



DEMAND

PAVIATH INTEGRATED SOLUTION

ENGG ALLIED

MECHANICAL

MECHANICS OF TILLAGE AND TRACTION

Paviath ONLINE

◆ MECH ALLIED ◆ AGRICULTURE ENGINEERING ◆ ELECTIVE - IV ◆ ENGINEERING CODE AIG012

### COURSE OBJECTIVE

TO IMPART THE FUNDAMENTAL KNOWLEDGE OF MECHANICS AND DYNAMICS IN VARIOUS TILLAGE IMPLEMENTS  
TO STUDY THE TYRES, TRACTION AND ITS APPLICATIONS

### COURSE OUTCOME

AFTER COMPLETION OF THE COURSE, THE STUDENTS WILL BE ABLE TO UNDERSTAND THE CONCEPTS OF MECHANICS, DYNAMICS AND TRACTION OF IMPLEMENTS AND THEIR APPLICATIONS

### COURSE CONTENT

UNIT I MECHANICS OF TILLAGE.  
UNIT II DYNAMICS OF TILLAGE.  
UNIT III TRACTION.  
UNIT IV TYRES.  
UNIT V APPLICATIONS

### REFERENCE BOOKS

1. KLEIN, N.L.; POPOV, L.F. AND V.A. SAKUM, (1985), AGRICULTURAL MACHINES, AMERIND PUB. CO. NEWYORK  
2. J. B. ULJEDAH, P. K. TURNDUIST, D. W. SMITH, & M. HDK, 1996, TRACTORS AND THEIR POWER UNITS, FOURTH ED. AMERICAN SOCIETY OF AGRICULTURAL ENGINEERS, ASAE  
3. KEPNER, R. A., ROY BAINER AND E. L. BARBER, 1978, PRINCIPLES OF FARM MACHINERY, THIRD EDITION, AVI PUBLISHING COMPANY INC, WESTPORT, CONNECTICUT.

1. RALPH ALCOCK, 1986, TRACTOR IMPLEMENTS SYSTEM, AVI PUBL.  
2. S. C. JAIN, FARM MACHINERY- AN APPROACH

### 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

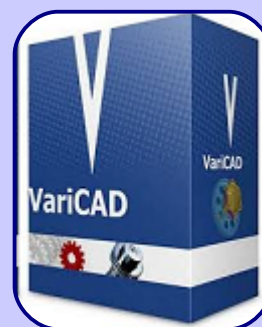
APM CAM/APM PLAIN/APM SCREW/APM STRUCTURE3D/APM DYNAMICS/APM BEAM/APM GRAPH/APM STUDIO  
APM DRIVE/APM TRANS/APM SHAFT/APM BEAR/APM JOINT/APM SPRING/APM BASE/APM MECHANICAL DATA/APM MATERIAL DATA/APM SECTION DATA/APM CONSTRUCTION DATA/APM BOOK



APM WINMACHINE



KOMPAS 3D



VARICAD

DESCRIPTION	ONLINE	TRAINING CENTRE	WEBINAR	REMARKS
MECHANICS OF TILLAGE AND TRACTION	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

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