

DEMAND

PAVIATH INTEGRATED SOLUTION

ENGG SPECIALIZED

MECHANICAL

ADVANCED STRENGTH OF MATERIALS

Paviath ONLINE

◆ SYLLABUS PROGRAM ◆ ADVANCED STRENGTH OF MATERIALS ◆ SPECIALIZED BRANCH

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

COURSE CONTENTS

UNIT I ANALYSIS OF PLATES UNIT II THICK CYLINDERS AND SPHERES UNIT III ROTATING DISCS UNIT IV BEAMS ON ELASTIC FOUNDATION UNIT V CURVED BEAMS AND CONTACT STRESSES

COURSE OBJECTIVE

TO ANALYSE THE STRESSES AND DEFORMATIONS THROUGH ADVANCED MATHEMATICAL MODELS. TO ESTIMATE THE DESIGN STRENGTH OF VARIOUS INDUSTRIAL EQUIPMENTS.

REFERENCE BOOKS

I. BORESI A.P., SCHMIDT R.J., "ADVANCED MECHANICS OF MATERIALS", JOHN WILEY AND SONS, SIXTHEDITION, 2003.

2. DALLY J.W. AND RILEY W.F, "EXPERIMENTAL STRESS

ANALYSIS" JOHN WILEY AND SDNS 2003

I. BURR A. H., CHEATHAM J.B., "MECHANICAL ANALYSIS AND DESIGN", PRENTICE HALL OF INDIA, SECONDEDITION,

2. DEN-HARTOG J.P., "STRENGTH OF MATERIALS", JOHN WILEY AND SONS.

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

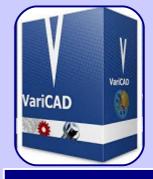
APM CAM/APM PLAIN/APM SCREW/APM STRUCTURE3D/APM DYNAMICS/APM BEAM/APM GRAPH/APM STUDIO APM DRIVE/APM TRANS/APM SHAFT/APM BEAR/APM JOINT/APM SPRING/APM BASE/APM MECHANICAL DATA/APM MATERIAL DATA/APM SECTION DATA/APM CONSTRUCTION DATA/APM BOOK



APM WINMACHINE



KOMPAS 3D



VARICAD

| PRODUCTION ENGG | MECH & AUTOMATION ENGG | MECH ENGG (SANDWICH) | ROBOTICS AND AUTOMATION | MECHATRONICS ENGG |
|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------|
| | ADVANCED STRENGTH OF Materials | ADVANCED STRENGTH OF Materials | ADVANCED STRENGTH OF Materials | |
| | SEMESTER VIII ELECTIVE V | ELECTIVE VI | ELECTIVE VI | |
| | CE6071 | CE6071 | CE6071 | |
| DESCRIPTION | ONLINE | TRAINING CENTRE | WEBINAR | REMARKS |
| ADVANCED STRENGTH OF Materials | 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 |