

SYLLABUS PROGRAM

YOUTUBE/WEBINAR

DESIGN/APPLICATION

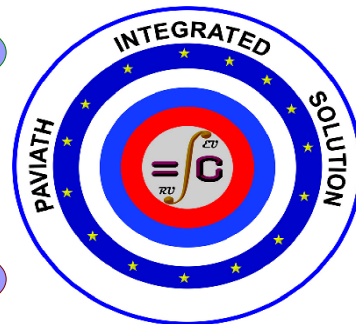
COUNSELLING – CAREER DEV.

INTERNSHIP PRE CONDITION

INSTITUTION DEMO

INDUSTRIAL VISIT

PROJECT/PRODUCT



PAVIATH PRECONDITION INTERNSHIP

FEATURE BASED TRAINING
DESIGN TRAINING-JOB PORTAL

DEGREE/DIPLOMA*

CANDIDATES

- ◆ LAPTOP SUITABLE TO CAE APPLICATION
- ◆ OWN TWO WHEELER
- ◆ AADHAR/PAN/ APPROVED ID
- ◆ INTERNSHIP VISITING CARD**

THE PROGRAMS ARE CORRELATED
TO PROJECT & CAREER ORIENTATION.
DOCUMENTATION ON EVERY ASPECTS
ARE MORE ESSENTIAL.

PAYMENT (PRICE + TAX) ONLINE

- ◆ COUSELLING CHARGE (CD LITERATURE*)
- ◆ MEMBERSHIP FEE***
- ◆ INTERNSHIP PRICE (NORMAL/CRASH)
- ◆ ONLY SOFT COPY (PRINTING DOCUMENT)

PROGRAM	FEATURE I	FEATURE II	FEATURE III	REPORT
COUNSELLING	CAREER AREA	PROJECT AREA	APPLN INDUSTRY	
SYLLABUS EACH	2/UNIT TRAINING	4/UNIT ASSIGNMENT	COMBINED TRAINING	
YOUTUB WEBINAR	SYLLABUS COACHING	WEBINAR DEMONS.	PUBLISHING	
DESIGN & ANALYSIS	PRODUCT DEV/REVERSE ENGG	FEATURE VS APPLN	SEQUENCE & TOOLS	
INSTITUTION DEMO	FIVE UNIVERSITY	10 ENGG COLLEGE	10 POLY TECHNIC	
INDUSTRY MARKETING	5 HEAVY INDUSTRY	10 MEDIUM INDUSTRY	10 SMALL INDUSTRY	
PROJECT	PRODUCT DEV-REVERSE ENG	SEQUENCE/ISO/GOST	LITERATURE/REPORT	
CAREER PLANNING	APPLICATION AREA	DEPARTMENT CHOICES	SUMERIZING REPORT	



CERTIFICATE

- CAREER AREA AND APPLICATION
- MECHANISM FEATURE APPLICATION
- PROJECT ORIENTATION.
- PRODUCT DEV. ORIENTATION
- TOTAL DOCUMENTATION

YOUTUBE & WEBINAR

UNIVERSITY – ENGG COLLEGE
POLYTECH – RESEARCH ORGN

HEAVY - MEDIUM INDUSTRY
SMALL INDUSTRY - PROFESSIONAL

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<http://www.paviathintegratedsolution.com/engineering-syllabus-mechanical>
<http://www.paviathintegratedsolution.com/sam-features>
<http://www.paviathintegratedsolution.com/mech-eng-saltire>

INTERNSHIP COUNSELLING SKELTEN I

MECHANISM AREA

Chemical — Water treatment — Consultant — Refractory — Metal Working — Agriculture

Cement — Oil — Gas — Wood Working — Textile — Testing — Spatial — Rubber — Printing — Plastic — Paper working — Machine Building

Automation — Entertainment — Garment — Cottage — Construction — Power Plant — Automobile — Interior



INSTITUTION ? INDUSTRY ?



APPLICATION AREA



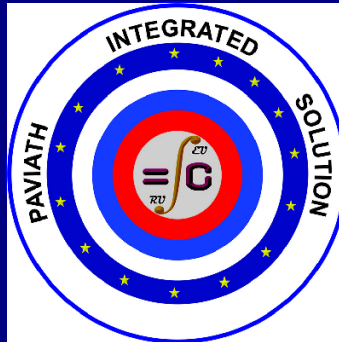
DEPARTMENT



FACULTY - INSTITUTION



RESEARCH ORGN



INTERNSHIP COUNSELLING

BASED ON SELECTION
PROJECT TO BE CONFIRMED

INSTITUTION AREA
INSTITUTION/RESEARCH/HIGHER STUDY
INDUSTRY AREA
R&D/PRODUCTION/QUALITY/SALES/SERVICE

DEPARTMENT # INDUSTRY



HIGHER STUDY



ENTREPRENEUR



R&D



Production



Quality



sales



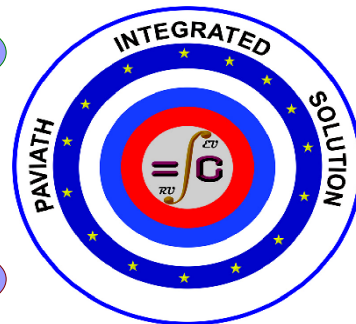
Service

Packaging — Mineral Processing — Material Handling — Marine — Ship Building — Interior

ISO/GOST/EN/DIN

SEMESTER UNITS

REFERENCE BOOKS



POLYTECH - AICTE - UNIVERSITY

INTERNSHIP SYLLABUS

MECHANISM

MACHINE ELEMENT

STRUCTURAL

I STRENGTH OF MATERIALS

SYLLABUS PROGRAM

- ◆ STRENGTH OF MATERIALS
- ◆ MECHANICAL ENGINEERING
- ◆ SEMESTER IV (II YEAR)
- ◆ ENGINEERING CODE PCC-ME 204

ACADEMIC SYLLABUS

INDUSTRY DB/APPLN

PROFESSIONAL COACH

DEGREE/DIPLOMA

COURSE SEMESTER

- ◆ OBJECTIVE OF COURSE
- ◆ COURSE CONTENTS
- ◆ COURSE OUTCOMES
- ◆ REFERENCE BOOKS

OBJECTIVE

- TO UNDERSTAND THE NATURE OF STRESSES DEVELOPED IN SIMPLE GEOMETRIES SUCH AS BARS, CANTILEVERS, BEAMS, SHAFTS, CYLINDERS AND SPHERES FOR VARIOUS TYPES OF SIMPLE LOADS
- TO CALCULATE THE ELASTIC DEFORMATION OCCURRING IN VARIOUS SIMPLE GEOMETRIES FOR DIFFERENT TYPES OF LOADING

COURSE CONTENTS

- TO UNDERSTAND THE NATURE OF STRESSES DEVELOPED IN SIMPLE GEOMETRIES SUCH AS BARS, CANTILEVERS, BEAMS, SHAFTS, CYLINDERS AND SPHERES FOR VARIOUS TYPES OF SIMPLE LOADS
- TO CALCULATE THE ELASTIC DEFORMATION OCCURRING IN VARIOUS SIMPLE GEOMETRIES FOR DIFFERENT TYPES OF LOADING

OBJECTIVE OUTCOMES

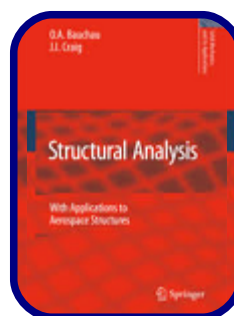
- AFTER COMPLETING THIS COURSE, THE STUDENTS SHOULD BE ABLE TO RECOGNISE VARIOUS TYPES LOADS APPLIED ON MACHINE COMPONENTS OF SIMPLE GEOMETRY AND UNDERSTAND THE NATURE OF INTERNAL STRESSES THAT WILL DEVELOP WITHIN THE COMPONENTS
- THE STUDENTS WILL BE ABLE TO EVALUATE THE STRAINS AND DEFORMATION THAT WILL RESULT DUE TO THE ELASTIC STRESSES DEVELOPED WITHIN THE MATERIALS FOR SIMPLE TYPES OF LOADING

REFERENCE BOOKS

1. EGOR P. POPOV, ENGINEERING MECHANICS OF SOLIDS, PRENTICE HALL OF INDIA, NEW DELHI, 2001.
2. R. SUBRAMANIAN, STRENGTH OF MATERIALS, OXFORD UNIVERSITY PRESS, 2007.
3. MECHANICS OF MATERIALS, FERDINAND P. BEEN, RUSSEL JOHNSON JR AND JOHN J. DEWOLFE, TATA MCGRAWHILL PUBLISHING CO. LTD., NEW DELHI 2005.

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 WINMACHINE
APM BASE
APM MECHANICAL DATA
APM MATERIAL DATA
APM SECTION DATA
APM CONSTRUCTION DATA
APM BOOK



SOFTWARE
APM WINMACHINE
VARICAD
KOMPAS 3D

<http://www.paviathjobportal.com/index>

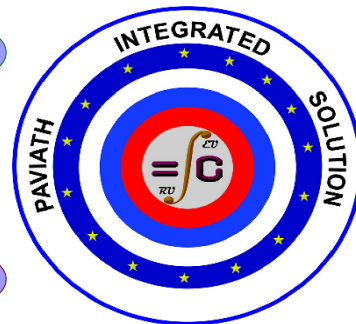
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ISO/GOST/EN/DIN

SEMESTER UNITS

REFERENCE BOOKS



POLYTECH - AICTE - UNIVERSITY

INTERNSHIP SYLLABUS

MECHANISM

MACHINE ELEMENT

STRUCTURAL

II KINEMATICS AND THEORY OF MACHINES

SYLLABUS PROGRAM

- ◆ KINEMATICS AND THEORY OF MACHINES
- ◆ MECHANICAL ENGINEERING
- ◆ SEMESTER V (III YEAR)
- ◆ ENGINEERING CODE PCC-ME 304

ACADEMIC SYLLABUS

INDUSTRY DB/APPLN

PROFESSIONAL COACH

DEGREE/DIPLOMA*

COURSE SEMESTER

- ◆ OBJECTIVE OF COURSE
- ◆ COURSE CONTENTS
- ◆ COURSE OUTCOMES
- ◆ REFERENCE BOOKS

OBJECTIVE

- ## TO UNDERSTAND THE KINEMATICS AND RIGID- BODY DYNAMICS OF KINEMATICALLY DRIVEN MACHINE COMPONENTS
- # TO UNDERSTAND THE MOTION OF LINKED MECHANISMS IN TERMS OF THE DISPLACEMENT, VELOCITY AND ACCELERATION AT ANY POINT IN A RIGID LINK
- # TO BE ABLE TO DESIGN SOME LINKAGE MECHANISMS AND CAM SYSTEMS TO GENERATE SPECIFIED OUTPUT MOTION
- # TO UNDERSTAND THE KINEMATICS OF GEAR TRAINS

COURSE CONTENT

- CLASSIFICATION OF MECHANISMS. ■ DISPLACEMENT, VELOCITY AND ACCELERATION ANALYSIS OF SIMPLE MECHANISMS. ■ CLASSIFICATION OF CAMS AND FOLLOWERS. ■ INVOLUTE AND CYCLOIDAL GEAR PROFILES. ■ SURFACE CONTACTS

COURSE OUTCOMES

- AFTER COMPLETING THIS COURSE, THE STUDENTS CAN DESIGN VARIOUS TYPES OF LINKAGE MECHANISMS FOR OBTAINING SPECIFIC MOTION AND ANALYSE THEM FOR OPTIMAL FUNCTIONING.

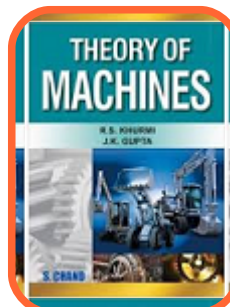
REFERENCE BOOKS

1. THOMAS BEVAN, THEORY OF MACHINES, 3RD EDITION, CBS PUBLISHERS & DISTRIBUTORS, 2005.
2. CLEGHORN WL. , MECHANISMS OF MACHINES, OXFORD UNIVERSITY PRESS, 2005.
3. ROBERT L. NORTON, KINEMATICS AND DYNAMICS OF MACHINERY, TATA MCGRAWHILL, 2009.
4. GHOSH A. AND MALLICK A.K., THEORY OF MECHANISMS AND MACHINES, AFFILIATED EAST-WEST PVT. LTD, NEW DELHI, 1988.

APM CAM/APM PLAIN
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APM DYNAMICS/APM BEAM
APM GRAPH/APM STUDIO
APM DRIVE/APM TRANS
APM SHAFT/APM BEAR
APM JOINT/APM SPRING

SAM

(SYNTHESIS ANALYSIS MECHANISM)
GENERAL - DESIGN WIZARDS -
MODELLING - INPUT MOTION -
CAD INTERFACE - ANALYSIS -
RESULTS - POST-PROCESSING
- OPTIMIZATION - TUTORIALS



SOFTWARE

APM WINMACHINE
SAM
SALTIRE
VARICAD
KOMPAS 3D

<http://www.paviathjobportal.com/index>

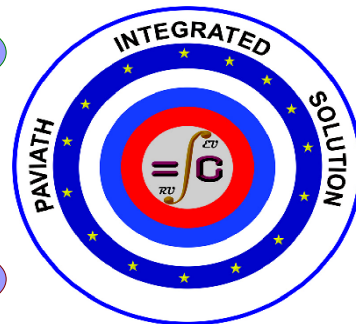
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ISO/GOST/EN/DIN

SEMESTER UNITS

REFERENCE BOOKS



POLYTECH - AICTE - UNIVERSITY

INTERNSHIP SYLLABUS

MECHANISM

MACHINE ELEMENT

STRUCTURAL

III. DESIGN OF MACHINE ELEMENTS

- ◆ SYLLABUS PROGRAM
- ◆ DESIGN OF MACHINE ELEMENTS
- ◆ MECHANICAL ENGINEERING
- ◆ SEMESTER VI (THIRD YEAR)
- ◆ ENGINEERING CODE PCC-ME 308

ACADEMIC SYLLABUS

INDUSTRY DB/APPLN

PROFESSIONAL COACH

DEGREE/DIPLOMA*

- COURSE SEMESTER
- ◆ OBJECTIVE OF COURSE
- ◆ COURSE CONTENTS
- ◆ COURSE OUTCOMES
- ◆ REFERENCE BOOKS

OBJECTIVE

- THIS COURSE SEEKS TO PROVIDE AN INTRODUCTION TO THE DESIGN OF MACHINE ELEMENTS COMMONLY ENCOUNTERED IN MECHANICAL ENGINEERING PRACTICE, THROUGH
1. A STRONG BACKGROUND IN MECHANICS OF MATERIALS BASED FAILURE CRITERIA UNDERPINNING THE SAFETY-CRITICAL DESIGN OF MACHINE COMPONENTS
 2. AN UNDERSTANDING OF THE ORIGINS, NATURE AND APPLICABILITY OF EMPIRICAL DESIGN PRINCIPLES, BASED ON SAFETY CONSIDERATIONS
 3. AN OVERVIEW OF CODES, STANDARDS AND DESIGN GUIDELINES FOR DIFFERENT ELEMENTS
 4. AN APPRECIATION OF PARAMETER OPTIMIZATION AND DESIGN ITERATION
 5. AN APPRECIATION OF THE RELATIONSHIPS BETWEEN COMPONENT LEVEL DESIGN AND OVERALL MACHINE SYSTEM DESIGN AND PERFORMANCE

COURSE CONTENT

- ◆ DESIGN CONSIDERATIONS ◆ LIMITS, FITS AND STANDARDIZATION ◆ REVIEW OF FAILURE THEORIES FOR STATIC AND DYNAMIC LOADING (INCLUDING FATIGUE FAILURE) ◆ DESIGN OF SHAFTS UNDER STATIC AND FATIGUE LOADINGS ◆ ANALYSIS AND DESIGN OF SLIDING AND ROLLING CONTACT BEARINGS ◆ DESIGN OF TRANSMISSION ELEMENTS SPUR, HELICAL, BEVEL AND WORM GEARS; BELT AND CHAIN DRIVES ◆ DESIGN OF SPRINGS HELICAL COMPRESSION, TENSION, TORSIONAL AND LEAF SPRINGS ◆ DESIGN OF JOINTS: THREADED FASTENERS PRELOADED BOLTS AND WELDED JOINTS ◆ ANALYSIS AND APPLICATIONS OF POWER SCREWS AND COUPLINGS ◆ ANALYSIS OF CLUTCHES AND BRAKES

COURSE OUTCOMES

- UPON COMPLETION OF THIS COURSE, STUDENTS WILL GET AN OVERVIEW OF THE DESIGN METHODOLOGIES EMPLOYED FOR THE DESIGN OF VARIOUS MACHINE COMPONENTS.

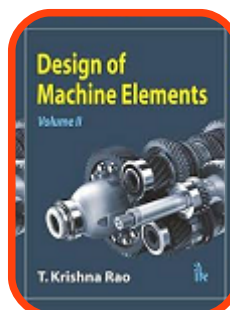
REFERENCE BOOKS

- [1] SHIGLEY, J.E. AND MISHKE, C.R., MECHANICAL ENGINEERING DESIGN, FIFTH EDITION, MCGRAW-HILL INTERNATIONAL; 1989.
- [2] DEUTSCHMAN, D., MICHELS, W.J. AND WILSON, C.E., MACHINE DESIGN THEORY AND PRACTICE, MACMILLAN, 1992.
- [3] JUVINAL, R.C., FUNDAMENTALS OF MACHINE COMPONENT DESIGN, JOHN WILEY, 1994.
- [4] SPOTTES, M.F., DESIGN OF MACHINE ELEMENTS, PRENTICE-HALL INDIA, 1994.
- [5] R. L. NORTON, MECHANICAL DESIGN - AN INTEGRATED APPROACH, PRENTICE HALL, 1998

APM CAM/APM PLAIN
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APM DRIVE/APM TRANS
APM SHAFT/APM BEAR
APM JOINT/APM SPRING

SAM

(SYNTHESIS ANALYSIS MECHANISM)
GENERAL - DESIGN WIZARDS -
MODELLING - INPUT MOTION -
CAD INTERFACE - ANALYSIS -
RESULTS - POST-PROCESSING
- OPTIMIZATION - TUTORIALS



SOFTWARE

APM WINMACHINE
SAM
SALTIRE
VARICAD
KOMPAS 3D

<http://www.paviathjobportal.com/index>

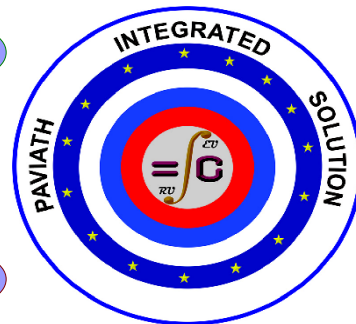
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<http://www.paviathintegratedsolution.com/mech-eng-saltire>

ISO/GOST/EN/DIN

SEMESTER UNITS

REFERENCE BOOKS



POLYTECH - AICTE - UNIVERSITY

INTERNSHIP SYLLABUS

MECHANISM

MACHINE ELEMENT

STRUCTURAL

IV DESIGN OF TRANSMISSION SYSTEMS

- ◆ SYLLABUS PROGRAM
- ◆ DESIGN OF TRANSMISSION SYSTEMS
- ◆ MECHANICAL ENGINEERING
- ◆ ELECTIVE SUBJECT
- ◆ ENGINEERING CODE PEC-MEL 433

ACADEMIC SYLLABUS

INDUSTRY DB/APPLN

PROFESSIONAL COACH

DEGREE/DIPLOMA*

COURSE SEMESTER

- ◆ OBJECTIVE OF COURSE
- ◆ COURSE CONTENTS
- ◆ COURSE OUTCOMES
- ◆ REFERENCE BOOKS

OBJECTIVE

TO LEARN ABOUT THE DESIGN PROCEDURES FOR MECHANICAL POWER TRANSMISSION COMPONENTS

COURSE CONTENT

FLEXIBLE TRANSMISSION ELEMENTS. GEAR TRANSMISSION. STRAIGHT BEVEL GEAR. GEAR BOX. CAM DESIGN.

OBJECTIVE OUTCOMES

UPON COMPLETING THIS COURSE THE STUDENTS WILL BE ABLE TO DESIGN TRANSMISSION SYSTEMS FOR ENGINES AND MACHINES.

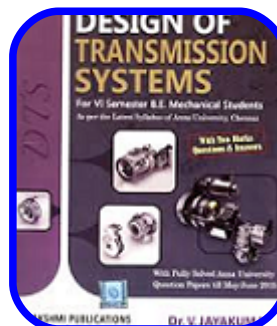
REFERENCE BOOKS

1. SHIGLEY J., MISCHKE C., BUDYNAS R. AND NISBETT K., MECHANICAL ENGINEERING DESIGN, 8TH ED., TATA MCGRAW HILL, 2010.
2. JINDAL U.C., MACHINE DESIGN: DESIGN OF TRANSMISSION SYSTEM, DORLING KINDERSLEY, 2010.
3. MAITRA G. AND PRASAD L., HANDBOOK OF MECHANICAL DESIGN, 2ND ED., TATA MCGRAW HILL, 2001.

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

SAM

(SYNTHESIS ANALYSIS MECHANISM)
GENERAL - DESIGN WIZARDS -
MODELLING - INPUT MOTION -
CAD INTERFACE - ANALYSIS -
RESULTS - POST-PROCESSING -
OPTIMIZATION - TUTORIALS



SOFTWARE

APM WINMACHINE
SAM
SALTIRE
VARICAD
KOMPAS 3D

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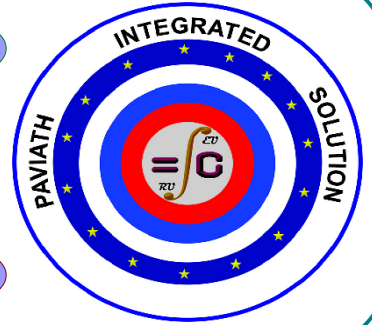
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ISO/GOST/EN/DIN

SEMESTER UNITS

REFERENCE BOOKS



POLYTECH - AICTE - UNIVERSITY

INTERSHIP MEDIA

MECHANISM

MACHINE ELEMENT

STRUCTURAL

PAVIATH MEDIA INTERSHIP



DEGREE/DIPLOMA*

SYLLABUS PROGRAM

- ◆ STRENGTH OF MATERIAL
- ◆ THEORY OF MACHINE
- ◆ DESIGN OF MACHINE ELEMENTS
- ◆ DESIGN OF TRANSMISSION SYSTEM

VARICAD 2D/3D/PDM/BOM
KOMPAS 3D 2D/3D/BOM

COURSE OUTCOMES

- ◆ DESIGN PROCEDURE
- ◆ EXERCISING VIDEO
- ◆ PUBLISHING IN YOUTUBE
- ◆ REFERENCE BOOKS

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**

SAM (SYNTHESIS ANALYSIS MECHANISM)

GENERAL - DESIGN WIZARDS - MODELLING -
INPUT MOTION - CAD INTERFACE - ANALYSIS -
RESULTS - POST-PROCESSING - OPTIMIZATION
- TUTORIALS

SALTIRE SOFTWARE

SALTIRE KNOWLEDGE BASE
MATHS ILLUSTRATION
GEOMETRY EXPRESSIONS
MECHANICAL EXPRESSIONS - ANALYTIS CAM
3D PRINTING - ATLAS OF FOUR BAR LINKAGE

STRENGTH OF MATERIAL (APM WINMACHINE)

THEORY OF MACHINE

(SAM/APM WINMACHINE/SALTIRE SOFTWARE)

DESIGN OF MACHINE ELEMENTS

(SAM/APM WINMACHINE)

DESIGN OF TRANSMISSION SYSTEM

(SAM/APM WINMACHINE/SALTIRE SOFTWARE)



TRAINING MODULES (WEBINAR)

STRENGTH OF MATERIAL

THEORY OF MACHINE

DESIGN OF MACHINE ELEMENTS

DESIGN OF TRANSMISSION SYSTEM

YOUTUBE & WEBINAR

UNIVERSITY - ENGG COLLEGE

POLYTECH - RESEARCH ORGN

HEAVY - MEDIUM INDUSTRY

SMALL INDUSTRY - PROFESSIONAL

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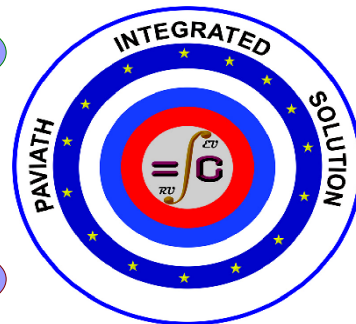
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ISO/GOST/EN/DIN

SEMESTER UNITS

REFERENCE BOOKS



POLYTECH - AICTE - UNIVERSITY

INTERNSHIP DESIGN

MECHANISM

MACHINE ELEMENT

STRUCTURAL

PAVIATH DESIGN INTERNSHIP

MECHANISM
APPLICATION INDUSTRIES

DEGREE/DIPLOMA*

INDUSTRY (TEXTILE/MEDIUM)

- ◆ RAW MATERIAL (COTTON/SYNTHETIC)
- ◆ CORDING/SPINNING/TWISTING
- ◆ WARPING/REEDING/WEAVING
- ◆ EMBROIDING/GARMENT DESIGN

SMALL/MEDIUM/HEAVY INDUSTRIES
PROCESS-RAW MATERIAL TO FINAL
PROCESS MACHINERIES

APPLICATION MACHINES

- ◆ CORDING/SPINNING UNIT
- ◆ TWISTING UNIT/WARPING UNIT
- ◆ RAPIER/SHUTTLE/AIRJET/WATERJET
- ◆ EMBROIDING M/C/GARMENT UNIT

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**

SAM (SYNTHESIS ANALYSIS MECHANISM)

GENERAL/DESIGN WIZARDS/MODELLING/INPUT MOTION/CAD
INTERFACE ANALYSIS/RESULTS/POST-
PROCESSING/OPTIMIZATION/TUTORIALS

SALTIRE SOFTWARE

SALTIRE KNOWLEDGE BASE/MATHS ILLUSTRATION/GEOMETRY
EXPRESSIONS/MECHANICAL EXPRESSIONS/ANALYTIS CAM
3D PRINTING - ATLAS OF FOUR BAR LINKAGE

MECHANISM - MACHINES - EQUIPMENTS

AGRICULTURE INDUSTRIES/AUTOMATION INDUSTRIES
CONSTRUCTION INDUSTRIES/**TEXTILE INDUSTRIES**
GARMENT INDUSTRIES/MACHINE BUILDING INDUSTRIES
BULK HANDLING INDUSTRIES/MINERAL PROCESSING INDUSTRIES
AUTOMOBILE INDUSTRIES/DEM INDUSTRIES
PRINTING INDUSTRIES/PACKAGING INDUSTRIES
PLASTIC INDUSTRIES/RUBBER INDUSTRIES
TESTING MACHINE INDUSTRIES/SPACE INDUSTRIES
MARINE/SHIP BUILDING INDUSTRIES

TYPE	SMALL/MEDIUM/HEAVY
APPLN AREA	-----
RAW MATERIALS	-----
FINAL PRODUCT	-----

NATURE	PRODUCT/DEM/SERVICE
R.M FORM	STD/FAB/CAST/FORG
MECHANISM TYPE	REFERENCE BOOKS
PROPERTIES	STAGE VS MECH VS PHYS

LISTING	PROCESS MACHINES
PARAMETER	DESIGN/STRUCTURE
DESIGN SEQUENCE	CONCEPT TO FINAL
SOFTWARE	CAI/CAE/MBD



BOOKS
KONSTRUKTIVEGETRIEBELEHRE
NEIL SCLATER/WILEY/DMAGL
I. I. ARTOBOLSKY/SAM REFERENCE
MECHANISM DESIGN: ANALYSIS & SYNTHESIS
PLANETENMISCHER MIT DYNAMISCH
GETRIEBENEN MISCHARMEN

YOUTUBE & WEBINAR
UNIVERSITY - ENGG COLLEGE
POLYTECH - RESEARCH ORGN

HEAVY - MEDIUM INDUSTRY
SMALL INDUSTRY - PROFESSIONAL

<http://www.paviathjobportal.com/index>

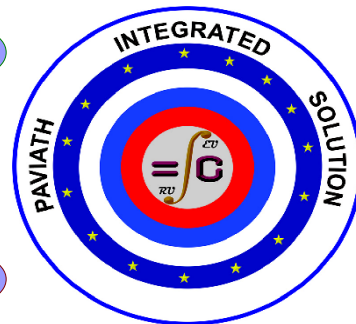
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ISO/GOST/EN/DIN

SEMESTER UNITS

REFERENCE BOOKS



POLYTECH - AICTE - UNIVERSITY

INTERNSHIP INSTITUTION

MECHANISM

MACHINE ELEMENT

STRUCTURAL

PAVIATH INSTITUTION INTERNSHIP

SEMINAR/WEBMINAR
DEMONSTRATION

DEGREE/DIPLOMA*

INSTITUTION

- ◆ UNIVERSITY/AUTONOMOUS
- ◆ AICTE APPROVED ENGG COLLEGE
- ◆ POLYTECHNIC COLLEGE
- ◆ RESEARCH INSTITUTION

SYLLABUS COACHING - CAREER
DEVELOPMENT - PROJECT DEV.
PRODUCT DEV. - REVERSE ENGG

MECHANICAL & ALLIED DEPARTMENT

- ◆ MECHANICAL/PRODUCTION
- ◆ MECHATRONICS/MARINE ENGG
- ◆ AUTOMOBILE ENGG/AERONAUTICAL ENGG
- ◆ AGRICULTURE ENGG./INDUS. AUTOMATION

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**

SAM (SYNTHESIS ANALYSIS MECHANISM)

GENERAL/DESIGN WIZARDS/MODELLING/INPUT MOTION/CAD
INTERFACE ANALYSIS/RESULTS/POST-
PROCESSING/OPTIMIZATION/TUTORIALS

SALTIRE SOFTWARE

SALTIRE KNOWLEDGE BASE/MATHS ILLUSTRATION/GEOMETRY
EXPRESSIONS/MECHANICAL EXPRESSIONS/ANALYTIS CAM
3D PRINTING - ATLAS OF FOUR BAR LINKAGE

MECHANISM - MACHINES - EQUIPMENTS

AGRICULTURE INDUSTRIES/AUTOMATION INDUSTRIES
CONSTRUCTION INDUSTRIES/**TEXTILE INDUSTRIES**
GARMENT INDUSTRIES/MACHINE BUILDING INDUSTRIES
BULK HANDLING INDUSTRIES/MINERAL PROCESSING INDUSTRIES
AUTOMOBILE INDUSTRIES/DEM INDUSTRIES
PRINTING INDUSTRIES/PACKAGING INDUSTRIES
PLASTIC INDUSTRIES/RUBBER INDUSTRIES
TESTING MACHINE INDUSTRIES/SPACE INDUSTRIES
MARINE/SHIP BUILDING INDUSTRIES

TYPE UNIV/ENGG/POLYTECH
NAME OF INST. _____
DEPARTMENT _____
WEB UR _____

HOD NAME _____
EMAIL ID _____
PHONE NO: _____
NO. OF STUDENTS _____

PROGRAM SYLLABUS/CAREER
PROGRAM COND. _____
CONDUCTED BY _____
DATE _____



INSTITUTION - INTERNSHIP
FREE BY INTERNSHIP TRAINEE
SYLLABUS PROGRAM
CAREER DEV. - PROJECT DEV.
PRODUCT DEV. - REVERSE ENGG

YOUTUBE & WEBINAR
UNIVERSITY - ENGG COLLEGE
POLYTECH - RESEARCH ORGN

HEAVY - MEDIUM INDUSTRY
SMALL INDUSTRY - PROFESSIONAL

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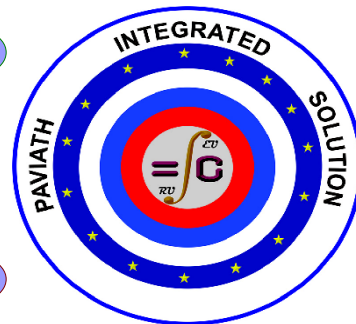
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<http://www.paviathintegratedsolution.com/sam-features>
<http://www.paviathintegratedsolution.com/mech-eng-saltire>

ISO/GOST/EN/DIN

SEMESTER UNITS

REFERENCE BOOKS



POLYTECH - AICTE - UNIVERSITY

INTERNSHIP INDUSTRY

MECHANISM

MACHINE ELEMENT

STRUCTURAL

PAVIATH INDUSTRY INTERNSHIP

FEATURE BASED TRAINING
DESIGN TRAINING-JOB PORTAL

DEGREE/DIPLOMA*

INDUSTRY

- ◆ HEAVY /MEDIUM INDUSTRY
- ◆ OEM /SMALL INDUSTRY
- ◆ RESEARCH INDUSTRY
- ◆ DEFENCE INDUSTRY

ACADEMIC UPDATE - PROFESSIONAL
DEVELOPMENT - PROJECT DEV.
PRODUCT DEV. - REVERSE ENGG

MECHANICAL & ALLIED INDUSTRIES

- ◆ AGRICULTURE INDUSTRIES/AUTOMATION INDUSTRIES
- ◆ CONSTRUCTION INDUSTRIES/TEXTILE INDUSTRIES
- ◆ AUTOMOBILE INDUSTRIES/OEM INDUSTRIES
- ◆ PRINTING INDUSTRIES/PACKAGING INDUSTRIES

APM WINMACHINE

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APM DYNAMICS/APM BEAM/APM **GRAPH/APM STUDIO**
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BULK HANDLING INDUSTRIES/MINERAL PROCESSING INDUSTRIES

AUTOMOBILE INDUSTRIES/OEM INDUSTRIES

PRINTING INDUSTRIES/PACKAGING INDUSTRIES

PLASTIC INDUSTRIES/RUBBER INDUSTRIES

TESTING MACHINE INDUSTRIES/SPACE INDUSTRIES

MARINE/SHIP BUILDING INDUSTRIES

TYPE HEAVY/MEDIUM/SMALL
NAME OF IND. _____
DEPARTMENT _____
WEB UR _____

HOD NAME _____
EMAIL ID _____
PHONE NO: _____
NO. OF EMPLOYEE _____

PROGRAM DESIGN/JOB PORTAL
REP. BY. _____
PLACE _____
DATE _____



INDUSTRY - INTERNSHIP
ACADEMIC UPDATE TRAINING
PROFESSIONAL DEVELOPMENT
PROJECT DEVELOPMENT.
PRODUCT DEVELOPMENT
REVERSE ENGINEERING

YOUTUBE & WEBINAR
UNIVERSITY - ENGG COLLEGE
POLYTECH - RESEARCH ORGN

HEAVY - MEDIUM INDUSTRY
SMALL INDUSTRY - PROFESSIONAL

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<http://www.paviathintegratedsolution.com/mech-eng-saltire>



SQI

SEQUENCE

PAVIATH INTEGRATED SOLUTION



RESEARCH

ELEMENT DESIGN

SYSTEM DESIGN

INTERSHIP PROJECT

ANALYSIS

PRODUCT DESIGN

CONCEPT DESIGN

REVERSE ENGG



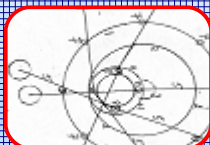
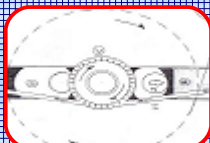
PRODUCT DESIGN

LITERATURE DATA
ENCYCLOPEDIA
PRODUCT DATA
PRODUCT SPECN
SYSTEM LAYOUT
PART SPECN.
APPLN AREA
ISO/DIN/GOST
MATERIAL DATA
TECH.PAPER
REF. BOOKS



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APPLICATION AREA I

AGRICULTURE INDUSTRIES
AUTOMATION INDUSTRIES
CONSTRUCTION INDUSTRIES
TEXTILE INDUSTRIES
GARMENT INDUSTRIES
MACHINE BUILDING INDUSTRIES
BULK HANDLING INDUSTRIES
MINERAL PROCESSING

APPLICATION AREA II

AUTOMOBILE INDUSTRIES
DEM INDUSTRIES
PRINTING INDUSTRIES
PACKAGING INDUSTRIES
PLASTIC INDUSTRIES
RUBBER INDUSTRIES
TESTING MACHINE INDUSTRIES
SPACE INDUSTRIES

APPLICATION AREA III

MARINE/SHIP BUILDING INDUSTRIES
CHEMICAL PLANT ENGINEERING
THERMAL PLANT ENGINEERING
FOOD PROCESSING INDUSTRIES
OIL - GAS INDUSTRIES
EFFLUENT TREATMENT INDUSTRIES
WATER TREATMENT INDUSTRIES
NUCLEAR EQUIPMENT INDUSTRIES

INSTITUTION

CONCEPTUAL

RESEARCH



PROJECT

REVERSE ENGG

INDUSTRY

MECHANISM AREA

AGRICULTURE ENBB.
AUTOMATION ENGG.
AUTOMOBILE ENGG.
TEXTILE MACHINERIES
MACHINE TOOL INDUSTRY
MINERAL MACHINERIES.
MATERIAL HANDLING
PRINTING MACHINES
PACKAGE MACHINES
CONSTRUCTION MACHINES
TESTING EQUIPMENTS
MARINE EQUIPMENTS

THERMAL AREA

CHEMICAL PLANT ENGG.
THERMAL PLANT ENGG.
FOOD PROCESSING.
OIL GAS INDUSTRIES.
EFFLUENT TREATMENT.
WATER TREATMENT.
NUCLEAR EQUIPMENT.
THERMAL FLOW SYSTEM.
PRESSURE VESSELS.
HEAT EXCHANGER.
STORAGE TANK.
PIPING SYSTEM.

MACHINE ELEMENTS ELEMENTS

DRIVE UNITS DESIGN
TRANSMISSION DESIGN
SHAFT DESIGN
ALL TYPE GEARS
PULLEY & CHAINE DRIVE
ROLLING CONTACT BEARING
ALL TYPE JOINTS DESIGN
SPRINGS & TORSION DESIGN
CAM AND FOLLOWER
PLAIN BEARING
PLANETARY SCREW

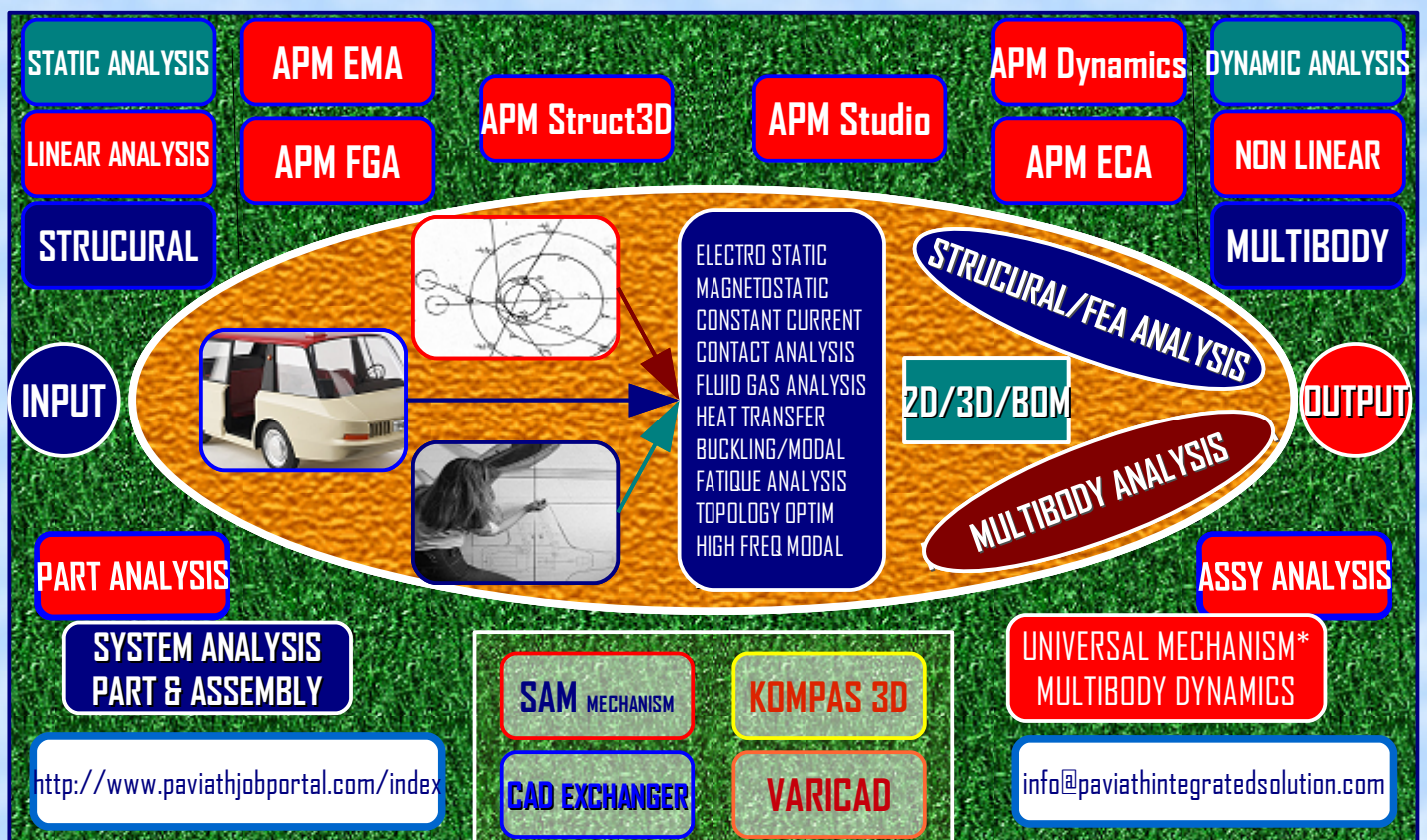
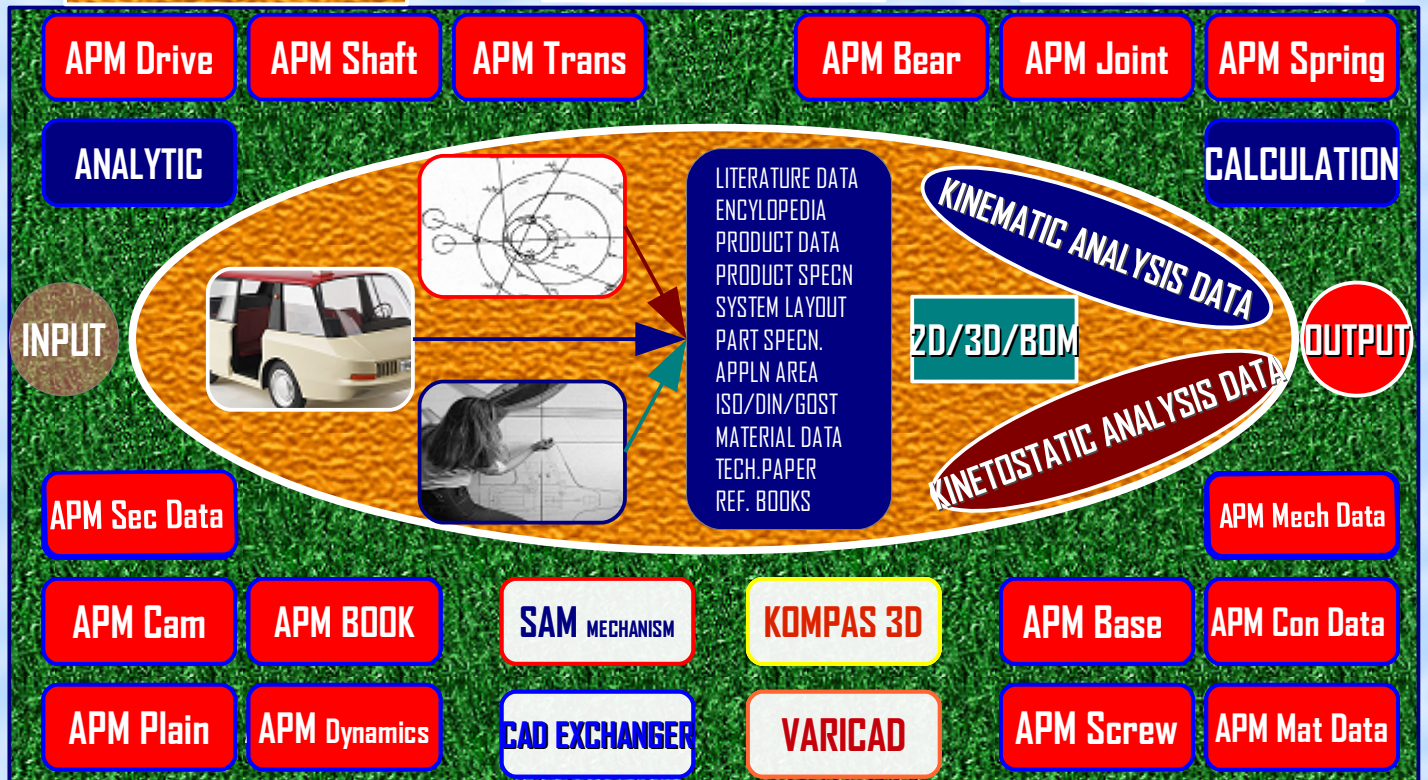
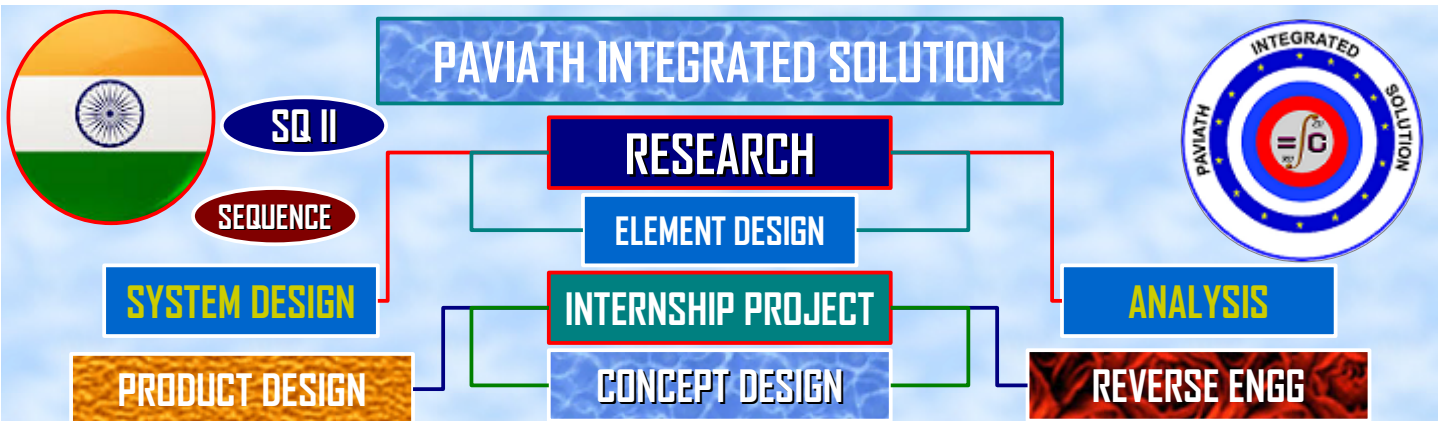
ANALYSIS

PART & ASSEMBLY
LINEAR/NON LINEAR
BUCKLING/MODAL/
FATIGUE ANALYSIS
TOPOLOGY OPTIMIZATION
TRANSIEN DYNAMIC
HIGH FREQUENCY MODAL
RESULT MAP
STRESS/LOAD/FATIGUE
DISPLACEMENT
TOTAL STRAIN
FACTOR OF SAFTEY
PRINCIPLE STRESS/VECTOR

ANALYSIS

ELECTRO STATIC
MAGNETOSTATIC
CONSTANT CURRENT
NON STAT ELECTROMAGNETIC
FLUID GAS ANALYSIS
PIPEING ANALYSIS
EQUIPMENT ANALYSIS
HEAT TRANSFER
TRANSIENT HEAT TRANSFER
MULTIBODY ANALYSIS
MATHEMATICAL ANALYSIS
3D PRINTING ANALYSIS
CONTACT ANALYSIS

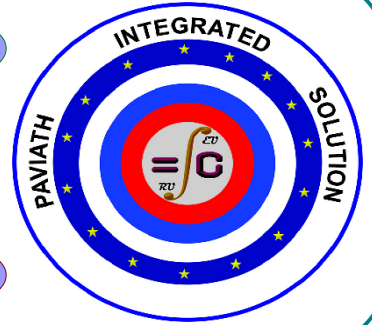
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ISO/GOST/EN/DIN

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REFERENCE BOOKS



POLYTECH - AICTE - UNIVERSITY

INTERNSHIP CAREER

MECHANISM

MACHINE ELEMENT

STRUCTURAL

PAVIATH CAREER INTERNSHIP

CAREER

- ◆ INSTITUTION/INDUSTRY
- ◆ APPLICATION AREA & INDUSTRY
- ◆ DEPARTMENT CHOICE I/CHOICE II
- ◆ ENTREPRENEUR (Application Area)

CAREER ORIENTATION
SEQUENCE ON TRAINING

COUNSELLING - SYLLABUS TRAINING
INTERN MEDIA - INSTITUTION VISIT
INDUSTRY VISIT - INTERN PROJECT

DEGREE/DIPLOMA*

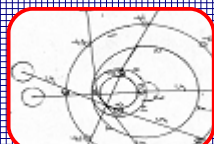
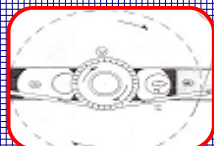
PROJECT

- ◆ CAREER AREA/APPLICATION INDUSTRY
- ◆ PRODUCT DEVELOPMENT
- ◆ REVERSE ENGINEERING
- ◆ DEM DEVELOPMENT DESIGN & ANALYSIS



CONCEPT DESIGN

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REVERSE ENGG.

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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
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3D PRINTING - ATLAS OF FOUR BAR LINKAGE



LIVE WEBINAR
TRAINING



CAREER - INTERNSHIP
DOCUMENTATION & CERTIFICATE
INTERNSHIP DATA/FEATURES
LITERATURE/ENCYCLOPEDIA
CONCEPTUAL DATA/ANALYSIS DATA
MECHANISM/MACHINE ELEMENTS

YOUTUBE & WEBINAR

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