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PAVIATH INTEGRATED SOLUTION

POLYTECH

MECHANICAL

AUTOMOBILE COMPONENT DESIGN

Paviath ONLINE

◆ MECHANICAL ENGINEERING GROUP ◆ FIFTH SEMESTER ◆ POLYTECHNIC CODE AE

COURSE AIM

- ◆ TO GAIN THE KNOWLEDGE AND SKILLS NEEDED IN AUTOMOTIVE DESIGN AND PRODUCTION.
- ◆ TO DEVELOP SKILLS IN COMPUTER-AIDED DESIGN AND MANUFACTURE (CAD/CAM).
- ◆ TO STUDY THE PROCESS OF ENGINEERING PROBLEM SOLVING.

COURSE OBJECTIVE

- ◆ ANALYZE THE LOADS, TYPE OF INDUCED STRESSES, RESISTING AREAS & HENCE THE MODES OF FAILURE.
- ◆ IDENTIFY MODES OF FAILURE & RELEVANT THEORY FOR PROBLEM SOLVING.
- ◆ ANALYZE PRACTICAL PROBLEMS & MAKE USE OF MATERIALS, STRENGTH EQUATIONS, FACTOR OF SAFETY ETC.
- ◆ USE DESIGN DATA BOOK TO STANDARDIZE COMPONENT DIMENSIONS, AND TO SELECT

COURSE CONTENTS

- ◆ BASIC CONCEPTS OF DESIGN. DESIGN OF MACHINE ELEMENTS
- ◆ DESIGN OF SHAFTS, KEYS & COUPLINGS
- ◆ DESIGN OF LEVERS
- ◆ DESIGN OF CHASSIS COMPONENT
- ◆ DESIGN OF ENGINE COMPONENTS.

REFERENCE BOOKS

- ◆ R.K. JAIN MACHINE DESIGN
- ◆ R.S. KHURMI & J.K. GUPTA MACHINE DESIGN
- ◆ PANDYA & SHAH MACHINE DESIGN
- ◆ P. C. SHARMA D. K. AGGARWAL MACHINE DESIGN
- ◆ R. B. GUPTA AUTO DESIGN
- ◆ N.K. GIRI. PROBLEMS IN AUTOMOBILE ENGINEERING
- ◆ K. M. AGGARWAL AUTO DESIGN PROBLEMS
- ◆ GRILES AUTOMOBILE DESIGN VOL.2,3
- ◆ J.E. SHIGLEY MACHINE DESIGN
- ◆ MACHINE TOOL DESIGN HANDBOOK CMTI
- ◆ DESIGN DATA BOOK P. S. G
- ◆ ROBERT L. NORTON MACHINE DESIGN AN INTEGRATED APPROACH

SAM (SYNTHESIS ANALYSIS MECHANISM)

- ◆ GENERAL ◆ DESIGN WIZARDS ◆ MODELLING
- ◆ INPUT MOTION ◆ CAD INTERFACE
- ◆ ANALYSIS ◆ RESULTS
- SALTIRE SOFTWARE
- ◆ MATHS ILLUSTRATIONS
- ◆ GEOMETRY EXPRESSIONS
- ◆ MECHANICAL EXPRESSIONS
- ◆ ANALYTIS CAM

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



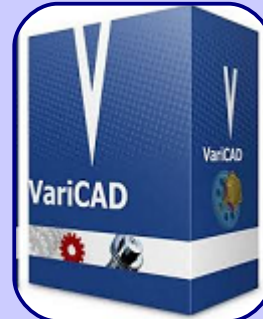
SALTIRE SOFTWARE



ARTAS SAM



KOMPAS 3D



VARICAD

DESCRIPTION	ONLINE	TRAINING CENTRE	WEBINAR	REMARKS
AUTOMOBILE COMPONENT DESIGN	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

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