

DEMAND

# PAVIATH INTEGRATED SOLUTION

ENGG SPECIALIZED

MECHANICAL

COMPOSITE MATERIALS AND MECHANICS

Paviath ONLINE

## ◆ SYLLABUS PROGRAM ◆ DESIGN OF MACHINE TOOL STRUCTURE ◆ SPECIALIZED BRANCH

COURSE OUTCOME
ABILITY TO DESIGN STRENGTH AND
COMPONENTS OF MACHINE TOOLS.

#### **COURSE CONTENTS**

UNIT I INTRODUCTION. UNIT II STRENGTH AND RIGIDITY OF MACHINE TOOL STRUCTURES. UNIT III SLIDEWAYS. UNIT IV SPINDLES AND SPINDLE SUPPORTS. UNIT V MACHINE TOOL DYNAMICS COURSE OBJECTIVE
TO UNDERSTAND DIFFERENT MACHINE TOOLS
USED FOR MACHING.
TO UNDERSTAND THE DESIGN CRITERIA FOR
MACHINE TOOL STRUCTURES.
TO KNOW THE DESIGNING OF SLIDEWAYS
TO UNDERSTAND THE VIBRATION IN THE
MACHINE TOOL DURING OPERATION.

#### REFERENCE BOOKS

1. SEN. G.C., AND A.BATTACHARYA, "PRINCIPLES OF Machine Tools", New Central Book Agency, 1999 2. Metha. N.K., "Machine Tool Design and Numerical Control", Tata McGraw Hill Publishing Company, 1996

I. MANFRED WEEK, "HAND BOOK OF MACHINE TOOLS – VOLI, VOL 2, VOL.3" JOHN WILEY & SONS, 1984. 2. ACHERKAN.N, "MACHINE TOOL DESIGN", VOL 3, MIR PUBLISHERS, 1978

#### 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
DESIGN OF MACHINE TOOL Structure				
PR6004				
DESCRIPTION	ONLINE	TRAINING CENTRE	WEBINAR	REMARKS
DESIGN OF MACHINE TOOL Structure	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