Activity Report on

"ISTE Approved 5 Days STTP on ANSYS Software"

- **Title of the Program** :- 5 Days Short Term Training Program (STTP) on ANSYS Software
- **Organized by** :- Mechanical Engineering Department, MGI-COET, Shegaon
- **Date** :- 18th January 2025 to 22nd January 2025
- **Time:** 11:00 AM to 5:00 PM
- **Approved by** :- Indian Society for Technical Education (ISTE)
- **Venue** :- ETL Lab, MGI-COET, Shegaon, Maharashtra
- **Duration** :- 5 Days
- **Mode** :- Offline
- **Instructor:** 1) Mr. Rahul Chimkar. (Project Engineer)
  2) Mr. Vivekanand S. Taddi (Research Scholar at NIT Nagpur)

Objective of the Training Program

The ISTE-approved STTP on Ansys Software for Mechanical Engineering was conducted with the primary aim of providing participants with advanced knowledge and practical skills in utilizing Ansys software. This program focused on enabling participants to effectively use simulation tools for solving complex engineering problems, enhancing their computational expertise in Finite Element Analysis (FEA), Thermal Analysis, and Dynamic Analysis.

Overview of the Program

The program was designed to introduce the participants to the core concepts of ANSYS software and its applications in mechanical engineering. The sessions were led by experts from both academia and industry, ensuring a rich learning experience. Throughout the five days, participants were exposed to theoretical aspects, followed by practical sessions to work on real-life engineering problems.

Program Details

Inauguration Ceremony

The program was organized under ISTE Student & Faculty Chapter. The speaker of this event was Mr. Rahul P. Chimkar & Mr. V. S. Taddi , from Samarth Solutions, Anchoring of the program was done by Miss. Bhakati Bhise from Mechanical Engineering Department. After that, the Guest welcome and felicitation ceremony take place. A total of 30 students and 09 faculty members participated in the event. The inauguration session set the tone for the training program, emphasizing the importance of simulation tools like Ansys in modern Mechanical Engineering applications.

Circular or Brochure: -

Late Purushottam Hari (Ganesh) Patil Shikshan Sanstha's
Mauli Group of Institution's,
College of Engineering & Technology, Shegaon.
Department of Mechanical Engineering
Session: 2024-2025

Date 20/12/2024

Notice

This is to inform all Mechanical Engineering students that an **ANSYS Software Course** will be conducted from **18th January 2025 to 22nd January 2025**. The course aims to provide practical and theoretical knowledge of ANSYS, a leading simulation software, which is essential for engineering analysis and design.

Details of the Course:

- **Organised by:** ISTE Student Chapter MGI-COET, Shegaon
- **Course Name:** Introduction to Ansys software.
- **Course Duration:** 18th January 2025 to 22nd January 2025
- **Time:** 11:00 AM to 5:00 PM
- **Venue:** Computer Lab
- **Eligibility:** All Mechanical Engineering students are eligible to attend.
- **Mode:** Offline
- **Instructor:** Mr. Rahul Chimkar. Project Engineer.

The course will cover various aspects of ANSYS software including but not limited to:

- Introduction to FEM & Modelling.
- Static analysis of 2D and 3D truss.
- Dynamic analysis of a machine component.
- Structural analysis of a machine component.
- Heat transfer analysis of a machine component.
- Thermal analysis of a machine component.

Interested students are requested to register on or before **15th January 2025**

For registration and further details, please contact:

- **Coordinator:** Prof. A. P. Bawne
- **Email:** amolbawane12991@gmail.com
- **Phone:** 9657443244

We strongly encourage all students to participate in this course to enhance their skills in simulation and analysis.

Prof. A. P. Bawne
ISTE Dept. Coordinator

Prof. R.M. Kshirsagar
Coordinator

Dr. R. B. Ingle
HOD / ISTE Secretary

Head of Department
Mechanical Engineering
Mauli Group of Institution's
College of Engineering & Technology
Shegaon Dist. Buldhana

Dr. C. M. Jadhao
Principal

PRINCIPAL
Mauli Group of Institutions
College of Engineering &
Technology, Shegaon

Session Highlights

Day 1: Introduction to ANSYS and its Applications

- Overview of ANSYS software and its various modules.
- Introduction to the user interface and basic navigation in ANSYS Workbench.
- Discussion on the significance of simulation in engineering design and problem-solving.

Day 2: Structural Analysis in ANSYS

- Explanation of static structural analysis concepts.
- Hands-on session on performing structural analysis using ANSYS.
- Setting up boundary conditions, applying loads, and interpreting results.

Day 3: Thermal Analysis using ANSYS

- Fundamentals of thermal analysis and heat transfer.
- Practical session on solving thermal problems using ANSYS, including conduction, convection, and radiation.
- Analysis of temperature distribution and heat flux.

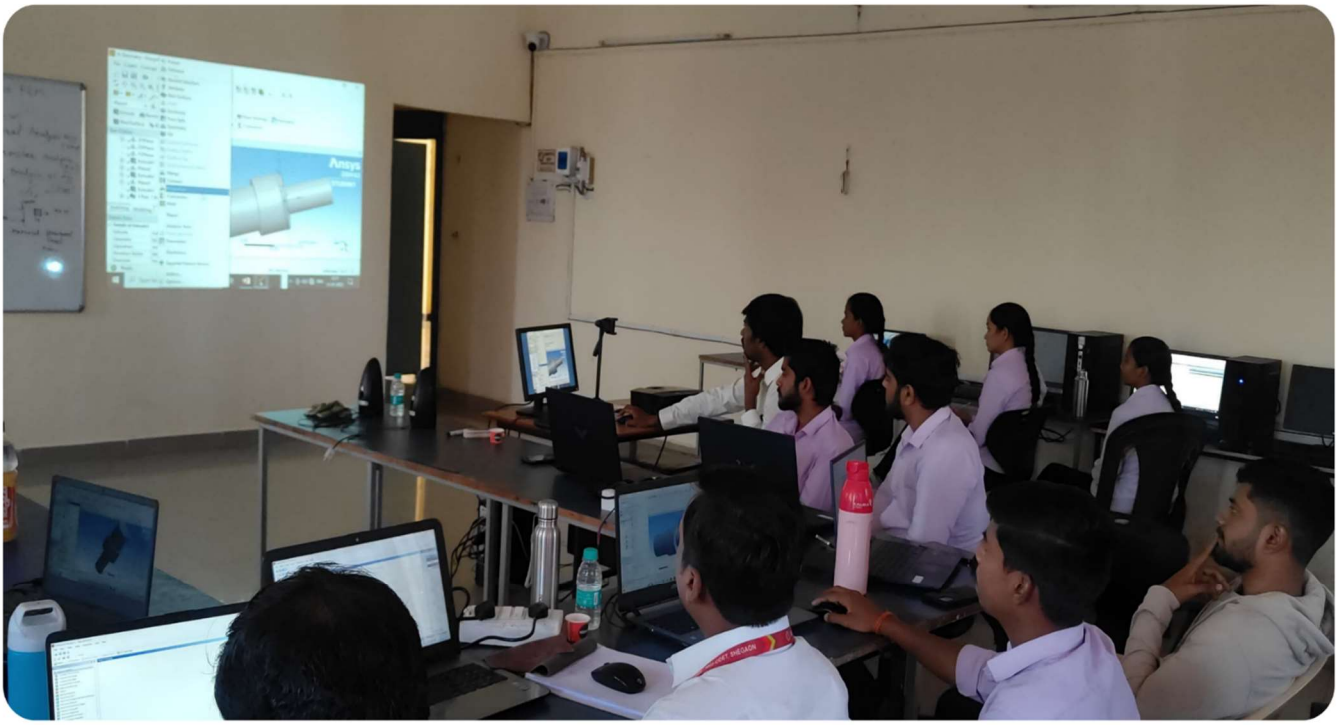
Day 4: Modal Analysis

- A system is mechanically excited to target its modeshapes
- Sensors record the vibration data
- The data is analyzed to determine the system's dynamic properties

Day 5: Advanced Simulation Techniques and Industry Applications

- Discussion on advanced topics such as non-linear analysis, modal analysis, and optimization.
- Real-life case studies where ANSYS was used to solve complex engineering problems in industry.
- Q&A session and conclusion of the training program.

5 Days STTP Highlights




GPS Map Came
Shegaon, Maharashtra, India
Qm72+76x, Khamgaon Rd, Shegaon, Sawarna,
Maharashtra 444203, India
Lat 20.763005° Long 76.650025°
21/01/25 03:03 PM GMT +05:30


GPS Map Came
Shegaon, Maharashtra, India
Qm72+76x, Khamgaon Rd, Shegaon, Sawarna,
Maharashtra 444203, India
Lat 20.762432° Long 76.649933°
22/01/25 11:18 AM GMT +05:30

Valedictory Function

The program ended with the valedictory function which was graced with the presence of Dr. C. M. Jadhao, Principal, MGI-COET, Dr. M. A. Baig, Vice Principal, Dr. R. B. Ingle, HOD (Mech Engg Dept).

Dr. C. M. Jadhao, Principal, MGI-COET, in his valedictory talk, started with congratulating coordinators and organizing committee for the successful conduct of STTP. He also explained the importance of Ansys Software. He emphasized the need of such programs as they provide a unique opportunity to explore the boundaries of what is currently known in various domains of Engineering and Technology, through a range of research experience. He also mentioned that such programs provide a common platform to discuss and learn new methodology to upgrade ourselves.

Felicitation of Hon'ble Mr. V. S. Taddi by Hon'ble Principal Sir

Hon'ble Principal Sir shared his valuable thoughts

Valedictory Function Highlights

Certificate Distribution Ceremony

Late Purushottam Hari (Ganesh) Patil Shikshan Sanstha's

Mauli Group of Institution's,

College of Engineering and Technology, Shegaon

AICTE Approved, Affiliated to Sant Gadge Baba Amravati University, Amravati, ISO 9001:2015 Certified

Session 2024-25

Department of Mechanical Engineering

Ansys Software Course Attendance

Date: 15/01/2025

Sr. No	Class	Name of Student	Sign
1	3M	Vaishnavi S. Kale.	V.S.kale.
2	3M	Roshan. R. Potalchare	Potalchare
03	3M	Shrish Bholankar	Bholankar
04	3M	Pragwal Tarale	Tarale
05	3M	Nilesh Thakare	Thakare
06	3M	Ritesh. V. Parsaiye.	Parsaiye.
07	3M	Gayatri G. shejole.	Shejole.
08	3M	Yash. S. Rawale.	Rawale
09	3M	Arati G Ingale	Ingale.
10	3M	Gayatri. S. chopade	G.Shepade
11	3M	Satyam. B. Deshmukh	Deshmukh
12	3M	Nakul. G. Nimkale	Nimkale.
13	3M	Om. Borde	Omborde.
14	3M	Umesh R Sonone	Sonone
15	3M	Aniket M. Tikar	Antikar
16	3M	Bhavesh. R. Jamode	BRJamod
17	3M	Kartik D. Mankar	Mankar
18	3M	Rajirao B. Navalkar	B. B. Navalkar

Coordinator

HOD

Head of Department

Mechanical Engineering

Mauli Group of Institution's

College of Engineering & Technology

Shegaon Dist. Buldhana

Late Purushottam Hari (Ganesh) Patil Shikshan Sanstha's

Mauli Group of Institution's,

College of Engineering and Technology, Shegaon

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Session 2024-25

Department of Mechanical Engineering

Ansys Software Course Attendance

Date: 18/01/2025

Sr. No	Class	Name of Student	Sign
1	4M	Bhagwat A Thorokar	
2	4M	Ritesh K gwandre	
3	BM	Amit M. Jadhav	
4	4M	Astha A. Mandhe	
5	4M	Nisha A. Bhende	
6	4M	Aniket A Mane	
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Coordinator

HOD

Head of Department

Mechanical Engineering

Mauli Group of Institution's

College of Engineering & Technology

Shegaon Dist. Buldhana

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Session 2024-25

Department of Mechanical Engineering

Ansys Software Course Attendance

Date: 18/01/2025

Sr. No	Name of Student	Sign
1	Mr. Amol P. Bawne	
2	Prof. C. V. Bhagat	
3	Prof. V. M. Gawali	
4	Prof. R. M. Kshirsagar	
5	Prof S. S Thakur	
6	Prof. D. B. Vaitkar	
7	Prof. S. S. Bhadang	
8.	Prof. Y. P. Tidke	
9	Dr. R. B. Ingle	
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Coordinator

HOD

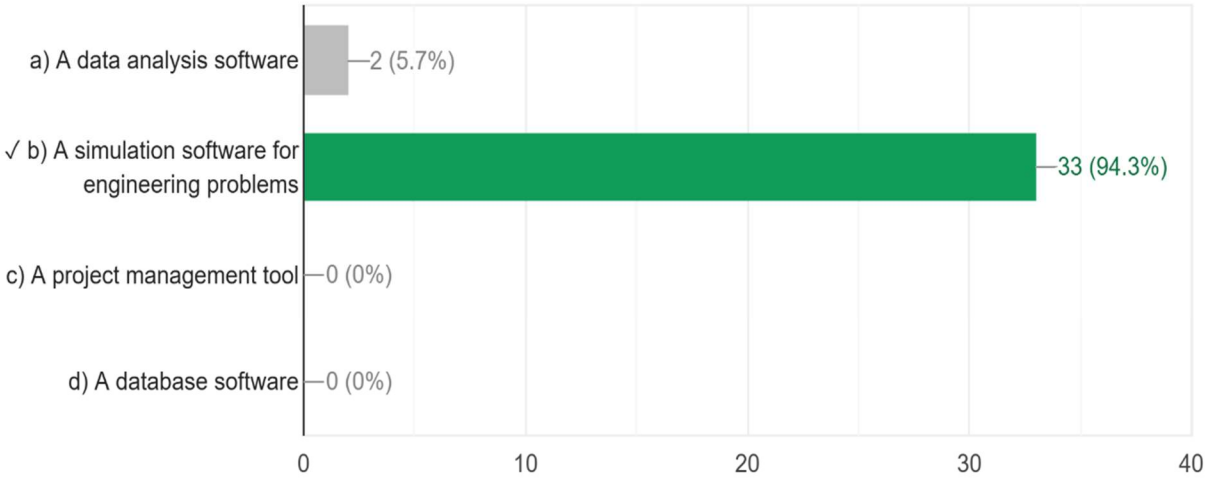
Head of Department

Mechanical Engineering
Mauli Group of Institution's
College of Engineering & Technology
Shegaon Dist. Buldhana

Assessment of Participant at the end of STTP

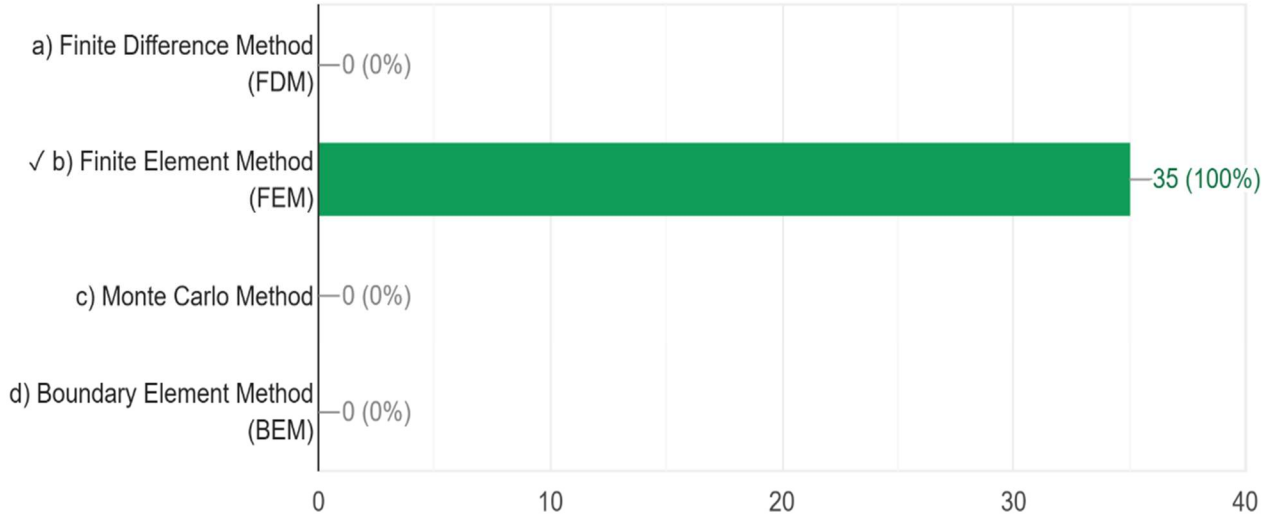
1. What is ANSYS?

33 / 35 correct responses



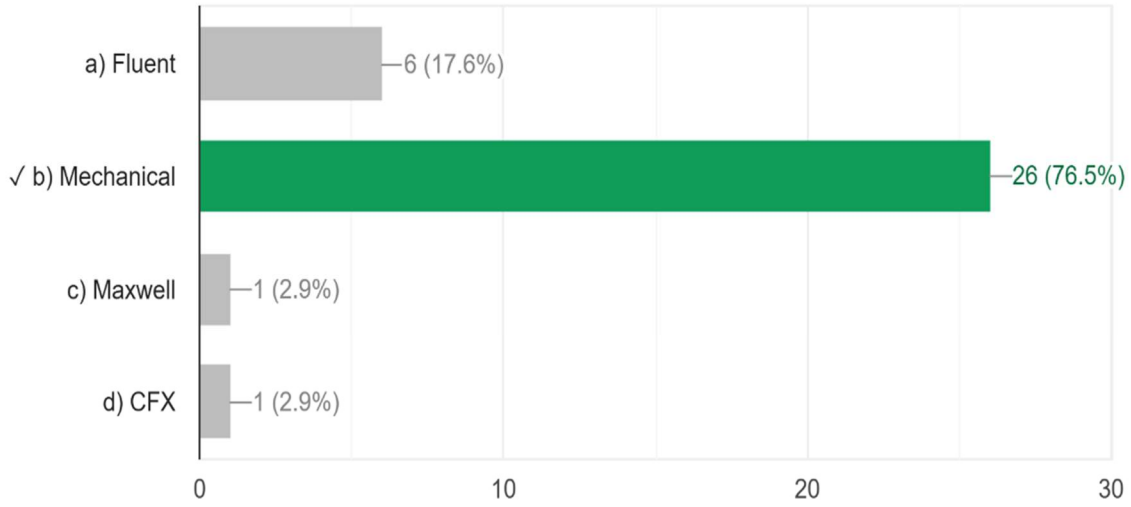
2. Which method does ANSYS primarily use to solve problems?

35 / 35 correct responses



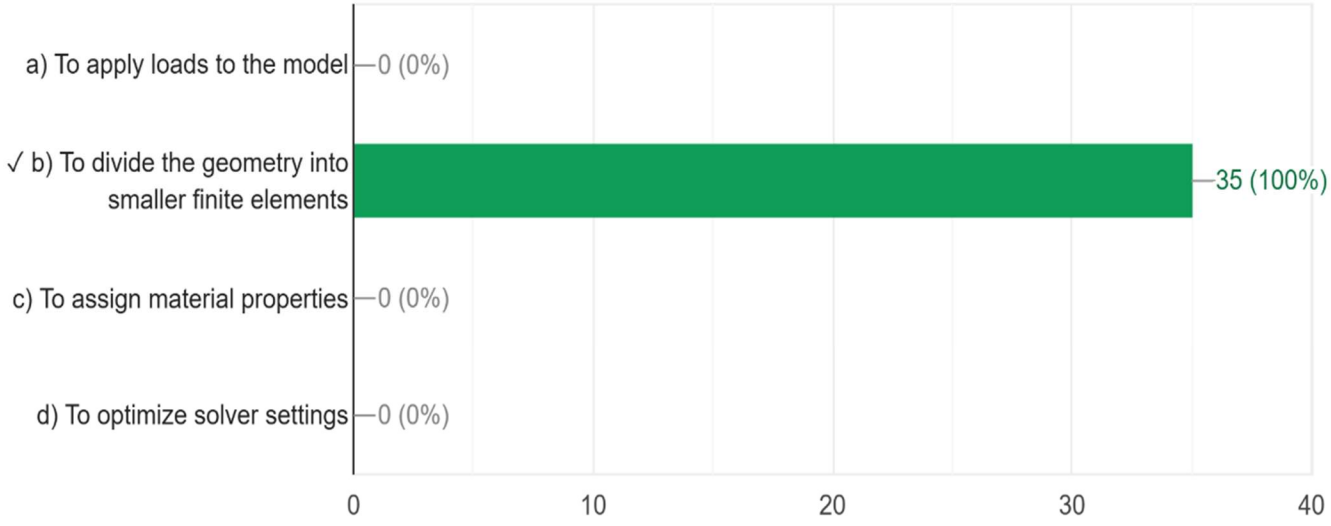
3. Which module in ANSYS is used for thermal analysis?

26 / 34 correct responses



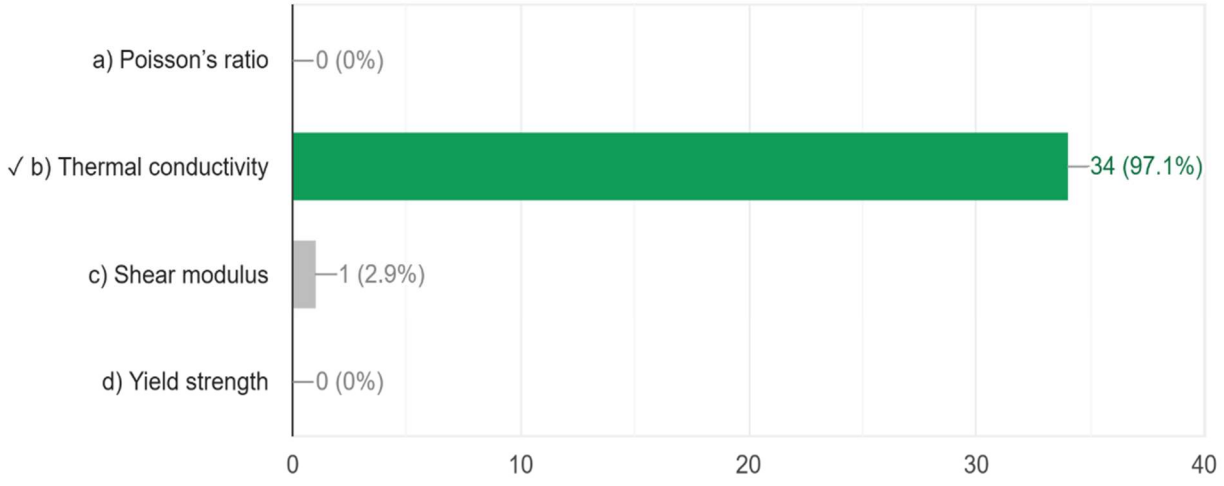
4. What is the purpose of meshing in ANSYS?

35 / 35 correct responses



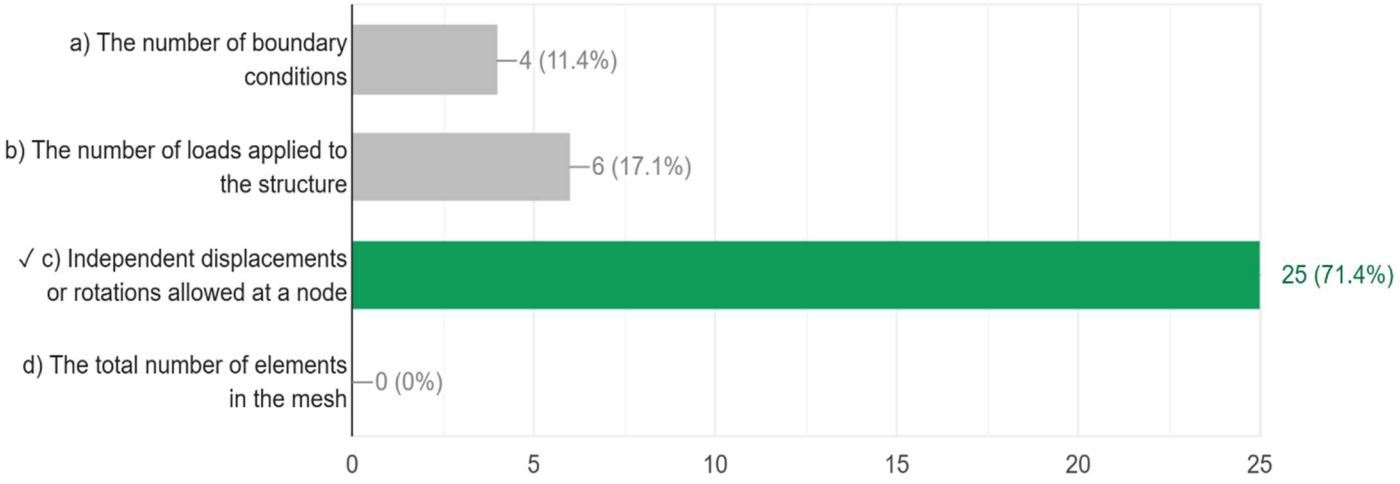
5. What is a key property required for thermal analysis?

34 / 35 correct responses



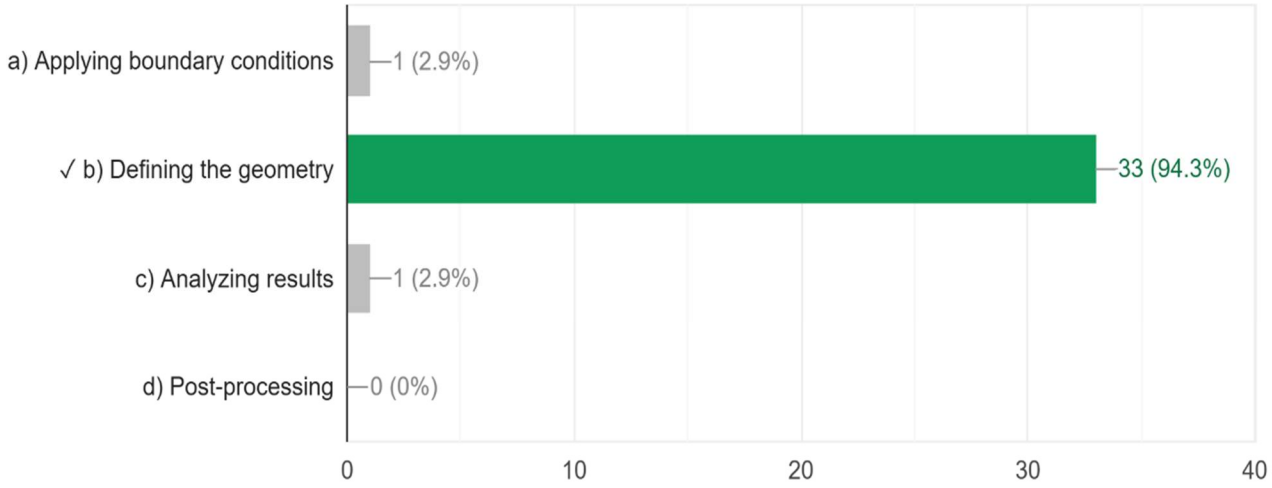
6. What does the term "degrees of freedom" refer to in ANSYS simulations?

25 / 35 correct responses



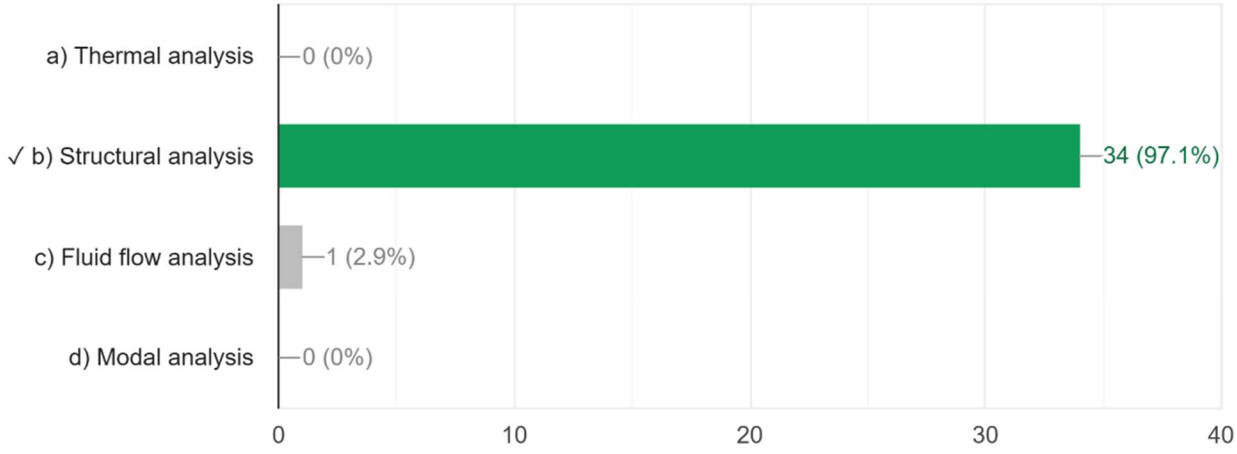
7. What is the first step in an ANSYS simulation?

33 / 35 correct responses



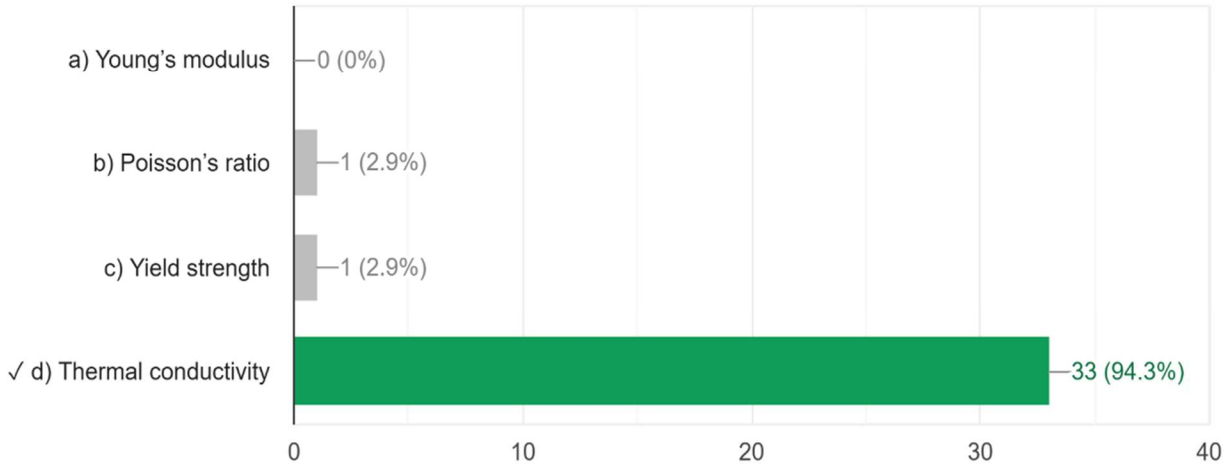
8. What type of analysis is performed to determine deformation and stress under loads?

34 / 35 correct responses



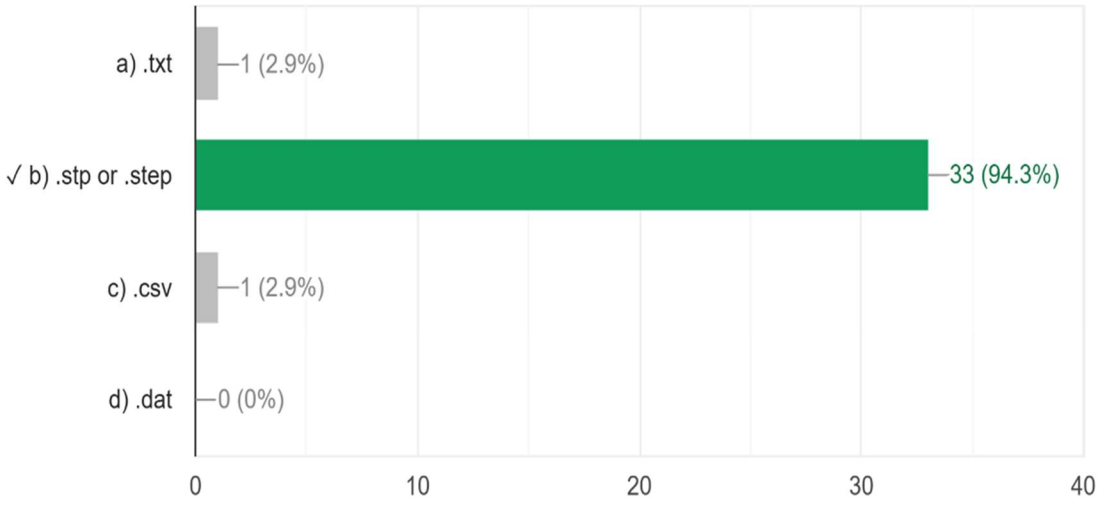
9. What property is NOT required for structural analysis in ANSYS?

33 / 35 correct responses



10. Which file format is commonly used to import CAD geometry into ANSYS Workbench?

33 / 35 correct responses

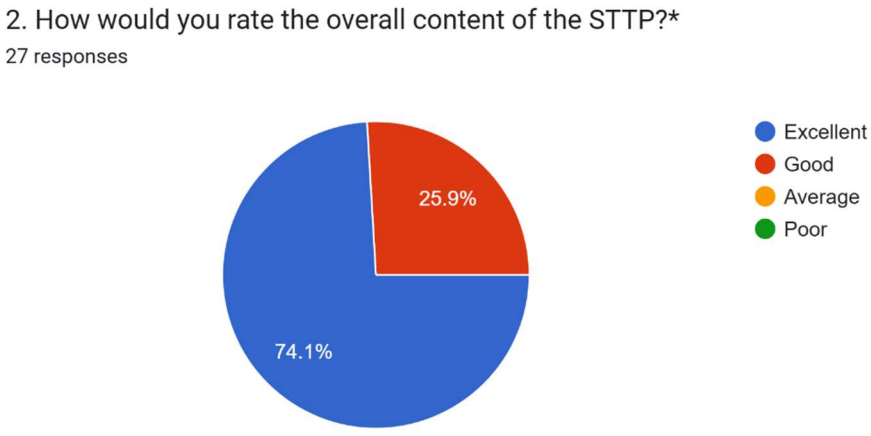


Feedback and Suggestions

Participants expressed high satisfaction with the quality of the sessions and the depth of content covered. They appreciated the practical sessions, which allowed them to apply the theoretical knowledge gained during the lectures. The feedback indicated that the training program was a valuable learning experience and would be beneficial for future research and teaching initiatives.

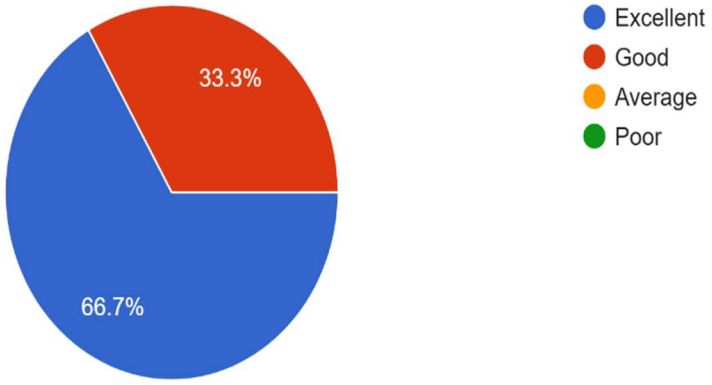
Suggestions for future programs included:

- Providing more time for practical hands-on work.
- Expanding the scope to cover more advanced topics like simulation optimization.



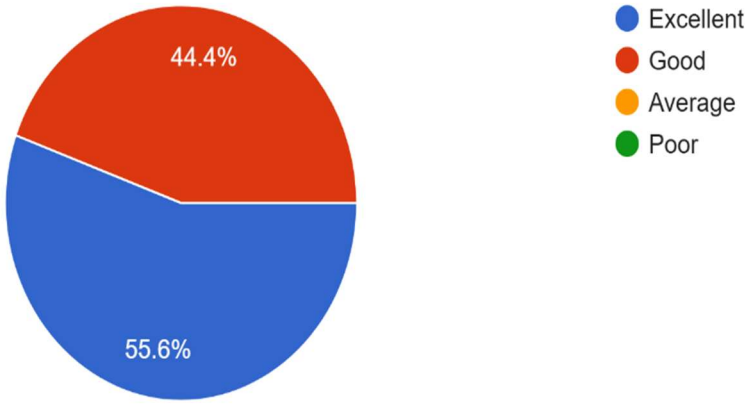
3. How relevant was the content to your professional development?

27 responses

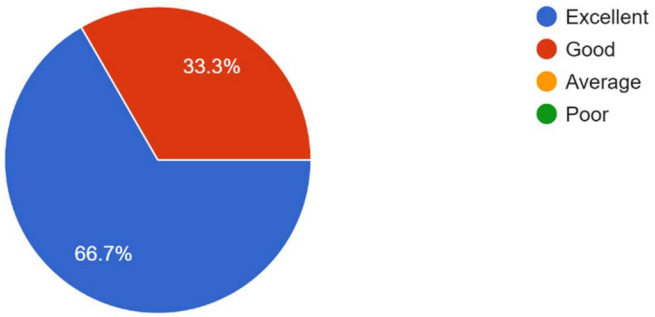


4. How engaging and clear were the instructors in their explanations?

27 responses



5. Overall, how satisfied are you with the STTP?
27 responses



6. Do you have any suggestions for improving the training?14 responses

No
Everything is good for the session 😊
Everything is good no need to improve
Training session is very well
Good
Everything is good .
Respected sir has teaching is in simple concept and good explanation
It's good and got solved many doubt about
Easy to understand

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CERTIFICATE

This is to certify that

Mr. / Ms. / Prof. Shrish A. Bholankar

has participated in the ISTE approved One-Week Short Term Training Program on

"ANSYS Software"

18 January 2025 to 22 January 2025

ISTE/Proceeding/STTP/FDP-SF-MAH172/2024-25

Mr. R. P. Chimkar
Trainer, Samarth Solutions

Dr. R. B. Ingle
ISTE Secretary & HOD (MECH)

Dr. C. M. Jadhao
Principal

Certificate no: Mech/courses/2024-25/

Issued on: 22/01/2025

Certificate Distributed to the Participant

Program Outcomes

By the end of the 5-day program, participants gained:

- **Improved Understanding:** Participants gained a comprehensive understanding of Ansys software and its applications in mechanical engineering.
- **Enhanced Practical Skills:** They developed hands-on expertise in conducting Finite Element Analysis (FEA), thermal analysis, and modal analysis using Ansys.
- **Real-World Applications:** Exposure to real-world case studies provided insights into solving practical engineering problems using simulation tools.
- **Industry-Academia Collaboration:** The program strengthened links between industry and academia through interactions with experts and professionals.
- **Problem-Solving Techniques:** Participants acquired advanced techniques for addressing complex engineering challenges through computational simulations.

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