

DEMAND

PAVIATH INTEGRATED SOLUTION

ENGG ALLIED

MECHANICAL

AIRCRAFT STRUCTURES - I

Paviath ONLINE

◆ MECH ALLIED ◆ AERONAUTICAL ENGINEERING ◆ SEMESTER - IV ◆ ENGINEERING CODE AE6403

COURSE OBJECTIVE

TO PROVIDE THE STUDENTS AN UNDERSTANDING ON THE LINEAR STATIC ANALYSIS OF DETERMINATE AND INDETERMINATE AIRCRAFT STRUCTURAL COMPONENTS.

TO PROVIDE THE DESIGN PROCESS USING DIFFERENT FAILURE THEORIES.

COURSE OUTCOME

ABILITY TO PERFORM LINEAR STATIC ANALYSIS OF DETERMINATE AND INDETERMINATE AIRCRAFT STRUCTURAL COMPONENTS ABILITY TO DESIGN THE COMPONENT USING DIFFERENT THEORIES OF FAILURE

COURSE CONTENT UNIT I STATICALLY DETERMINATE & INDETERMINATE STRUCTURES. UNIT II ENERGY METHODS. UNIT III COLUMNS.

UNIT IV FAILURE THEORIES. UNIT V INDUCED STRESSES

REFERENCE BOOKS

1. TIMOSHENKO AND GERE, "MECHANICS OF MATERIALS", TATA MCGRAW HILL,

2. MEGSON T M G, "AIRCRAFT STRUCTURES FOR ENGINEERING STUDENTS" ELSEVIER SCIENCE AND TECHNOLOGY, 2007

3. PEERY AND AZAR, "AIRCRAFT STRUCTURES" 1. DONALDSON, B.K., "ANALYSIS OF AIRCRAFT STRUCTURES - AN INTRODUCTION",

1. DUNAUSUN, D.A., "ANCIENTS OF HARDON PROBLEMS (1938.)
2. Bruhn F. F. "Analysis and design of Flight Vehicle Structures", Tri-State Off-Set Company, USA, 1985.
3. Peery, D.J. and Azar, J., "Aircraft Structures", 2nd Edition, McGraw.

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 |
|-------------------------|--------------------------|-------------------|-----------------|-----------------|
| AIRCRAFT STRUCTURES - I | 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 |

info@paviathintegratedsolution.com -www.paviathintegratedsolution.com www.paviathjobportal.com