◆ MECH ALLIED ◆ AERONAUTICAL ENGINEERING ◆ SEMESTER – III ◆ ENGINEERING CODE CE6452

COURSE OBJECTIVE
◆ TO INTRODUCE VARIOUS BEHAVIOR OF STRUCTURAL COMPONENTS UNDER VARIOUS LOADING CONDITIONS

COURSE OUTCOME
◆ SOLVE THE PROBLEMS RELATED TO THE STRUCTURAL COMPONENTS UNDER VARIOUS LOADING CONDITIONS.

COURSE CONTENT
UNIT I INTRODUCTION.
UNIT II STRESSES IN BEAMS.
UNIT III DEFLECTION OF BEAMS.
UNIT IV TORSION – SPRINGS – COLUMNS.
UNIT V BIAXIAL STRESSES

REFERENCE BOOKS
I. WILLIAM NASH, "STRENGTH OF MATERIALS", TATA MCGRAW HILL, 2004
2. TIMOSHENKO AND YOUNG "STRENGTH OF MATERIALS" VOL. I & II
I. DYM,C.L., AND SHAMES,I.H., 'SOLID MECHANICS', MCGRAW HILL, KOGAKUSHA, TOKYO, 1973.
2. STEPHEN TIMOSHENKO, 'STRENGTH OF MATERIALS', VOL I & II, CBS PUBLISHERS AND DISTRIBUTORS, THIRD EDITION.
3. TIMOSHENKO,S. AND YOUNG, D.H., 'ELEMENTS OF STRENGTH OF MATERIALS', T.VAN NOSTRAND CO. INC., PRINCETON, N.J. 1977

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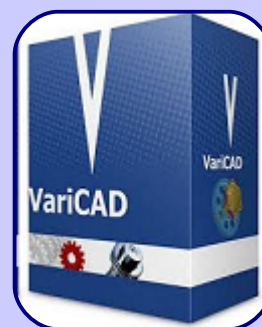◆ SALTIRE SOFTWARE
◆ DOCUMENTATION & PRINTING

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
SOLID MECHANICS	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