OF INDIA, NEW DELHI, 2007.
2. SHIGLEY J.E., PENNOCK,G.R., UICKER J.J., "THEORY OF MACHINES AND MECHANISMS", OXFORD UNIVERSITY PRESS,2003.
1. THOMAS BEVAN, "THEORY OF MACHINES", CBS PUBLISHERS AND DISTRIBUTORS, 1984.
2. GHOSH A. AND MALLICK A.K., "THEORY OF MECHANISMS AND MACHINES", AFFILIATED EAST-WEST PRESS PVT. LTD., NEW DELHI, 1988.
3. RAO J.S. AND DUKKIPATI R.V., "MECHANISM AND MACHINE THEORY", WILEY-EASTERN LIMITED, NEW DELHI, 1992.

COURSE SOFTWARE
◆ APM WINMACHINE (MULTIPHYSICS)
◆ KOMPAS 2D/3D/PDM/BOM
◆ VARICAD 2D/3D/PDM/BOM
◆ UNIVERSAL MECHANISM(MBD).
◆ SAM (MECHANISM DESIGN)
◆ SALTIRE SOFTWARE
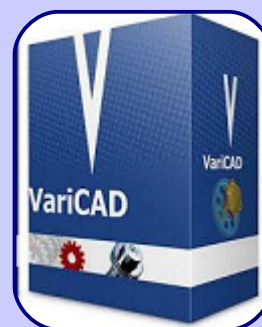◆ DOCUMENTATION & PRINTING

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
DYNAMICS OF MACHINES		DYNAMICS OF MACHINES		DYNAMICS OF MACHINES
ELECTIVE IV		ELECTIVE IV		SEMESTER IV
ME9253		ME6505		ME6505
DESCRIPTION	ONLINE	TRAINING CENTRE	WEBINAR	REMARKS
DYNAMICS OF MACHINES	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/1/UNIT IN SEQUENCE	NETWORKING/HRS*	PRESENTATION	* BROWSING FEE
PRICE (SEMESTER)	BY MAIL	* BROWSING FEE	NO COST	CERTIFICATE