



DEMAND

PAVIATH INTEGRATED SOLUTION

ENGG ALLIED

MECHANICAL

TRACTOR AND POWER UNITS

Paviath ONLINE

◆ MECH ALLIED ◆ AGRICULTURE ENGINEERING ◆ SEMESTER IV ◆ ENGINEERING CODE AIG402

COURSE OBJECTIVE
TO INTRODUCE THE STUDENTS TO THE DIFFERENT SYSTEMS AND WORKING PRINCIPLES OF TRACTOR, POWER TILLER, MAKES OF TRACTORS AND POWER TILLERS.

COURSE OUTCOME
THE STUDENTS WILL BE ABLE TO UNDERSTAND THE VARIOUS EQUIPMENTS AND MECHANIZATIONS USED IN THE FARM.
THE STUDENTS WILL HAVE THE KNOWLEDGE ON EARTH MOVING MACHINERIES, TRACTOR CLASSIFICATION AND TILLAGE IMPLEMENTS.

COURSE CONTENT
UNIT I TRACTORS.
UNIT II ENGINE SYSTEMS.
UNIT III TRANSMISSION SYSTEMS.
UNIT IV HYDRAULIC SYSTEMS.
UNIT V POWER TILLER AND TRACTOR TESTING

REFERENCE BOOKS

- JAIN, S.C. AND C.R. RAI. FARM TRACTOR MAINTENANCE AND REPAIR. STANDARD PUBLISHERS AND DISTRIBUTORS, NEW DELHI, 1999.
- 1. BARBER, E.L., J.B. LILJEDAHN AND E.C. MCKIBBEN. TRACTORS AND THEIR POWER UNITS. WILEY EASTERN PVT. LTD., NEW DELHI, 1997.
- 2. DOMKUNDWAR A.V. A COURSE IN INTERNAL COMBUSTION ENGINES. DHANPAT RAI & CO. (P) LTD., EDUCATIONAL AND TECHNICAL PUBLISHERS, DELHI, 1999.
- 3. BLACK, P.O. DIESEL ENGINE MANUAL. TARAPOREVALA SONS & CO., MUMBAI, 1996.
- 4. BROUSE, W.H. AND ANGLIN, D.L. AUTOMOTIVE MECHANICS. MACMILLAN MCGRAW- HILL, SINGAPORE. INDIAN STANDARD CODES FOR AGRICULTURAL IMPLEMENTS PUBLISHED BY ISI, NEW DELHI, 1993.

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
TRACTOR AND POWER UNITS	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