PSG Institute of Technology and Applied Research

Department of Mechanical Engineering

Event title	**3 Days VAC On "Geometric Dimensioning and Tolerancing"**
Event Category	Value Added Course
Date and Duration	12.8.24 to 14.8.24 – Three days
Department	Mechanical
Co-ordinator	Dr S Nanthakumar, Associate Professor, Mechanical Department
Resource Person	Dr R Ramesh, Professor & Head, Mechanical Department
No. of Participants Registered	32
No. of participants Attended	32

1. The three days course on GD&T begun with the welcome address by Dr S Nanthakumar, ASP, Department of Mechanical Engineering.He welcomed the students and outlined the importance of the such VAC for current industries.
2. Dr R Ramesh, Professor and Head, Department of Mechanical Engineering started the session (Day 1- 12.8.24) with a basic introduction to GD&T.
3. He mentioned that GD&T is a crucial factor for modern industrial manufacturing, serving as a universal language for engineers and designers to communicate design intent with clarity and precision.
4. This approach ensures parts are manufactured to function as intended while optimizing production processes and reducing costs.
5. In Afternoon session students were taken to metrology lab and practical demonstration of GD&T measurement were carried out. Then students were asked to take 10 hours online course on GD&T through IMTMA portal.
6. Day 2 (13.8.24) started with a recap of previous session. Unlike traditional dimensioning, which specifies exact measurements, GD&T allows for more detailed control over part tolerances and relationships between features.
7. GD&T allows for more detailed control over part tolerances and relationships between features. This approach ensures parts are manufactured to function as intended while optimizing production processes and reducing costs. Afternoon session students were asked to take the online IMTMA online course in CAD Lab.
8. Day 3 (14.8.24) students were given case studies and real-world examples illustrating how GD&T improves product quality, enhances interchangeability of parts, and facilitates assembly processes.
9. By employing GD&T principles, companies achieve tighter control over manufacturing processes, reduce scrap and rework, and enhance overall product reliability and performance.

10. In afternoon students were exposed to GD&T measurements using CMM. Real time industrial productswere measured and GD&T parapmeters were demonstrated.

Event Photo 1

Course complete certificate