DEMAND

PAVIATH INTEGRATED SOLUTION

ENGG SPECIALIZED

MECHANICAL

STRENGTH OF MATERIALS

Paviath ONLINE

◆ SYLLABUS PROGRAM ◆ STRENGTH OF MATERIALS ◆ SPECIALIZED BRANCH

COURSE OBJECTIVE

TO UNDERSTAND THE STRESSES DEVELOPED IN BARS, COMPOUNDS BARS, BEAMS, SHAFTS, CYLINDERS AND SPHERES.

COURSE CONTENTS

UNIT I STRESS, STRAIN AND DEFORMATION OF SOLIDS.
UNIT II TRANSVERSE LOADING ON BEAMS AND STRESSES IN BEAM.
UNIT III TORSION.
UNIT IV DEFLECTION OF BEAMS.
UNIT V THIN CYLINDERS, SPHERES AND THICK CYLINDERS

COURSE OUTCOME

● UPON COMPLETION OF THIS COURSE, THE STUDENTS CAN ABLE TO APPLY MATHEMATICAL KNOWLEDGE TO CALCULATE THE DEFORMATION BEHAVIOR OF SIMPLE STRUCTURES.
● CRITICALLY ANALYSE PROBLEM AND SOLVE THE PROBLEMS RELATED TO MECHANICAL ELEMENTS AND ANALYSE THE DEFORMATION BEHAVIOR FOR DIFFERENT TYPES OF LOADS.

REFERENCE BOOKS

1. BANSAL, R.K., "STRENGTH OF MATERIALS", LAXMI PUBLICATIONS (P) LTD., 2007
2. JINDAL U.C., "STRENGTH OF MATERIALS", ASIAN BOOKS PVT. LTD., NEW DELHI, 2007
1. EGOR. P.POPOV "ENGINEERING MECHANICS OF SOLIDS" PRENTICE HALL OF INDIA, NEW DELHI, 2001
2. SUBRAMANIAN R., "STRENGTH OF MATERIALS", OXFORD UNIVERSITY PRESS, OXFORD HIGHER EDUCATION SERIES, 2007.
3. HIBBELER, R.C., "MECHANICS OF MATERIALS", PEARSON EDUCATION, LOW PRICE EDITION, 2007
4. FERDINAND P. BEEN, RUSSELL JOHNSON, J.R. AND JOHN J. DEWOLE "MECHANICS OF MATERIALS", TATA MCGRAW HILL PUBLISHING 'CO. LTD., NEW DELHI, 2005.

COURSE SOFTWARE

◆ APM WINMACHINE
◆ KOMPAS 2D/3D/PDM/BOM
◆ VARICAD 2D/3D/PDM/BOM
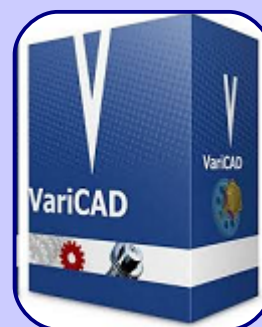◆ DOCUMENTATION & PRINTING

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
SEMESTER IV	SEMESTER IV	SEMESTER III	NA	SEMESTER III
CE6306	CE6306	CE6306	NA	CE6306
DESCRIPTION	ONLINE	TRAINING CENTRE	WEBINAR	REMARKS
STRENGTH OF MATERIAL	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/I/UNIT IN SEQUENCE	NETWORKING/HRS*	PRESENTATION	* BROWSING FEE
PRICE (SEMESTER)	BY MAIL	* BROWSING FEE	NO COST	CERTIFICATE