



Yavatmal, Maharashtra, India
C47p+44x, Pimpalgaon, Yavatmal, Maharashtra
445001, India
Lat 20.412596° Long 78.13533°
Monday, 13/04/2026 11:51 AM GMT +05:30



Yavatmal, Maharashtra, India
C47p+44x, Pimpalgaon, Yavatmal, Maharashtra
445001, India
Lat 20.412596° Long 78.13533°
Monday, 13/04/2026 11:51 AM GMT +05:30



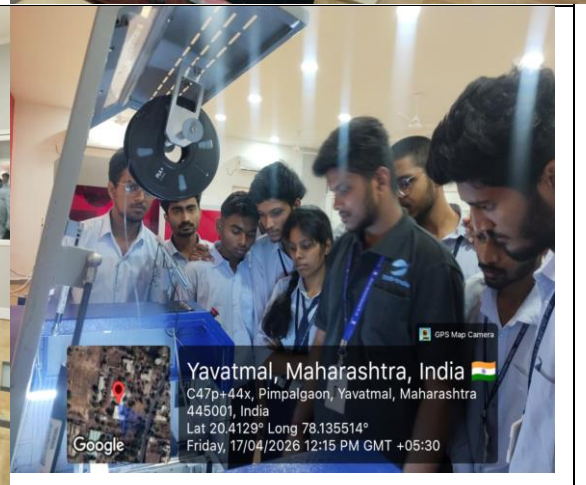
Yavatmal, Maharashtra, India
C47p+44x, Pimpalgaon, Yavatmal, Maharashtra
445001, India
Lat 20.412595° Long 78.135319°
Thursday, 23/04/2026 05:07 PM GMT +05:30



Yavatmal, Maharashtra, India
C47p+44x, Pimpalgaon, Yavatmal, Maharashtra
445001, India
Lat 20.41262° Long 78.13533°
Wednesday, 15/04/2026 12:40 PM GMT +05:30

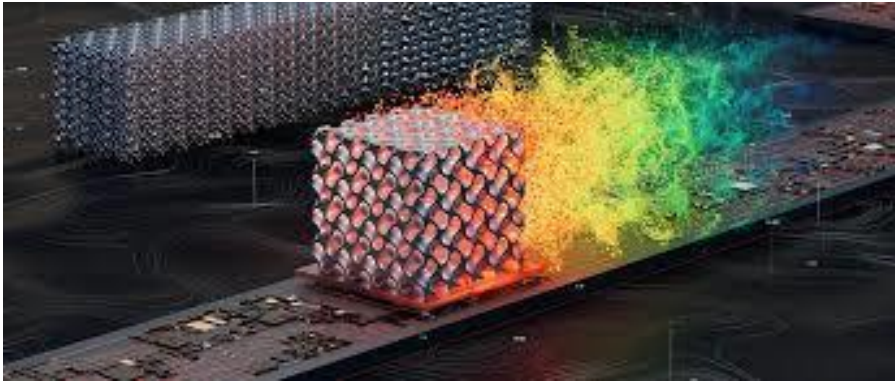


Yavatmal, Maharashtra, India
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445001, India
Lat 20.412618° Long 78.135383°
Friday, 17/04/2026 01:07 PM GMT +05:30



Yavatmal, Maharashtra, India
C47p+44x, Pimpalgaon, Yavatmal, Maharashtra
445001, India
Lat 20.4129° Long 78.135514°
Friday, 17/04/2026 12:15 PM GMT +05:30

CENTER OF EXCELLENCE



Design and Simulation Lab



Advanced Manufacturing Lab



Principal Investigator: Dr. S. R. Kewate

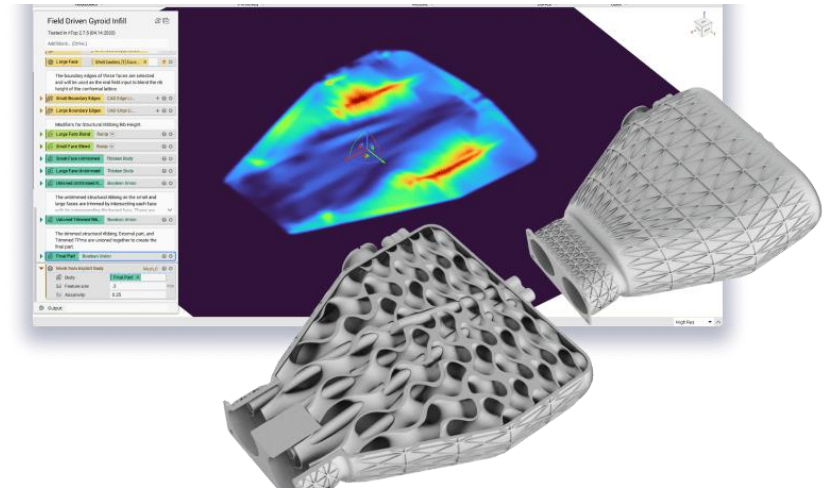


Co- Principal Investigator: Dr. S. R. Shiledar

Design and Simulation Lab

Solutions Available:-

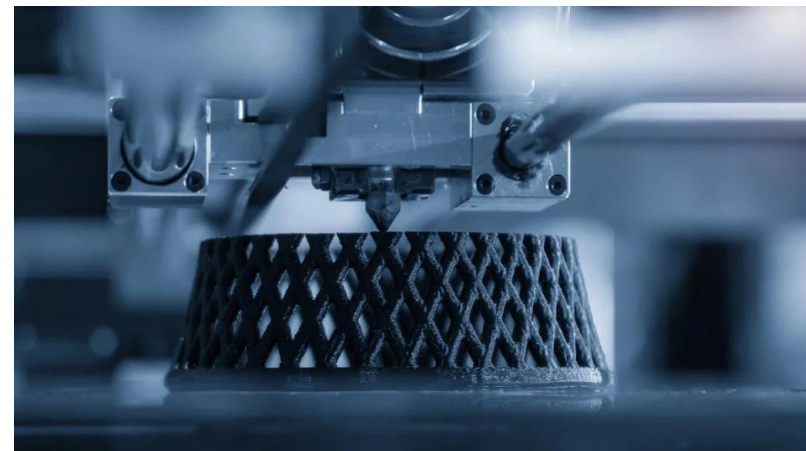
- PTC Creo Parametric
- Autodesk Fusion 360
- Autodesk Netfabb
- Altair Hyperworks



Advanced Manufacturing Lab

Technology / Equipment Available:-

- FFF 3D Printer - Hydra 16 AS
- FDM 3D Printer - Hydra 21
- SLA 3D Printer - Phrozen Sonic Mega 8K V2
- DLP 3D Printer - Phrozen Sonic XL 4K





Government College of Engineering **Honeywell** Yavatmal

Design and Simulation Lab

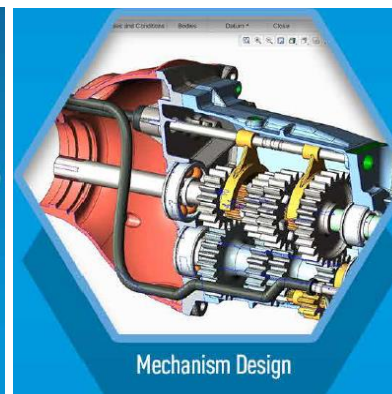
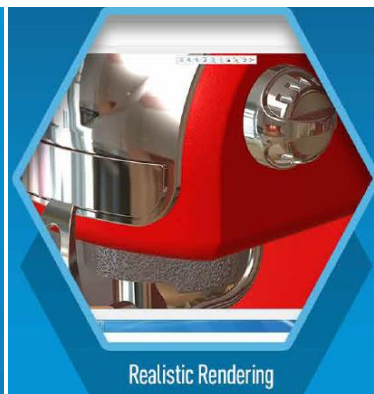
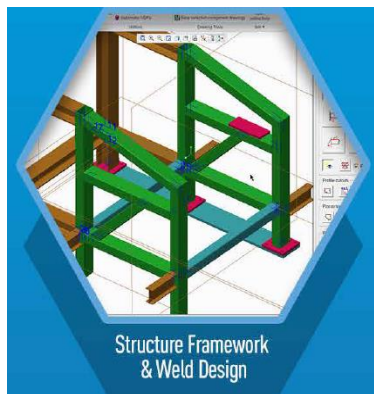
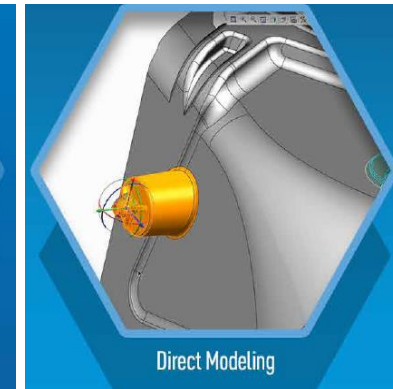
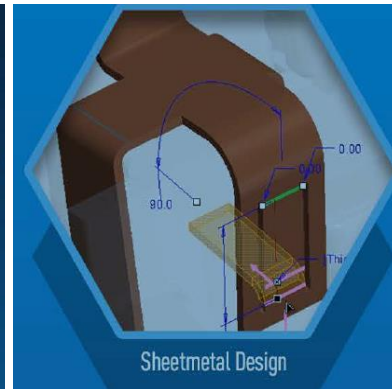
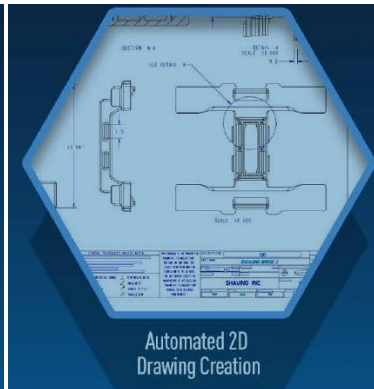
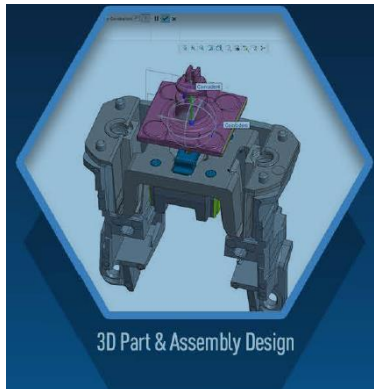
PTC Creo Parametric



Design and Simulation Lab

PTC Creo Parametric

Capabilities:-



Design and Simulation Lab

PTC Creo Parametric

Capabilities:-

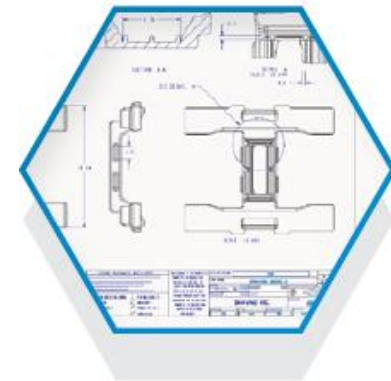
3D Part & Assembly Design

- Create precise geometry, regardless of model complexity
- Quickly build robust engineering features such as rounds, chamfers, holes, and more
- Create design variants using family tables
- Smarter, faster assembly modeling performance
- Static and dynamic interference detection



Automated 2D Drawing Creation & Update

- Create 2D and 3D drawings according to international standards, including ASME, ISO and JIS
- Automate the creation of drawings with templates
- Automatically create associative bill of materials associative bill of materials (BOM) with balloon notes



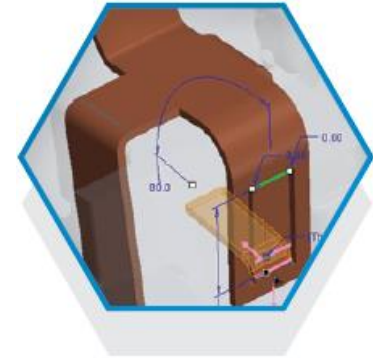
Design and Simulation Lab

PTC Creo Parametric

Capabilities:-

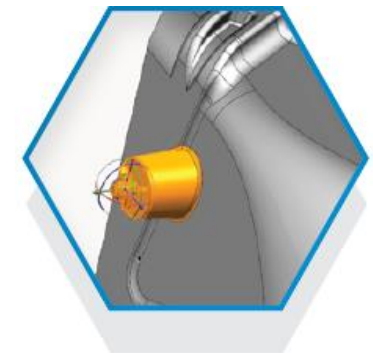
Sheet Metal Design

- Easily create walls, bends, punches walls, bends, punches, flanges, forms, and reliefs using the streamlined user interface
- Automatically generate flat patterns from 3D geometry
- Dynamically preview formed and flattened sheetmetal designs simultaneously
- Easily convert solid parts to sheetmetal
- Simply define sheetmetal design parameters, e.g. bend allowances



Direct Modeling (Flexible Modeling)

- Make changes to PTC Creo data regardless of design intent
- Modify non-PTC Creo data regardless of origin (Solidworks, STEP, etc...)
- Recognize rounds, chamfers, patterns and symmetry on imported geometry
- Create or recreate design intent and record edits as features



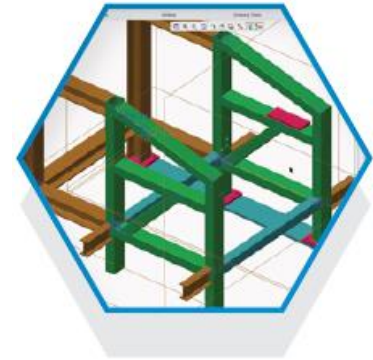
Design and Simulation Lab

PTC Creo Parametric

Capabilities:-

Structural Framework & Weld Design

- Optimized user interface for the structural framework design process
- Extract valuable information from the model, such as mass properties, clearances, interferences, and cost data
- Easily produce complete 2D weld documentation



Realistic Rendering and 3D Animation

- Create accurate, photorealistic images of products quickly, while rendering even the largest assemblies
- Shade with reflections for displaying different material classes such as metal, glass, paint, and plastic
- Create assembly/disassembly animations directly from the modeling environment



Design and Simulation Lab

PTC Creo Parametric

Capabilities:-

Mechanism Design

- Create mechanical connections
- Validate the kinematic motion of your design
- Establish motion envelopes to detect and avoid interferences



Product Data Management (PDM)

- Secures CAD models, their structures and relationships (PTC Creo, AutoCAD, SolidWorks, Inventor, Pro/ENGINEER, PTC Creo Elements/Direct, and PTC Mathcad) improving control and collaboration.
- Powerful searching tools – Quickly and easily search, copy or rename designs improving product information discovery and design reuse





Government College of Engineering Yavatmal **Honeywell**

Design and Simulation Lab

Autodesk Fusion 360



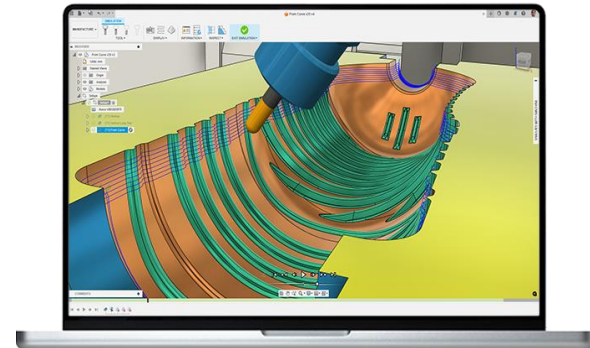
Design and Simulation Lab

Autodesk Fusion 360

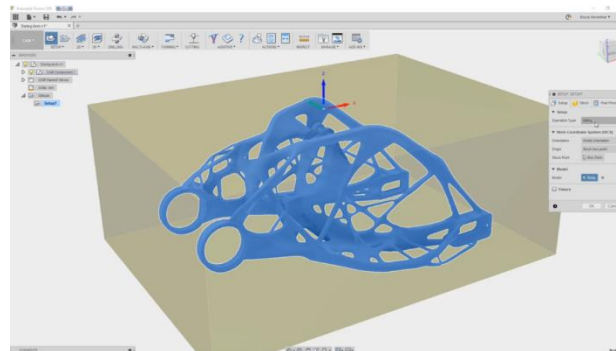
Capabilities:-



Computer Aided Design



Computer Aided Manufacturing



Computer Aided Engineering

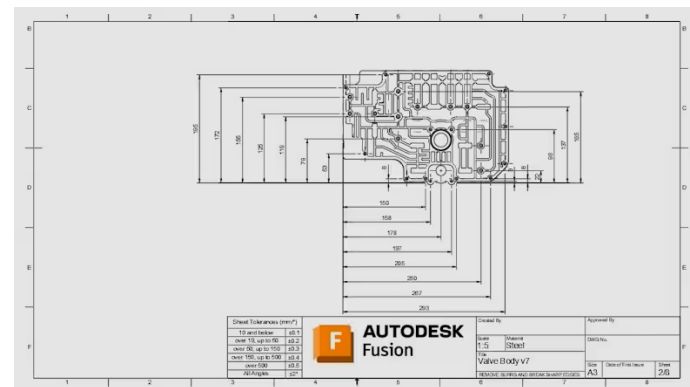
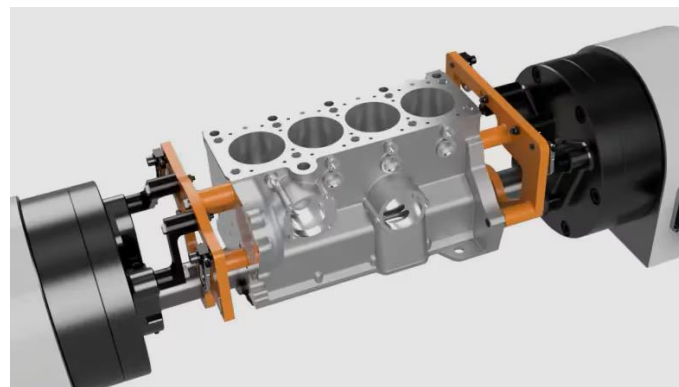
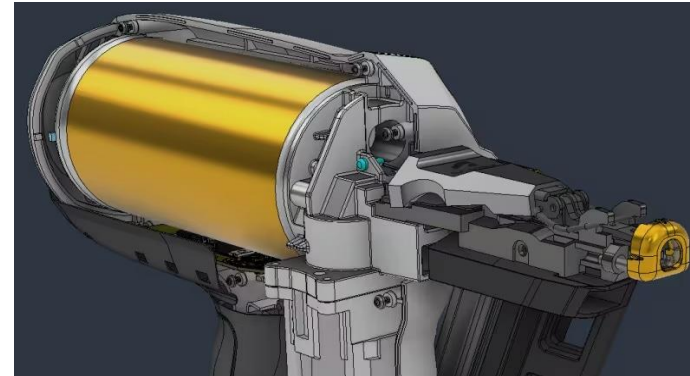
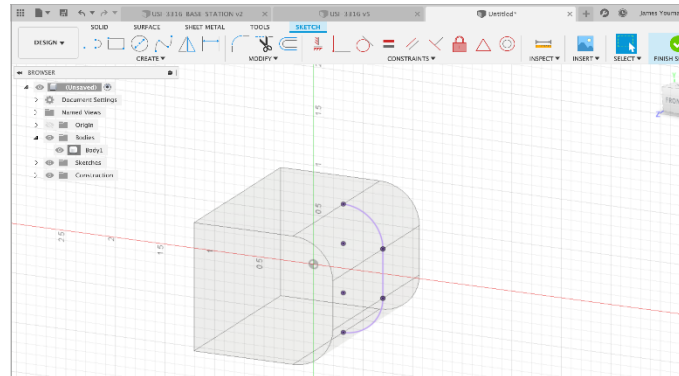
Design and Simulation Lab

Autodesk Fusion 360

Capabilities:-

Computer Aided Design

- Sketching
- Extrusion
- Modification
- Assemblies
- Drawings



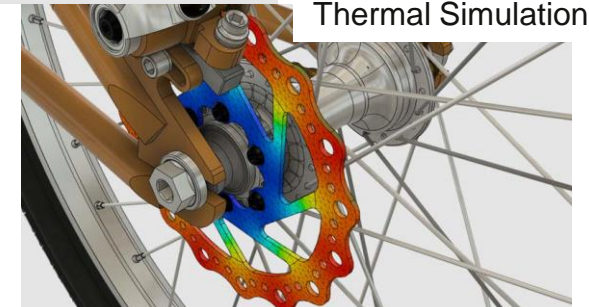
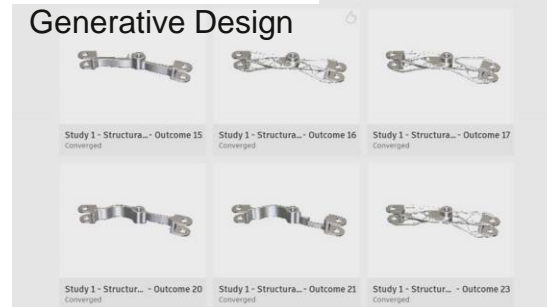
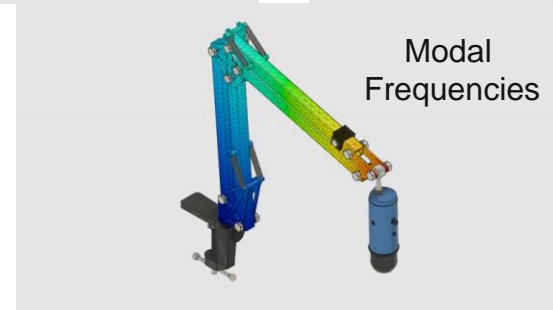
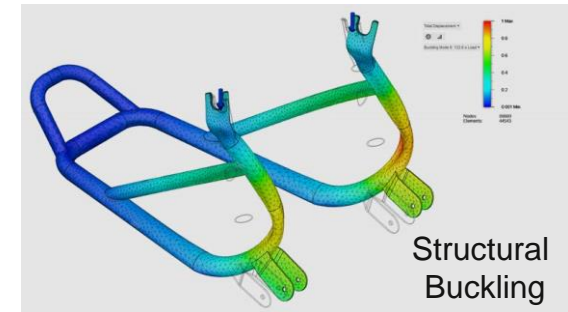
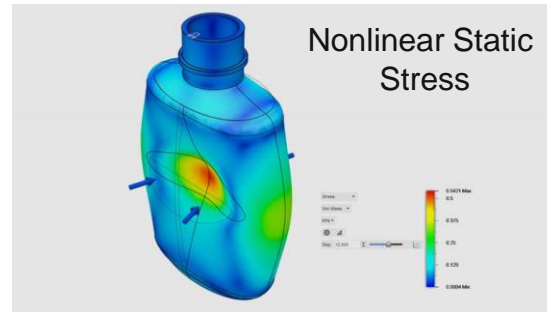
Design and Simulation Lab

Autodesk Fusion 360

Capabilities:-

Computer Aided Engineering

- Digital Simulation
- Static Stress
- Modal frequency
- Thermal and Thermal Stress
- Structural Analysis
- Generative Design
- Buckling
- Non-Linear Stress
- Shape Optimization
- Validation & Documentation

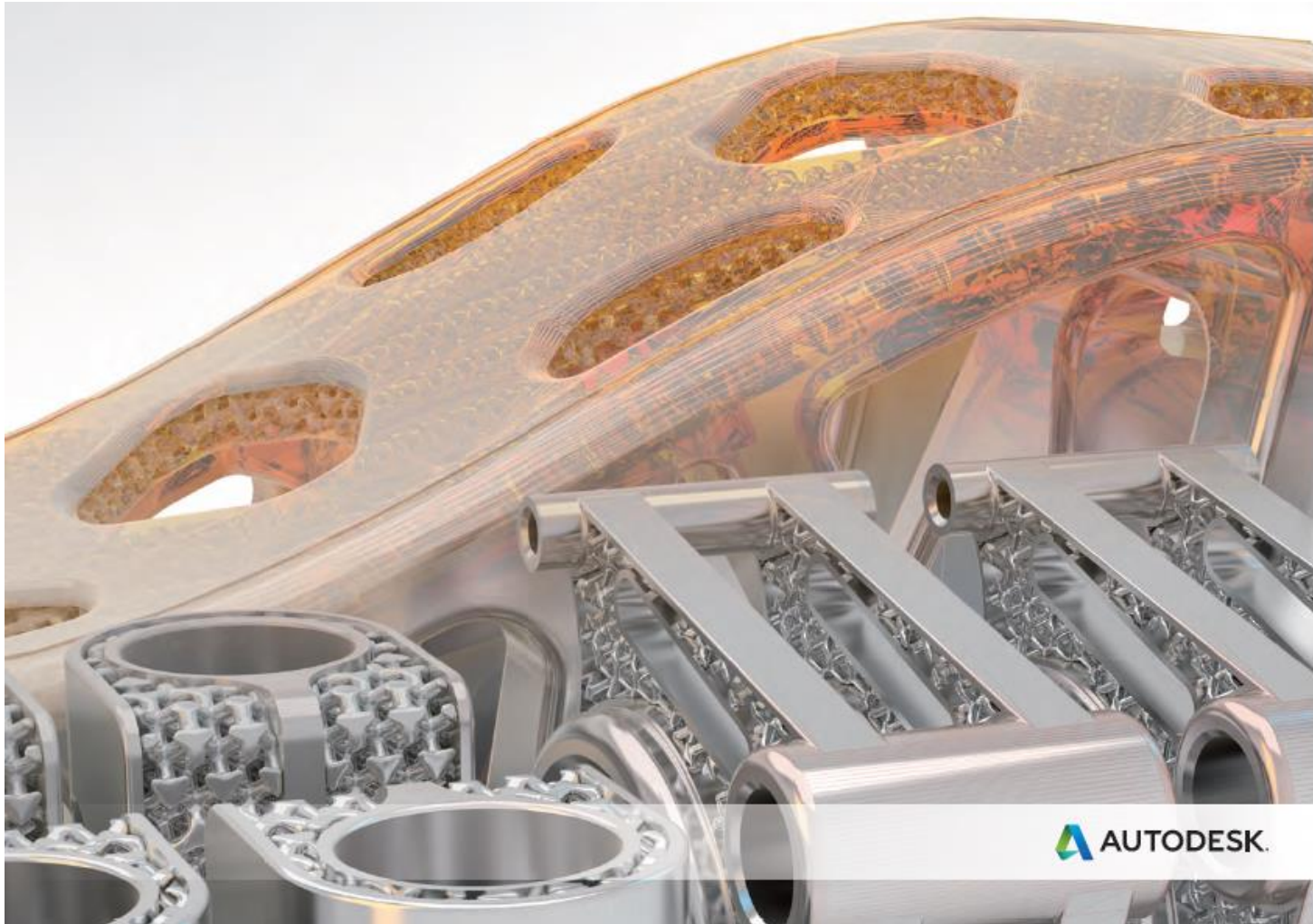




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Design and Simulation Lab

Autodesk Netfabb



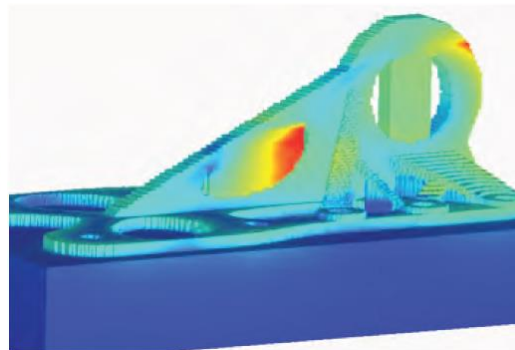
Design and Simulation Lab

Autodesk Netfabb

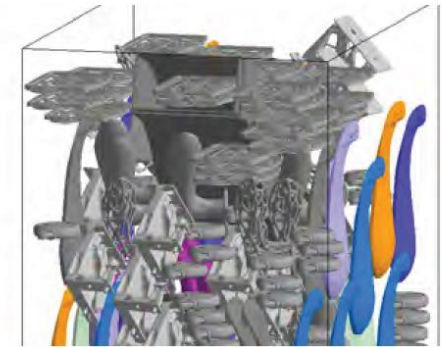
Capabilities:-



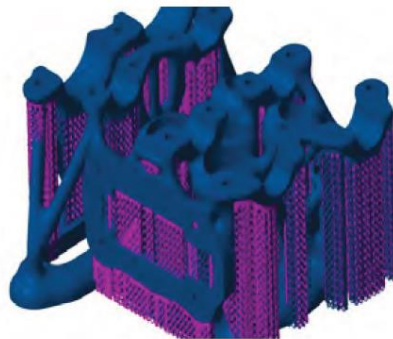
Design for Additive



Process Simulation



Platform Packing



Configurable Build Supports



Dedicated Machine Workspaces

Design and Simulation Lab

Autodesk Netfabb

Capabilities:-

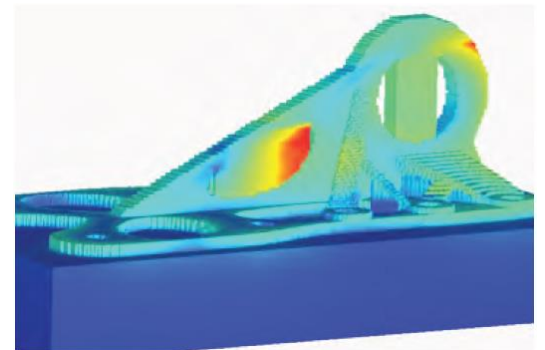
Design for Additive

- Netfabb includes design optimization tools that help you achieve results that are lighter in weight, as stiff or as flexible as needed, with your chosen aesthetics and unique material properties.
- Generate forms optimized for stiffness and weight, based on the loads and constraints of the part.
- Quickly apply complex internal lattice structures and surface skins.
- Use the optimization engine to refine parts automatically and develop libraries of unique structures by combining your unique unit cells.



Process Simulation

- Predict and mitigate various metal laser powder bed fusion build failures before manufacturing in significantly less time than is required to build the part.
- Compensate your models based on simulation results to create a modified pre-form, designed to warp into the desired shape when manufactured, resulting in nearly no net distortion.
- Reduce the need for trial and error, saving time and money.



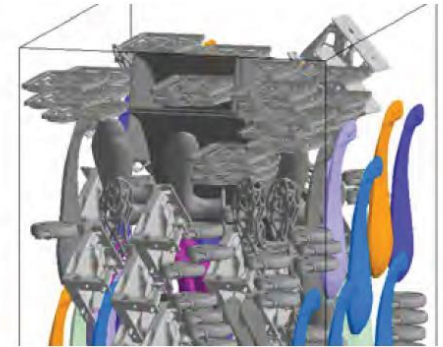
Design and Simulation Lab

Autodesk Netfabb

Capabilities:-

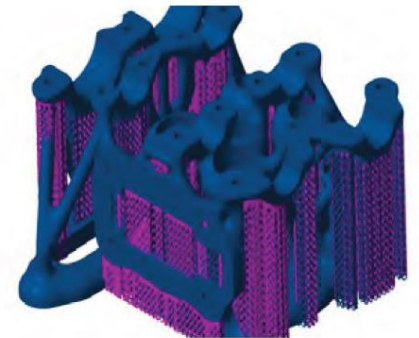
Platform Packing

- Automatic packing is a fast and convenient way to find the most efficient way to pack parts on the build platform.
- Convert your 3D models into layers and all relevant 3D file types before exporting slice files directly to your machines.



Configurable Build Supports

- Identify areas that require support and use manual or fully automatic supports tools to generate support structures.



Design and Simulation Lab

Autodesk Netfabb

Capabilities:-

Dedicated Machine Workspaces

- Streamline your build preparation process with integrated workspaces for every AM process for over 100 machines including EOS, SLM, HP, Farsoon, Formlabs and more.





Government College of Engineering Yavatmal **Honeywell**

Design and Simulation Lab

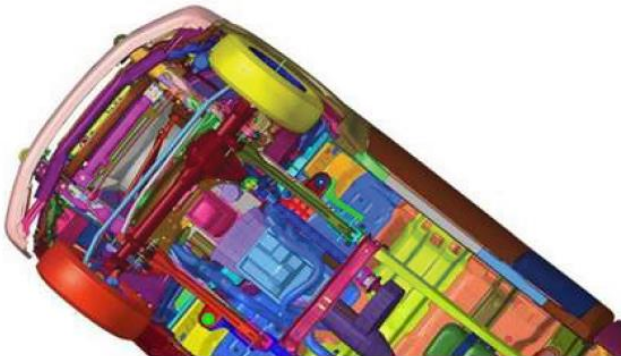
Altair Hyperworks



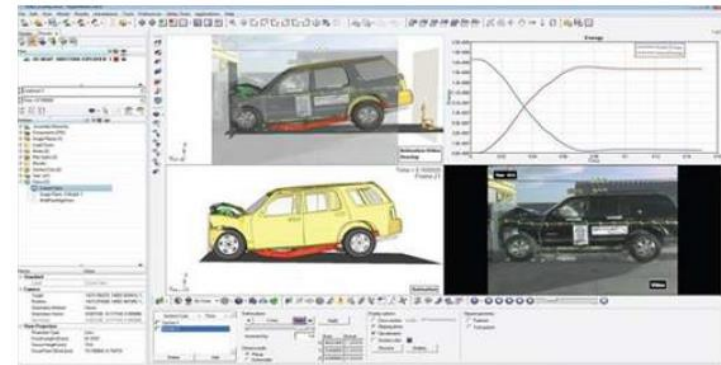
Design and Simulation Lab

Altair Hyperworks

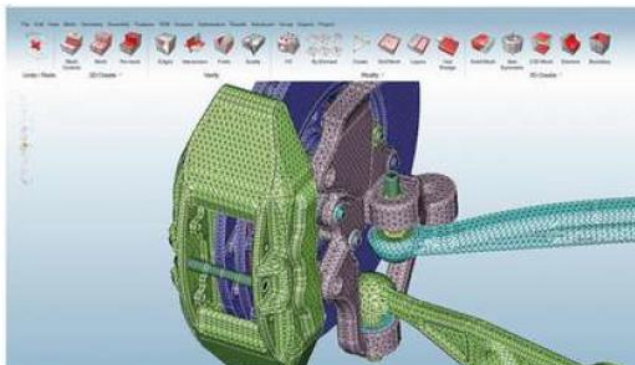
Modules and Capabilities:-



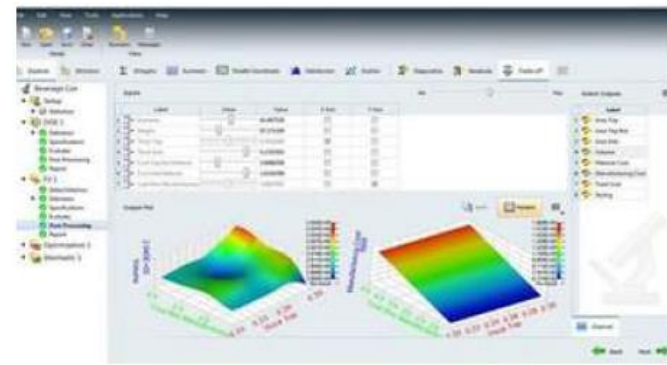
Finite Elements Pre-processor
HYPERMESH



Visualization and Reporting
HYPERVIEW



Process-oriented FE Modeling
SIMLAB

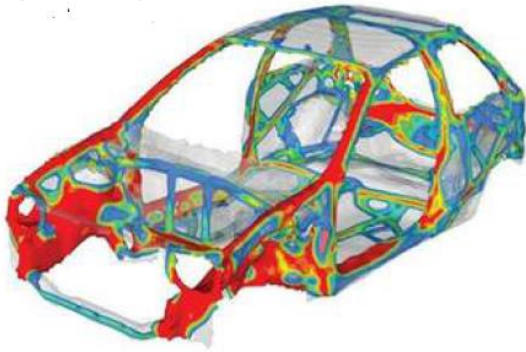


Design Exploration & Optimization
HYPERSTUDY

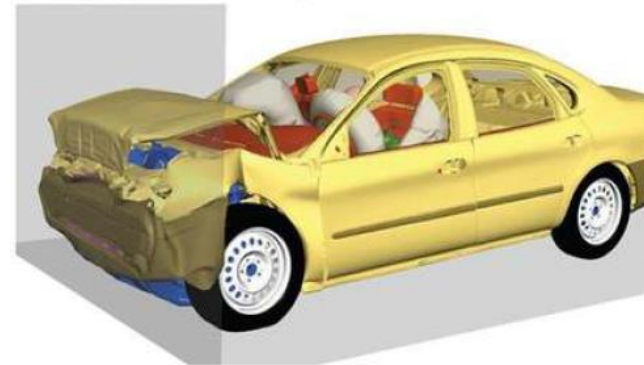
Design and Simulation Lab

Altair Hyperworks

Modules and Capabilities:-



Structural Analysis and Optimization
OPTISTRUCT



Crash, Safety & Impact
RADIOSS



Data Processing and Visualization
COMPOSE



Fatigue Life and Durability
HYPERLIFE

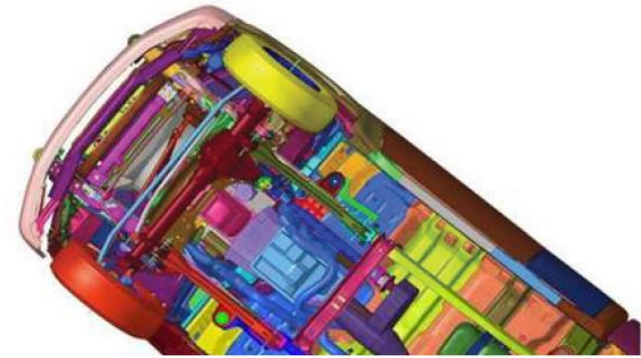
Design and Simulation Lab

Altair Hyperworks

Capabilities:-

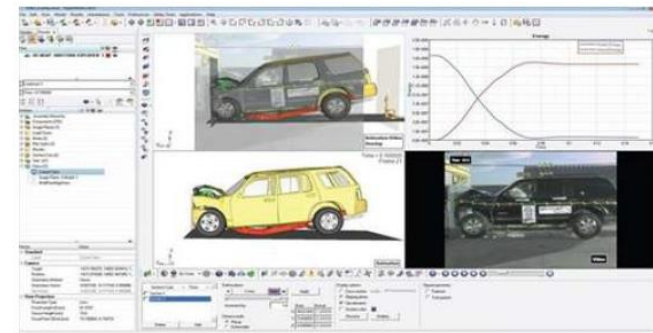
Finite Elements Pre-processor - HYPERMESH

- Streamlined Geometry Import and Model Assembly
- Simplify the creation of large model meshes that adhere to industry requirements
- Use automated meshing tools to cleanup, refine, and create shell, solid, and other mesh types
- Automated Report Generation



Visualization and Reporting - HYPERVIEW

- Seamless Integration with Leading CAE Solvers
- Multi-Page, Multi-Window: Freedom to Explore
- See the Invisible, Uncover Hidden Insights
- Interactive Post-Processing
- Advanced Results Post-Processing
- Customized Post-Processing with Command Recording and Playback



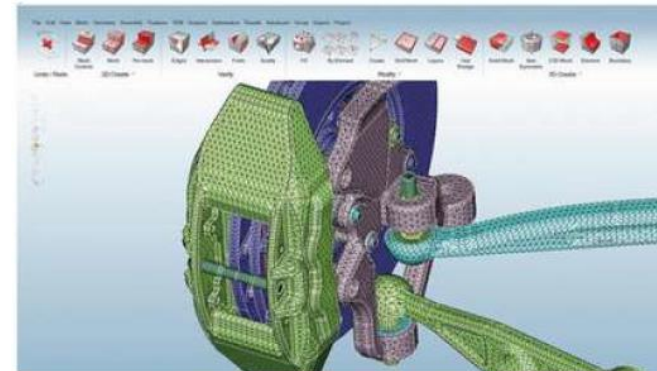
Design and Simulation Lab

Altair Hyperworks

Capabilities:-

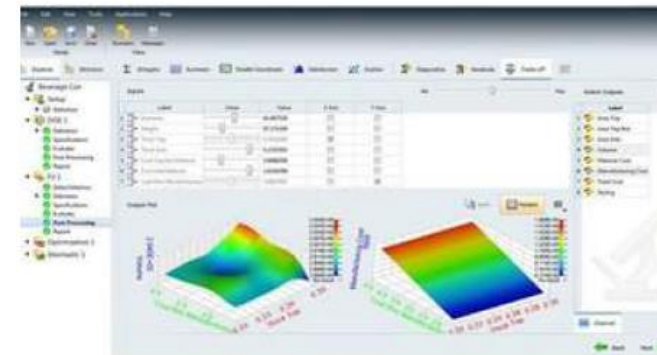
Process-oriented FE Modeling - SIMLAB

- SimLab is a process-oriented multidisciplinary simulation environment
- Empowers users to accurately analyze the performance of complex assemblies
- Deliver consistent, repeatable results with streamlined simulation workflows
- Easily monitor results and convergence to accelerate early-stage design



Design Exploration & Optimization - HYPERSTUDY

- Perform not only CAD-based but also coupled structural, electromagnetics, CFD, thermal, and multi-body dynamics optimization
- Various models and solvers can be linked into a workflow to perform multiphysics design studies
- A step-by-step process guides the user through the study definition and results analysis
- Create intelligent design variants, manage runs, and extract results automatically



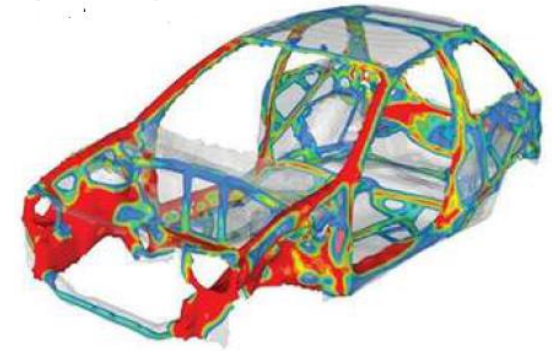
Design and Simulation Lab

Altair Hyperworks

Capabilities:-

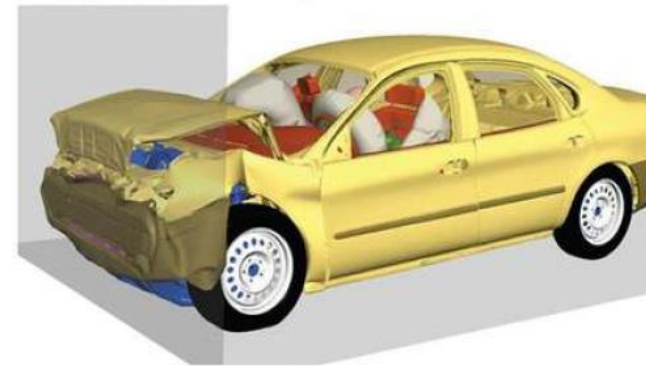
Structural Analysis and Optimization - OPTISTRUCT

- Design, Simulate and Optimize multi-physics systems with a one model, one solver solution
- Structural Optimization
- Material Analysis
- Vibration and Acoustic Analysis
- Comprehensive Nonlinear Analysis
- Real-World Multiphysics



Crash, Safety & Impact - RADIOSS

- Optimize product performance under dynamic load
- Highly nonlinear problems like crash, impact, blast and stamping simulation



Design and Simulation Lab

Altair Hyperworks

Capabilities:-

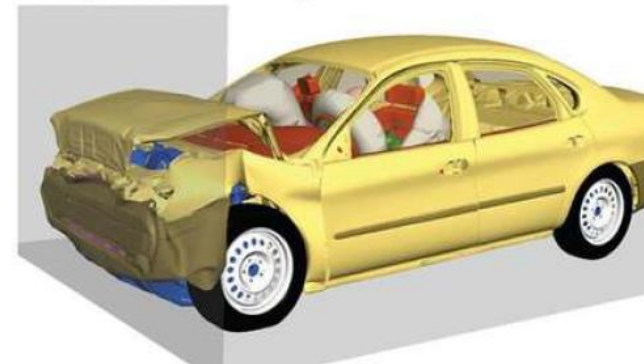
Data Processing and Visualization - COMPOSE

- A powerful, general purpose numerical computing environment
- Develop and perform custom mathematical data operations
- Process Automation and Scripting



Fatigue Life and Durability - HYPERLIFE

- A comprehensive, easy to learn solution for fatigue and durability analysis
- A simple yet robust signal processing within the LoadMap utility
- Weld Fatigue assessment is available for Spot Welds and Seam Welds





Government College of Engineering Yavatmal **Honeywell**

Advance Manufacturing Lab

FFF 3D Printer - Hydra 16 AS





Government College of Engineering Yavatmal **Honeywell**

Advance Manufacturing Lab

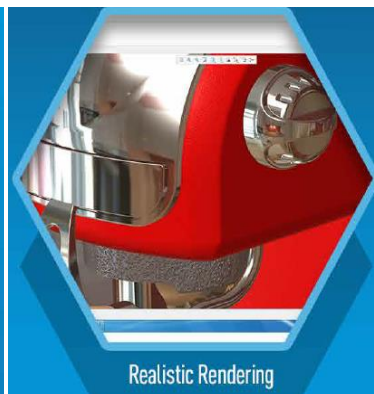
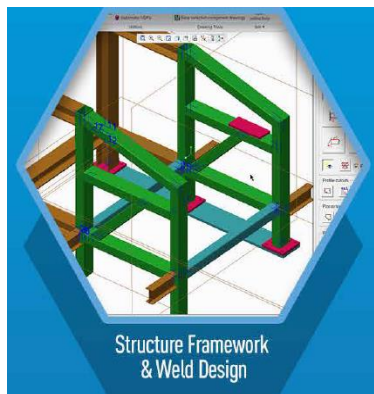
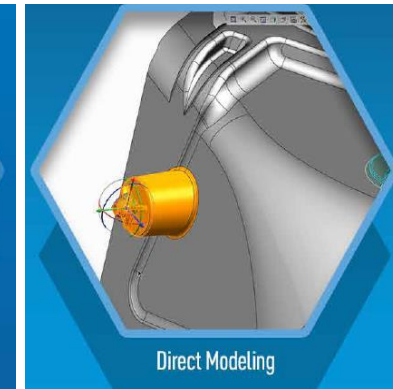
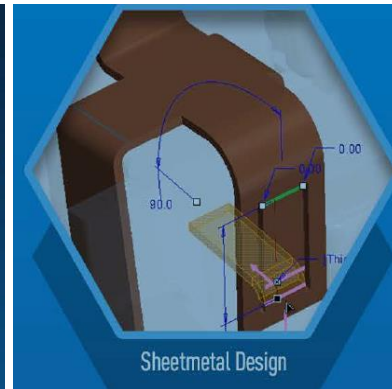
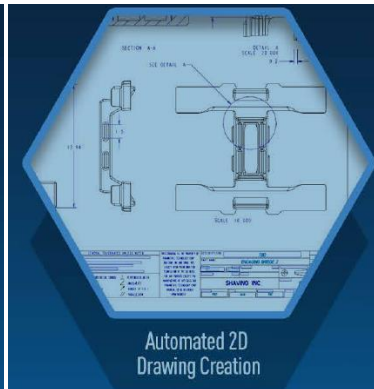
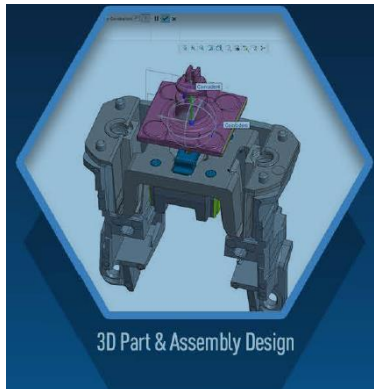
FFF 3D Printer - Hydra 16 AS

Capabilities:-

Design and Simulation Lab

PTC Creo Parametric

Capabilities:-



THANK YOU

REGISTRATION FORM

Name : _____

Branch, Year : _____

Institution : _____

Address for Correspondence:

Telephone: _____

Mobile No. _____

Email: _____

Signature of Applicant: _____

Note:

Participants who successfully complete the training program will be encouraged to submit a small project/report based on the concepts learned during the course. The project should demonstrate practical application of the acquired knowledge and skills in electronics, simulation, or embedded systems. Upon successful evaluation and approval of the submitted project/report, participants will be awarded a **certificate of completion** and project achievement. This initiative aims to promote innovation, hands-on learning, and practical problem-solving abilities among participants.

Seal & Signature of Authority/Head of Institute

Chief Patron

Dr. Vinod M. Mohitkar

Hon. Director, Directorate of Technical Education (DTE)
Maharashtra State, Mumbai.

Patrons

Dr. Dhanpal Kamble

Dy. Director, DTE, Maharashtra State, Mumbai.

Dr. V. R. Mankar

Joint Director, Technical Education
Regional Office, Amravati

Chief Coordinator

Dr. R. K. Rai

Principal, Government College of Engineering, Yavatmal

E-Mail: principal@gcoey.ac.in

Center of Excellence GCOEY Coordinators

Dr. S. R. Kewate (PI CoE)

Dr. S. R. Shiledar (CO-PI CoE)

Coordinators of program

Dr. S. S. Thakre

Asst. Prof and HoD Electronics & Telecommunication
Engineering

Dr. U. D. Dongare

Asst. Professor Electrical Engineering

Advisory Committee

Dr. V. N. Ghate (HoD Electrical Engg.)

Dr. A. I. Dhattrak (HoD Civill Engg.)

Dr. M. Deshmukh (HoD Mechanical Engg.)

Prof. Andhare (HoD Computer)

Technical Training Faculties

Mr. Darshan R

(Software Trainer, AMS India Pvt Ltd)

Mr. Kiran Kumar

(Hardware Design Engineer, AMS India Pvt Ltd)

Supporting Faculties

Mr. Kunal Pawar, Lab assistant

**Government College of Engineering,
Yavatmal**

(Affiliated to DBAT University Lonere, Raigad)

*"To nurture competent engineers for technological and social
advancement"*



Collaborate with

Honeywell

(A Joint Initiative of Honeywell, AMS &
Trisita Engineering LLP & GCOE Yavatmal)

Under Center of Excellence project

Organized

**Two weeks Industrial Training Practice
Session for Students**

on

“Embedded Systems & Circuit Simulation”

27th April to 8th May 2026

Organized by

**Department of Electronics and
Telecommunication Engineering,
Government College of Engineering,
Yavatmal – 445001**

Phone: 072322 38683 Website: www.gcoey.ac.in

About Institute:

The Government College of Engineering, Yavatmal (GCOEY), established in the year 2018, is non-autonomous Institute of Govt. of Maharashtra. The Institute is AICTE approved and affiliated to Dr. Babasaheb Ambedkar Technological university Lonere, Raigad, The institute conducts five undergraduate engineering courses namely Civil, Computer, Electrical, Electronics & Telecommunication, and Mechanical Engineering.

The institute has established a **Center of Excellence (CoE)** on Digitalization through Simulation to provide advanced training and skill development opportunities for students and faculty. The Center of Excellence (CoE) serves as a dynamic platform to bridge the gap between academia and industry by offering advanced laboratories, practical hands-on training, and exposure to emerging digital and simulation technologies. It is dedicated to promoting skill-based education, innovation, and research that enhances the technical and professional competencies of both students and faculty members.

Through specialized certification programs, workshops, internships, and strong collaborations with industry partners, the **CoE** equips learners with practical knowledge and industry-relevant skills. This initiative ensures that students and faculty remain updated with modern technological trends and are prepared to meet

Program overview

This Two-week training program practice session is designed for students to strengthen their understanding of core Electronics & Communication concepts through practical exposure using simulation and embedded programming tools. The program focuses on bridging the gap between theoretical learning and real-world applications using industry-relevant software tools.

real-world engineering challenges, thereby creating industry-ready professionals.

Software Practice Session

- NI Multisim (Circuit Simulation)
- Arduino IDE (Embedded Programming)

Course scope:

Participants will be able to:

- ✓ Design and simulate basic electronic circuits using modern software tools, enabling them to analyze circuit behavior before physical implementation.
- ✓ Understand analog and digital electronics practically through laboratory experiments, component-level studies, and real-time demonstrations.
- ✓ Develop simple embedded applications by working with microcontrollers, sensors, and interfacing techniques for automation and control systems.
- ✓ Apply theoretical knowledge to real-world problems by practicing assignments.

Contents:

- Practice Session on Circuit Simulation, Analog and Digital Electronics
- Practice Session on Embedded System and Arduino Interfacing
- Assignments
- Submission of Assignments

Eligibility of Participants:

Undergraduate Students (ECE / Electrical / Allied)

Outcomes:

Participants will be able to:

- Practice and Submission of Assignments
- Design and simulate basic electronic circuits
- Understand analog and digital electronics practically
- Develop simple embedded applications

- **Fees:** The workshop is fully sponsored by the institute under CoE lab Government College of Engineering Yavatmal, There is no registration charges for the internal students and faculties.

For more information, Contact to

- Mrs. V. R. Godse (Mob. 9730923800)
- Mr. Kunal Pawar (Mob. 9689803731)

Student Coordinators

- Saurabh Manohar Rathod (8010196066)
- Arpita Gitesh Gupta
- Khushi Dhanraj Nikhade
- Ankit Avadhesh Patel

Registration: Participants are requested to register in advance using the enclosed Registration Form

Last Date of Registration: 26th April 2026.

Registration Google Form Link:

<https://forms.gle/e3YLECAXE6fY7deo7>

REGISTRATION FORM

Name : _____

Branch, Year : _____

Institution : _____

Address for Correspondence:

Telephone: _____

Mobile No. _____

Email: _____

Signature of Applicant: _____

Note:

Participants who successfully complete the training program will be encouraged to submit a small project/report based on the concepts learned during the course. The project should demonstrate practical application of the acquired knowledge and skills in Autodesk Fusion 360. Upon successful evaluation and approval of the submitted project/report, participants will be awarded a **certificate of completion** and project achievement. This initiative aims to promote innovation, hands-on learning, and practical problem-solving abilities among participants.

Seal & Signature of Authority/Head of Institute

Chief Patron

Dr. Vinod M. Mohitkar

Hon. Director, Directorate of Technical Education (DTE)
Maharashtra State, Mumbai.

Patrons

Dr. Dhanpal Kamble

Dy. Director, DTE, Maharashtra State, Mumbai.

Dr. V. R. Mankar

Joint Director, Technical Education
Regional Office, Amravati

Chief Coordinator

Dr. R. K. Rai

Principal, Government College of Engineering, Yavatmal

E-Mail: principal@gcoey.ac.in

Center of Excellence GCOEY Coordinators

Dr. S. R. Kewate (PI CoE)

Dr. S. R. Shiledar (CO-PI CoE)

Coordinators of program

Prof. M. J. Deshmukh

Asst. Prof and HoD Mechanical Engineering

Dr. M. S. Satpute

Asst. Professor Mechanical Engineering

Advisory Committee

Dr. V. N. Ghate (HoD Electrical Engg.)

Dr. A. I. Dhattrak (HoD Civill Engg.)

Dr. M. Deshmukh (HoD Mechanical Engg.)

Prof. Andhare (HoD Computer)

Technical Training Faculties

Mr. Darshan R

(Software Trainer, AMS India Pvt Ltd)

Mr. Kiran Kumar

(Hardware Design Engineer, AMS India Pvt Ltd)

Supporting Faculties

Mr. Kunal Pawar, Lab assistant

**Government College of Engineering,
Yavatmal**

(Affiliated to DBAT University Lonere, Raigad)

*"To nurture competent engineers for technological and social
advancement"*



Collaborate with

Honeywell

(A Joint Initiative of Honeywell, AMS &
Trisita Engineering LLP & GCOE Yavatmal)

Under Center of Excellence project

Organized

**Two weeks Industrial Training Practice
Session for Students**

on

“Autodesk Fusion 360”

27th April to 8th May 2026

Organized by

**Dept. of Mechanical Engineering,
Government College of Engineering,
Yavatmal –445001**

Phone: 072322 38683 Website: www.gcoey.ac.in

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Through specialized certification programs, workshops, internships, and strong collaborations with industry partners, the **CoE** equips learners with practical knowledge and industry-relevant skills. This initiative ensures that students and faculty remain updated with modern technological trends and are prepared to meet

Program overview

This Two-week training program practice session is designed for students to strengthen their understanding of CAD, CAM and CAE through practical exposure using Autodesk Fusion 360 software and Advanced Manufacturing. The program focuses on bridging the gap between theoretical learning and real-world applications using industry-relevant software tools.

real-world engineering challenges, thereby creating industry-ready professionals.

Software Practice Session

- Autodesk Fusion 360 (CAD, CAM, CAE)

Course scope:

Participants will be able to:

- ✓ Develop strong foundation in CAD, simulation, and additive manufacturing.
- ✓ Equip students with hands-on experience using industry-standard tools.
- ✓ Enable integration of design-to-manufacturing workflows into teaching.
- ✓ Prepare for industry-oriented projects and certifications.

Contents:

- Practice Session on Autodesk Fusion 360 software
- Assignments
- Submission of Assignments

Eligibility of Participants:

Undergraduate Students (Mechanical Engineering)

Outcomes:

Participants will be able to:

- Practice and Submission of Assignments
- Develop strong foundation in CAD, CAM and CAE
- Develop strong foundation in Simulation
- Prepare for industry-oriented projects and certifications

- **Fees:** The workshop is fully sponsored by the institute under CoE lab Government College of Engineering Yavatmal, There is no registration charges for the internal students and faculties.

For more information, Contact to

- Mr. M. R. Bhende Mech (Mob. 86238 28151)

Student Coordinators

- Om Balkishan Devade 3rd Yr (9172014171)
- Sumit Kailas Chavhan
- Aniket Duleshwar Lende 2nd Yr (8055675939)

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