

Certified training program

SkillBridge: Mechanical Engineers

A Joint Mission by
Dimex Green Energy
&
Bhautik 3D Innovations

Under guidance from IIT Tirupati & BITS Pilani



www.DimexEnergy.com



www.Bhautik3d.com

About Dimex Green Energy

- Dimex Green Energy is working on Building a Sustainable Future with Green Energy.
- It is working on many turnkey projects in Green energy sector and is also actively pursuing ways to skill up India's youth for the transition to emerging technologies.

About Bhautik3D Innovations

- Bhautik 3D Innovations is an India-based engineering company specializing in sustainable mobility, CAD/CAE services and product development
- We intend to bridge the skill gap by providing high-quality, hands-on industry relevant training which creates industry ready graduates



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Why train with us?

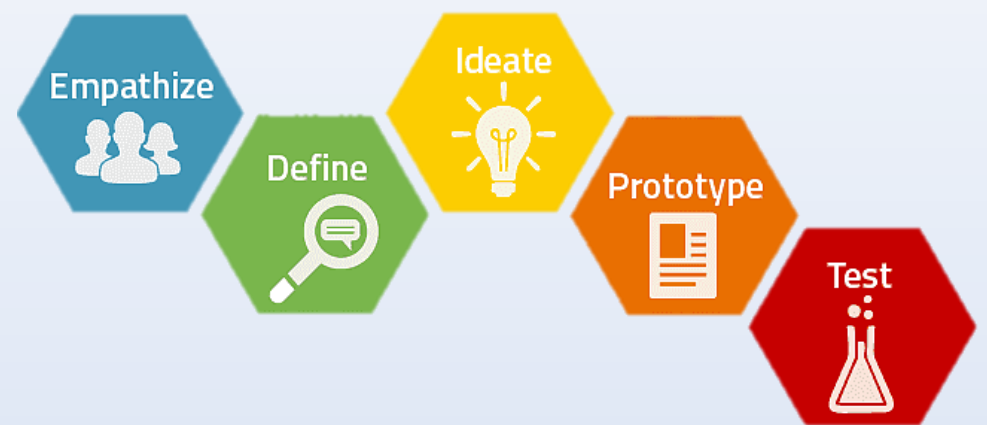


- Industry relevant training which makes you industry ready
- Not a typical classroom course for just another certificate.
- We train by working in small batches and live projects
- Application oriented learning
- Trainings conducted by industry experts with practical knowledge
- Hands on training by doing live projects
- Close mentoring by industry veterans
- We also provide placement assistance so that you can gain relevant experience

Training Programs

Design

- Design thinking
- Optimal way from Design to Reality
- Design Reconstruction
- Design for Six Sigma (DFSS)



Soft Skills

- Story Telling for Engineers
- Presentation skills
- Communication skills
- Critical Thinking
- Problem Solving
- Teamwork and Collaboration
- Business Mindset
- Leadership



Office Skills

- Excel - Advance skills
- PowerPoint - Sharing your thoughts
- Word - Technical Paper writing
- MS – Project – Project Management Tool
- Ethical use of Copilot / ChatGPT / Gemini



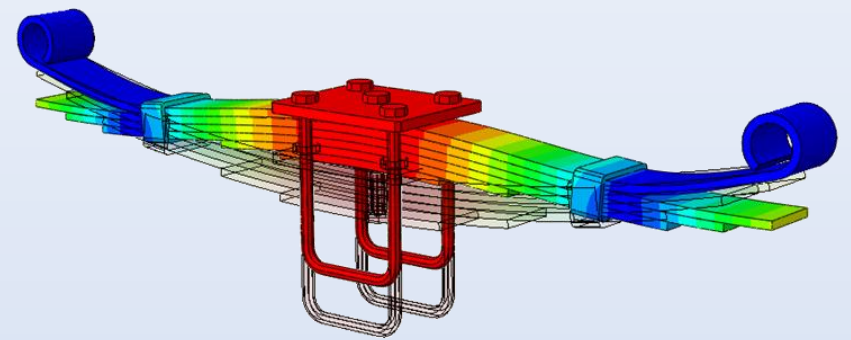
Training Programs

Simulations

- Leveraging Finite Element Analysis for excellence in Design
- Best Practices for Finite Element Modeling
- Post-processing: Understanding your simulated results

Advanced Simulation topics

- Material modeling Best practices
- Fundamentals of Metal Fatigue
- Structural Optimization
- Simulating Highly Non-linear models



Testing

- Design validation through prototyping
- Optimal Strain gauging and DAQ Setup
- Test Data Validation
- Lifecycle assessment



FEA/CFD Tools

- Altair Hypermesh
- ANSA
- Altair Optistruct
- Abaqus
- Ansys
- Nastran
- Ls-Dyna
- Fe-Safe
- nCode
- True-Load
- I-Sight
- Ansys Fluent
- OpenFOAM
- AcuSolve



CAD Tools

- Solidworks
- Catia

Training Programs

Towards Green Energy

- Green Energy: An Indian & Global Perspective
- Technical & Economical Challenges
- Introduction to Clean mobility
- Enabling Energy Transition in the Medium & Heavy Commercial Vehicle Segment

Towards Hydrogen

- Introduction to Green Hydrogen
- Overview on Production, storage & Use
- H2 Production technologies
- Storage, regulations and safety
- Introduction to Fuel Cells
- Introduction to H2 IC Engines
- Distribution, Grid infrastructure & Micro grid
- Case studies: Micro grid
- Hydrogen Applications and Future Prospects



Some of your mentors

- **Pavan Kumar**

Pavan brings over 20 years of industry experience, having been an integral member of R&D teams at several automotive giants, both in India and abroad. He is currently working on green energy-driven vehicles and drones.

- **Praveen Saraswat**

Praveen holds both a BTech and an MBA from top institutions in India, and he brings 20 years of experience to the table. Throughout his career, he has worked closely with the CEOs of many prominent Indian corporations.

- **Dr. Chakradhar Iyyunni**

Dr. Chakradhar brings over 35 years of extensive experience in both industry and academia. He is a distinguished author of multiple books and research papers and has played a pivotal role in establishing several institutes. Currently, Dr. Chakradhar is dedicated to advancing hydrogen technologies to combat climate change and to enhancing the skills of India's workforce.

- **Arti Ahluwalia**

Arti is the United Nations Representative- Coordinator for the Commons cluster NGO, she has worked across 50 of Fortune 500 companies and with various Govt agencies. She has championed re-engineering concepts for functional, organizational and institutional overhauls.



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