

Ansys Syllabus

Objective


The entire objective of the 60 hrs this program is to develop the basics of the students designing and analysis


Course outcomes


- Carry out the basic end-to-end static structural analysis process in Ansys Mechanical.
- Describe several of the considerations that are important in the planning of a useful and appropriate analysis model.
- Demonstrate a basic understanding of viewing control, entity selection, geometry import, material property definition and assignment, coordinate systems, mesh control, contact regions, simple loads, supports and results display.
- Appreciate the importance of model validation and several common techniques that may be used to achieve it.

Introduction to FEA and Ansys

- Introduction to FEA
- General working of FEA
- Nodes, element and elements shapes
- General procedure of conducting finite element analysis
- FEA through ansys
- Effective utilization of FEA
- FEA software
- Advantages and limitations of FEA software
- Key assumptions in FEA
- Assumptions related to geometry
- Assumptions related to materials properties
- Assumptions related to boundary conditions
- Assumptions related to fasteners
- Types of analysis
- Structure analysis
- Thermal analysis
- Fluid flow analysis
- Electromagnetic field analysis
- Coupled field analysis
- Important term and definitions


Anj Head
Department of Mechanical Engineering
Invertis University
Bareilly- 243123, UP


Registrar
Invertis University
Bareilly


Dean
Faculty of Engineering & Techn.
Invertis University
Bareilly- 243123, UP

- Strength
- Load
- Stress
- Strain
- Elastic limit
- Ultimate strength
- Factor of safety
- Lateral strain and Poisson's ratio
- Bulk modulus
- Creep
- Engineering materials
- Introduction to Ansys
- System requirement
- Getting started with Ansys
- Interactive mode
- Launcher window
- Command window icon
- Raise hidden icon
- Reset picking
- Contact manager

Basic solid modeling

- Solid modeling in Ansys
- Solid modeling and direct generation
- Solid modeling method
- Bottom up construction
- Consideration before creating a model for analysis
- Details required
- Symmetry
- Creating geometric entities

Thermal analysis

- Important terms used in thermal analysis
- Heat transfer mode
- Thermal gradient
- Thermal flux
- Bulk temperature

Amj

Head

Department of Mechanical Engineering
Invertis University
Bareilly-243123, UP

[Signature]
Dean
Faculty of Engineering & Technology
Invertis University
Bareilly-243123, UP

[Signature]
Registrar
Invertis University
Bareilly

Department of Mechanical Engineering

20 January 2022

CIRCULAR

VALUE ADDED COURSE (Ansys in Mechanical Engineering)

B. Tech. ME


Students of B. Tech. (ME) all years are hereby informed that value added course "Ansys in Mechanical Engineering" is scheduled from 1 February 2022 in your respective classroom, Academic Block-II.


Schedule:


- Time Slot: 03:00 PM to 05:00 PM
- Key Speaker : Mrs Ritu Gupta
- Duration: 2 hrs

Program Overview:

The objective of the program is to introduce the basic concept of Ansys and its applications, challenges and its importance. to enable the students how to approach for solving the engineering problems using Auto cad simulation. .


Mrs Ritu Gupta
Department of Engineering & Technology
Invertis University
Bareilly-243123, UP


Mr. Anuj Kumar
(HOD)
Department of Mechanical Engineering
Invertis University
Bareilly-243123, UP


Registrar
Invertis University
Bareilly

VALUE ADDED COURSE (Ansys for Mechanical Engineering)

INVERTIS
UNIVERSITY BAREILLY



Program:-B. TECH.



03:00 PM TO 05:00 PM



1 Sept 2021 - 30 Oct 2021


Registrar
Invertis University
Bareilly

KEY SPEAKER :
Mrs. Ritu Gupta

HOD:

MR. Anuj Kumar  Head

Department of Mechanical Engineering
Invertis University
Bareilly-243123, U.P


Dean

Faculty of Engineering & Technology
Invertis University
Bareilly-243123, UP

*VALUE ADDED COURSE (AutoCAD Mechanical Engineering).




PROGRAM OVERVIEW:

The objective of this course is to make the students aware and to learn how Ansys software really works. They have got the opportunity to gain and developed their technical skills by the learning of Ansys and its various features and commands.


Present

Faculty of Engineering & Technology
Invertis University
Francilly 243123, UP


Registrar
Invertis University
Bareilly


Head
Department of Mechanical Engineering
Invertis University
Francilly-243123, UP

INVERTIS UNIVERSITY

CERTIFICATE OF VALUE ADDED COURSE


This Certificate is awarded to Mr./Ms. Abhay Pratap Singh
of Program B.Tech (ME) Year/Semester Fourth year
for successfully completing a value added course _____

_____ ANSYS _____
offered by Department of Mechanical Engineering
during 21 September to 15 October 2021

Head of the Department

Course Coordinator


Head of the Department


Registrar
Invertis University
Bareilly

INVERTIS UNIVERSITY

CERTIFICATE OF VALUE ADDED COURSE

This Certificate is awarded to Mr./Ms. Achal Bajpai
of Program B.Tech (ME) _____ Year/Semester Fourth Year
for successfully completing a value added course _____

_____ Ansys _____
offered by Department of Mechanical Engineering _____
during 01 September to 15 October 2021 _____

Head of the Department

Course Coordinator



INVERTIS UNIVERSITY


CERTIFICATE OF VALUE ADDED COURSE

This Certificate is awarded to Mr./Ms. Chetan Kaul
of Program B.Tech (ME) Year/Semester Fourth Year
for successfully completing a value added course _____

_____ Ansys _____
offered by Department of Mechanical Engineering _____
during 01 September to 15 October 2021 _____

Head of the Department

Course Coordinator


Dean
School of Engineering & Technology
Invertis University
Bareilly 243123, UP


Registrar
Invertis University
Bareilly

INVERTIS UNIVERSITY

CERTIFICATE OF VALUE ADDED COURSE

This Certificate is awarded to Mr./Ms. Ashamendra Singh
of Program B. Tech (ME) Year/Semester Fourth Year
for successfully completing a value added course _____

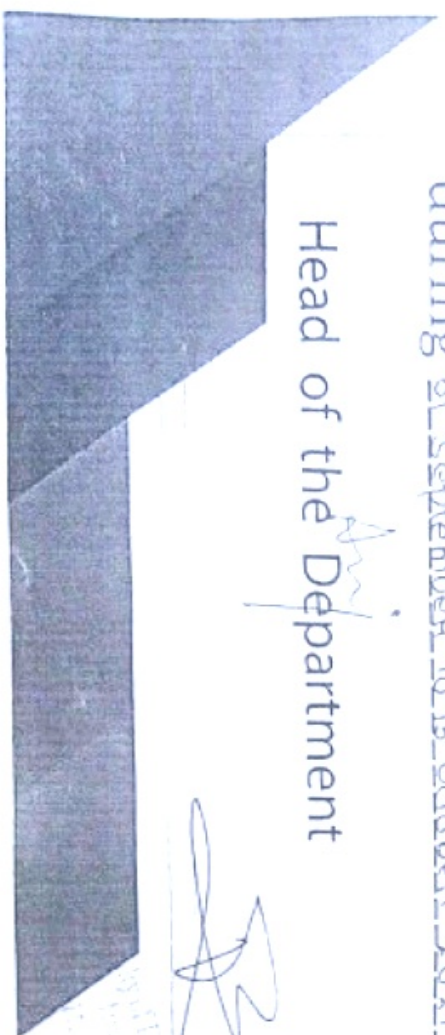
_____ Ansys _____
offered by Department of Mechanical Engineering _____
during September to 15 October 2021 _____

Head of the Department

Course Coordinator




Registrar
Invertis University
Bareilly



INVERTIS UNIVERSITY


CERTIFICATE OF VALUE ADDED COURSE

This Certificate is awarded to Mr./Ms. Sunprender Singh
of Program B.Tech (ME) Year/Semester Fourth Year
for successfully completing a value added course _____

_____ Arav's _____
offered by Department of Mechanical Engineering _____
during September to 15 October 2021 _____

Head of the Department

Course Coordinator


Dean
Faculty of Engineering & Technology
Invertis University
Bareilly 243123, UP



Registrar
Invertis University
Bareilly

INVERTIS UNIVERSITY

CERTIFICATE OF VALUE ADDED COURSE



This Certificate is awarded to Mr./Ms. Hammad Rashid
of Program B.Tech (ME) Year/Semester Fourth year
for successfully completing a value added course _____
Ansys
offered by Department of Mechanical Engineering
during 01 September to 15 October 2021

Head of the Department



Dean & Technology
Faculty of Engineering
Invertis University
Campus 241123, UP

Course Coordinator



Academy
Invertis University
Bareilly

INVERTIS UNIVERSITY


CERTIFICATE OF VALUE ADDED COURSE

This Certificate is awarded to Mr./Ms. Harkirat Singh
of Program B.Tech (ME) Year/Semester fourth year
for successfully completing a value added course _____

_____ Analysis _____
offered by Department of Mechanical Engineering _____
during 01-September to 15-October 2021 _____

Head of the Department

Course Coordinator


Dean
Faculty of Engineering & Technology
Invertis University
Bareilly-243123, UP


Registrar
Invertis University
Bareilly

INVERTIS UNIVERSITY


CERTIFICATE OF VALUE ADDED COURSE

This Certificate is awarded to Mr./Ms. Mahar Ram Sharma
of Program B.Tech. (ME) Year/Semester fourth Year
for successfully completing a value added course _____

_____ Amys _____
offered by Department of Mechanical Engineering _____
during 01-September to 15-October 2021 _____

Head of the Department

Course Coordinator


Dean
Faculty of Engineering & Technology
INVERTIS UNIVERSITY
Bareilly-243123, UP


Registrar
Invertis University
Bareilly

INVERTIS UNIVERSITY

CERTIFICATE OF VALUE ADDED COURSE

This Certificate is awarded to Mr./Ms. Mohd. Faraz
of Program B.Tech. (Mech) Year/Semester Fourth Year
for successfully completing a value added course

B.Tech.
offered by Department of Mechanical Engineering
during September to October 2021

Head of the Department

Course Coordinator




Dean
Faculty of Engineering & Technology
Invertis University
Barilly - 243123, UP


Registrar
Invertis University
Barilly

INVERTIS UNIVERSITY

CERTIFICATE OF VALUE ADDED COURSE

This Certificate is awarded to Mr./Ms. Mahel Najmul Ansari
of Program 4th Tech (ME) _____ Year/Semester Fourth Year
for successfully completing a value added course _____

_____ Always _____
offered by Department of Mechanical Engineering _____
during September to 31 October 2021 _____

Head of the Department

Course Coordinator


Dean
Faculty of Engineering & Technology
Invertis University


Registrar
Invertis University
Bareilly

INVERTIS UNIVERSITY

CERTIFICATE OF VALUE ADDED COURSE

This Certificate is awarded to Mr./Ms. Mohsin
of Program B.Tech (ME) Year/Semester Fourth year
for successfully completing a value added course Ansys
offered by Department of Mechanical Engineering
during 01 September to 15 October 2021

Head of the Department


Dean & Technology
Faculty of Engineering & Technology
Inverts University
Bareilly 24123, UP

Course Coordinator



Registrar
Inverts University
Bareilly

INVERTIS UNIVERSITY

CERTIFICATE OF VALUE ADDED COURSE

This Certificate is awarded to Mr./Ms. Pawan Kumar
of Program B.Tech (ME) Year/Semester Fourth year
for successfully completing a value added course _____
Ansys
offered by Department of Mechanical Engineering
during 15 September to 15 October 2021

Head of the Department


Dean
Faculty of Engineering & Technology
Invertis University
Bareilly 24123, UP

Course Coordinator


Registrar
Invertis University
Bareilly

INVERTIS UNIVERSITY


CERTIFICATE OF VALUE ADDED COURSE

This Certificate is awarded to Mr./Ms. Praveen Kumar
of Program B.Tech (ME) Year/Semester Fourth year
for successfully completing a value added course _____

_____ Ansys _____
offered by Department of Mechanical Engineering
during 1st September to 15 October 2021

Head of the Department

Course Coordinator


Dean & Technology
Faculty of Engineering & Technology
Invertis University
Bareilly 24123, UP


Registrar
Invertis University
Bareilly

INVERTIS UNIVERSITY

CERTIFICATE OF VALUE ADDED COURSE

This Certificate is awarded to Mr./Ms. Paigansha Saxena
of Program B_Tech(ME) _____ Year/Semester Fourth year
for successfully completing a value added course _____

_____ Ansys _____
offered by Department of Mechanical Engineering _____
during 21 September to 15 October 2021

Head of the Department



Dean & Technology

Faculty of Engineering & Technology
Invertis University
Faculty No. 2, 23, UP

Course Coordinator



Registrar
Invertis University
Bareilly

INVERTIS UNIVERSITY


CERTIFICATE OF VALUE ADDED COURSE

This Certificate is awarded to Mr./Ms. Ravi Kant Sharma
of Program B.Tech (ME) Year/Semester Fourth Year
for successfully completing a value added course _____

_____ Ansys _____
offered by Department of Mechanical Engineering _____
during September to 15 October 2021 _____

Head of the Department

Course Coordinator


Faculty of Engineering & Technology
Invertis University
Bareilly-243123, UP


Registrar
Invertis University
Bareilly

INVERTIS UNIVERSITY

CERTIFICATE OF VALUE ADDED COURSE

This Certificate is awarded to Mr./Ms. Rishikesh Patil
of Program Year/Semester Fourth Year
for successfully completing a value added course _____

_____ Analysis _____
offered by Department of Mechanical Engineering _____
during September to 15 October 2021 _____

Head of the Department

Course Coordinator


Dean
Faculty of Engineering & Technology
Invertis University
Bareilly 243123, UP


Invertis University
Bareilly

INVERTIS UNIVERSITY

CERTIFICATE OF VALUE ADDED COURSE

This Certificate is awarded to Mr./Ms. Rishi Saxena
of Program _____ Year/Semester Fourth Year
for successfully completing a value added course _____

_____ Physics _____
offered by Department of Mechanical Engineering _____
during Semester V to VI October 2021 _____

Head of the Department

[Signature]
Course Coordinator

[Signature]
Dean & Technology
Faculty of Engineering & Technology
Invertis University
Bareilly-243123, UP

[Signature]
Registrar
Invertis University
Bareilly

INVERTIS UNIVERSITY

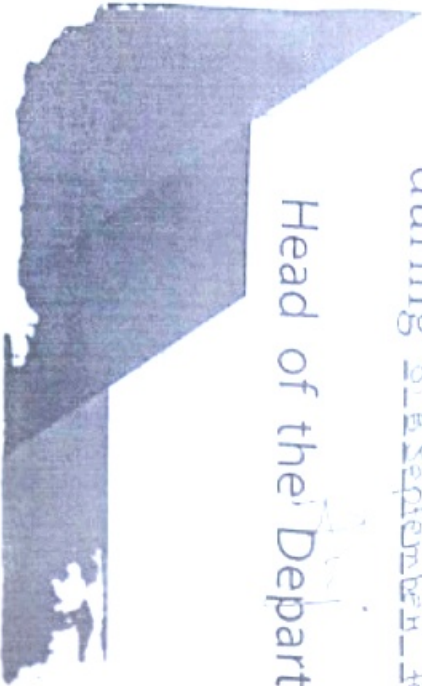
CERTIFICATE OF VALUE ADDED COURSE

This Certificate is awarded to Mr./Ms. Souhag Pal
of Program M.Tech (ME) Year/Semester Fourth Year
for successfully completing a value added course _____

_____ Always _____
offered by Department of Mechanical Engineering
during 01st September to 15 October 2021 _____

Head of the Department

Course Coordinator




Dean & Technology
Faculty of Engineering & Technology
Invertis University
Bareilly - 243123, UP


Registrar
Invertis University
Bareilly

INVERTIS UNIVERSITY

CERTIFICATE OF VALUE ADDED COURSE

This Certificate is awarded to Mr./Ms. Somenendra Singh
of Program B.Tech. (ME) Year/Semester fourth Year
for successfully completing a value added course _____

_____ Ansyl _____
offered by Department of Mechanical Engineering _____
during 01-Sep-20 to 15-October 2021 _____

Head of the Department



Dean
Faculty of Engineering & Technology
Invertis University
Bareilly - 247123, UP

Course Coordinator



Registrar
Invertis University
Bareilly

INVERTIS UNIVERSITY


CERTIFICATE OF VALUE ADDED COURSE

This Certificate is awarded to Mr./Ms. Syed Norman
of Program B.Tech (ME) _____ Year/Semester Fourth Year
for successfully completing a value added course _____

_____ Days _____
offered by Department of Mechanical Engineering _____
during 01 September to 15 October 2021 _____

Head of the Department

Course Coordinator


Dean
Faculty of Engineering & Technology
Invertis University
Bareilly-243123, UP


Registrar
Invertis University
Bareilly

INVERTIS UNIVERSITY

CERTIFICATE OF VALUE ADDED COURSE

This Certificate is awarded to Mr./Ms. Vishwa Deep Verma
of Program B.Tech (ME) Year/Semester fourth Year
for successfully completing a value added course _____

_____ Assign _____
offered by Department of Mechanical Engineering _____
during 01 Sept till October 2021 _____

Head of the Department

Course Coordinator


Faculty of Engineering & Technology
Inverts University
Bareilly 231123, UP


registrar
Inverts University
Bareilly

INVERTIS UNIVERSITY


CERTIFICATE OF VALUE ADDED COURSE

This Certificate is awarded to Mr./Ms. Munender Pal Singh
of Program B.Tech CME Year/Semester fourth year
for successfully completing a value added course _____

_____ Arms _____
offered by Department of Mechanical Engineering
during 01 Sept to 15 October 2021

Head of the Department

Course Coordinator


Dean
Faculty of Engineering & Technology
Invertis University


Registrar
Invertis University
Bareilly

Form No. 123, UP

INVERTIS UNIVERSITY


CERTIFICATE OF VALUE ADDED COURSE

This Certificate is awarded to Mr./Ms. Zeehan Faareej
of Program B.Tech CML Year/Semester fourth year
for successfully completing a value added course _____

_____ Ansyls _____
offered by Department of Mechanical Engineering _____
during 01-September to 15-October 2021 _____

Head of the Department

Course Coordinator


Dean
Faculty of Engineering & Technology
Invertis University
Bareilly 243123, UP



INVERTIS UNIVERSITY


CERTIFICATE OF VALUE ADDED COURSE

This Certificate is awarded to Mr./Ms. Subject Singh
of Program R.Tech (M.E) Year/Semester fourth Year
for successfully completing a value added course _____

_____ Days
offered by Department of Mechanical Engineering
during 01-September to 15-October 2021

Head of the Department

Course Coordinator


Dean
Faculty of Engineering & Technology
Invertis University
Barilly - 203123, UP


Invertis University
Barilly