



DEMAND

# PAVIATH INTEGRATED SOLUTION

ENGG ALLIED

MECHANICAL

DESIGN OF JIGS, FIXTURES & PRESS TOOLS

Paviath ONLINE

◆ MECHANICAL UNIVERSITY ◆ SEMESTER – V ◆ ENGINEERING CODE ME9301

### COURSE AIM

TO APPRECIATE AND UNDERSTAND THE IMPORTANCE OF TOOL DESIGN IN THE OVERALL PRODUCT CYCLE.

### COURSE OBJECTIVE

- ◆ TO UNDERSTAND THE FUNCTIONS AND DESIGN PRINCIPLES OF JIGS, FIXTURES AND PRESS TOOLS
- ◆ TO GAIN PROFICIENCY IN THE DEVELOPMENT OF REQUIRED VIEWS OF THE FINAL DESIGN..

### COURSE CONTENT

UNIT I LOCATING AND CLAMPING PRINCIPLES. UNIT II JIGS AND FIXTURES. UNIT III PRESS WORKING TERMINOLOGIES AND ELEMENTS OF CUTTING DIES. UNIT IV BENDING FORMING AND DRAWING DIES. UNIT V MISCELLANEOUS TOPICS.

### REFERENCE BOOKS

1. JOSHI, P.H. "JIGS AND FIXTURES", SECOND EDITION, TATA MCGRAW HILL PUBLISHING CO. LTD., NEW DELHI, 2004.
2. DONALDSON, LECAIN AND GOULD "TOOL DESIGN", III RD EDITION TATA MCGRAW HILL, 2000.
3. K. VENKATARAMAN, "DESIGN OF JIGS FIXTURES & PRESS TOOLS", TATA MCGRAW HILL, NEW DELHI, 2005.
4. KEMPSTER, "JIGS AND FIXTURE DESIGN", HODDES AND STOUGHTON – THIRD EDITION 1974.
5. JOSHI, P.H. "PRESS TOOLS" – DESIGN AND CONSTRUCTION", WHEELS PUBLISHING, 1996.
6. HOFFMAN "JIGS AND FIXTURE DESIGN" – THOMSON DELMAR LEARNING, SINGAPORE, 2004.
7. ASTME FUNDAMENTALS OF TOOL DESIGN PRENTICE HALL OF INDIA.
8. DESIGN DATA HAND BOOK, PSG COLLEGE OF TECHNOLOGY, COIMBATORE.

### COURSE SOFTWARE

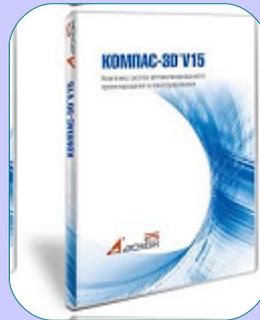
- ◆ APM WINMACHINE (MULTIPHYSICS)
- ◆ KOMPAS 2D/3D/PDM/BDM
- ◆ VARICAD 2D/3D/PDM/BDM
- ◆ UNIVERSAL MECHANISM(MBD).
- ◆ SAM (MECHANISM DESIGN)
- ◆ SALTIRE SOFTWARE
- ◆ DOCUMENTATION & PRINTING

### 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
DESIGN OF JIGS, FIXTURES & PRESS TOOLS	REGISTRATION	DOCUMENTS	COUNSELLING	OWN LAPTOP
ONLINE	2/UNIT TRAINING	4/UNIT ASSIGNMENT	2/UNIT ASSIGNED	SCHEDULE
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