◆ MECHANICAL UNIVERSITY ◆ ELECTIVES – I ◆ ENGINEERING CODE ME9024

COURSE AIM
TO IMPART THE KNOWLEDGE OF EFFECTS OF VIBRATIONS AND NOISE AND THE METHODS TO CONTROL THEM IN ENGINEERING APPLICATIONS.

COURSE OBJECTIVE
◆ TO UNDERSTAND THE FUNDAMENTALS OF VIBRATION AND NOISE AND ITS PRACTICAL APPLICATIONS.
◆ TO UNDERSTAND THE WORKING PRINCIPLE AND OPERATIONS OF VARIOUS VIBRATIONS AND NOISE MEASURING INSTRUMENTS
◆ TO UNDERSTAND THE VARIOUS VIBRATION AND NOISE CONTROL STRATEGIES

COURSE CONTENT
UNIT I FUNDAMENTALS OF VIBRATION.
UNIT II TWO DEGREE FREEDOM SYSTEM.
UNIT III MULTI-DEGREE FREEDOM SYSTEM.
UNIT IV EXPERIMENTAL VIBRATION ANALYSIS.
UNIT V ENGINEERING NOISE AND ITS CONTROL.L

REFERENCE BOOKS
1. AMBEKAR.A.G. "MECHANICAL VIBRATIONS AND NOISE ENGINEERING", PRENTICE HALL OF INDIA, NEW DELHI,2006
2. RAO, S.S.," MECHANICAL VIBRATIONS," ADDISON WESLEY LONGMAN, 1995.
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1. THOMSON, W.T. – "THEORY OF VIBRATION WITH APPLICATIONS", CBS PUBLISHERS AND DISTRIBUTORS, NEW DELHI, 1990.
2. DEN HARTOG, J.P. "MECHANICAL VIBRATIONS," DOVER PUBLICATIONS, 1990.
3. RAMAMURTI. V, "MECHANICAL VIBRATION PRACTICE WITH BASIC THEORY", NAROSA, NEW DELHI, 2000.
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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
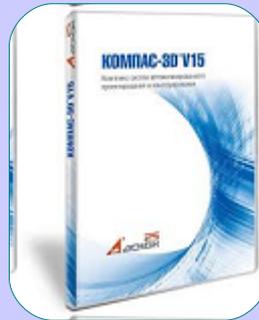
KOMPAS 3D
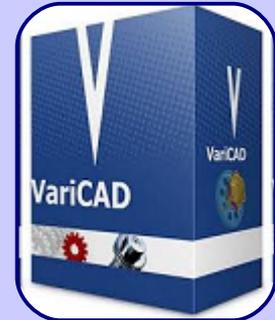
VARICAD

DESCRIPTION	ONLINE	TRAINING CENTRE	WEBINAR	REMARKS
MECHANICAL VIBRATIONS & NOISE	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