

Design your Destiny!



Who are we?

Mission: Imparting Practical Domain knowledge to Mechanical Engineering Graduates and Automotive enthusiasts by our seasoned industry experts. Empowering our students to become an expert in the domain of their choice.

3,00,000 mechanical engineers graduate every year in India and only a few get into core companies. Mechanical engineers find it difficult to get employed in the industry due to their sole focus on learning the design software, without proper domain knowledge. We Disenosys, are working to bridge this skill gap between students and the industry requirements. We

have a team of industry experts, with over a decade of experience who empower our students to land their dream jobs. We connect to our students from all the corners of the world through live, interactive and virtual classrooms.

Disenosys is bootstrapped by Praveen Kumar, who has worked with many multinational OEMs like Ford, Daimler, Ashok Leyland. Together as a team, we are constantly working to provide Automotive industrial domain training to young and aspiring design engineers around the globe.

Our students are our Hope. We are dedicated to making their dreams into reality.



Automotive Plastic Trims – Interiors and Exteriors

What is Automotive Plastic Trims?

The design of Automotive Interior and Exterior plastic components is called Trims. It is done in Catia GSD workbench. The plastic components that you see inside the car are Interior. Ex: Dashboard, Instrument Panel, Doors, seating and pillars.

Plastic components that you see outside of a car are Exterior. ex: bumper, light assy, hoods.

Many major automotive design companies have separate interior and exterior design studios lacking interaction and communication. This divide has created dispersion between the two departments, leading to a design theme that does not follow throughout the whole vehicle. OEMs have recently recognised this issue and are currently making efforts to create a new design strategy, attempting to generate a more substantial connection between exterior and interior design.

The styling and design teams at an automotive OEM always walk an extra mile to make the best looking interior and exterior automotive trims. But, when it comes to engineering for a feasibility study, various constraints are not well thought and analyzed due to time constraints. As a result, the best-looking styling gets compromised in the production vehicle.

Through this program, Disenosys equips our students both in interior and exterior trims to fill this gap and prepare them for the upcoming automotive trends. Our projects, Pillar design process and Bumper design process are designed by our industry experts to give our students industrial exposure.

Who can take this course?

- 3rd and Final year B.E/BTech students in Mechanical/Automobile and Aerospace discipline
- MTech students in Mechanical/Automobile and Aerospace discipline.
- Working professionals who are looking for better job opportunities in CAD, CAM, CAE, Auto Cad, Autodesk Domain.
- Automotive enthusiasts.

Why should I take the Automotive Plastic Trims course with Disenosys?

Top benefits of Automotive Plastic Trims – Interiors and Exteriors course:

- You will learn about various plastic materials used to build components of the car.
- You will learn about various Interior and Exterior components, their design and development process.
- **You should be able to design a component independently by the end of this course.**
- Get trained by seasoned industry **experts working in OEMs.**
- We help **in building your resume** after completion of the course.

- Get a **course completion certificate** from Disenosys.
- **Mock interviews** will be conducted after completion of the course, to clear Industrial Technical rounds for placement.
- Excellent performers will be **referred to top OEMs** through our internal contacts.
- Stand out among your peers in getting selected as **Trims Design and Development Engineer**.
- **Industry-oriented projects** at the end of the course which will add value in your interviews.

OUR TRAINERS



Our team comprises of design experts, working in top OEMs around the globe. We stand apart from others with the quality we deliver to our students. Our seasoned industry experts impart their knowledge for the betterment of the future generation.

Course Duration

- 3 Months Live, Online and Interactive Sessions.

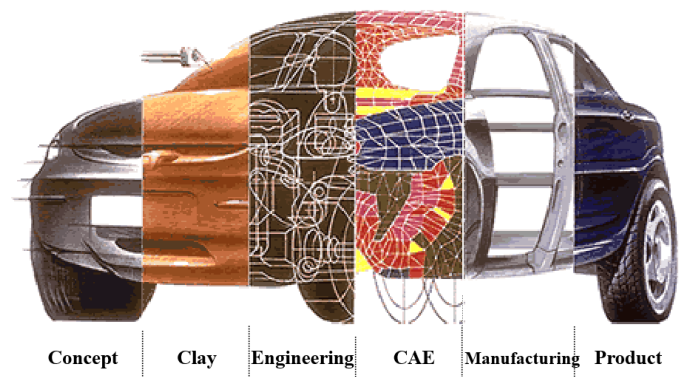
Certification

- A digital certificate will be provided by Disenosys after successful completion of the course.

Course Curriculum

Introduction to Automotive Interior and Exterior

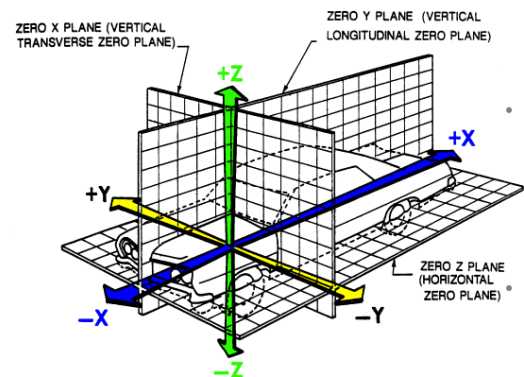
- Basics of Plastics?
- Commodity of Plastics and Applications
- Product Design and Development
- Mold Design Fundamentals
- Plastic Product Design and Guide Lines
- Plastic Defects and remedies
- Plastic Fixations
- Examples of Master sections
- General Terminologies in Automotive
- Joining Technologies in Plastic
- Heat staking



- Vibration Welding
- Laser Scoring
- Basic Automotive interior and Exterior Regulations

Steps Involved in Plastic Product Design

- Target setting
- Benchmarking
- Concept themes & Packaging
- Style development
- Ergonomic & packaging
- A class surfacing
- CFD analysis
- System packaging
- Plastic Product design
- CAE analysis
- Prototype manufacturing
- Testing and validation



Introduction to Plastic Trims

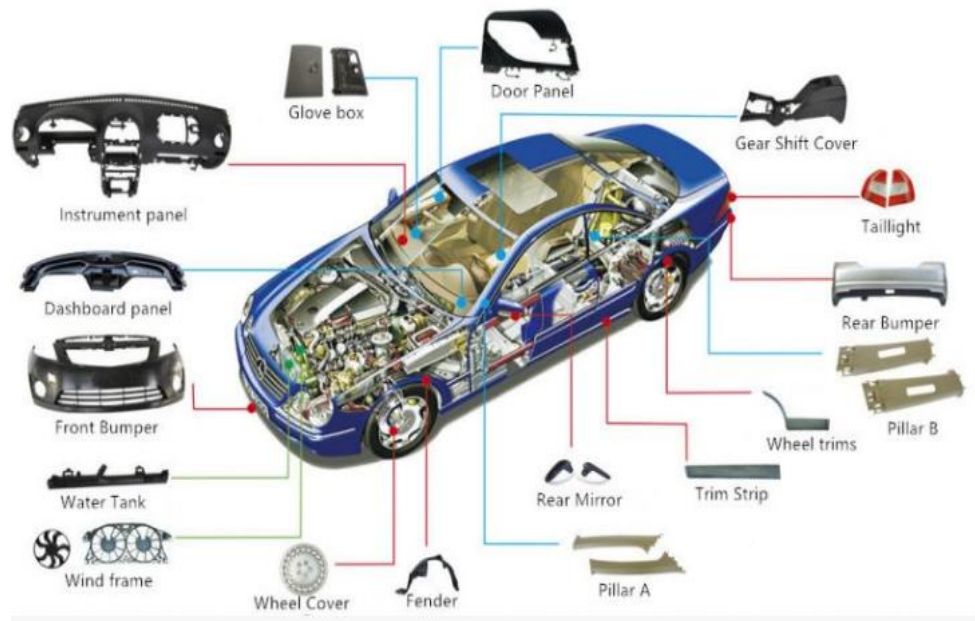
Hard Trims

- IP
- Console
- Door

- Pillars
- Bumper etc.

Soft Trims

- Head Liner
- Carpet
- NVH parts etc



Introduction to Automotive Interior and Exterior

INTERIOR

- Instrumentation Panel (IP)
- Glove Box
- Fuse Box
- Cluster Bezel etc.
- Cross Car Beam (CCB)
- Door Trim
- Door Carrier
- Map Pocket
- Switch Bezel etc
- Many more parts and their Assembly Process



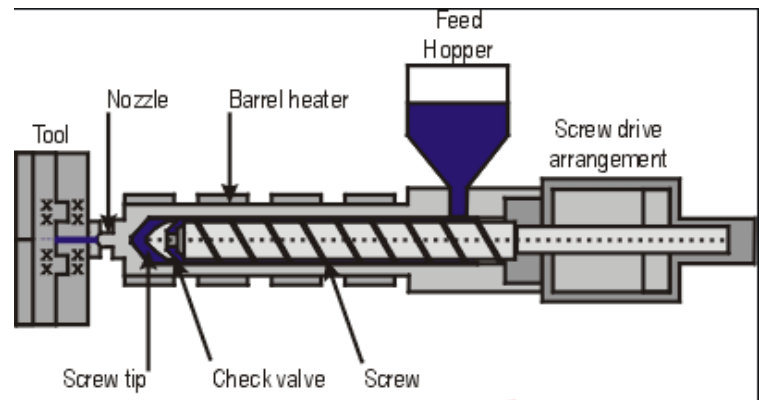
EXTERIOR

- Bumpers (Front and Rear)
- Fenders
- Bumper Grills
- Scuff Plates
- Roof Rails
- Other Supportive Structures



Introduction to Plastic Materials

- Polypropylene (PP)
- Acrylonitrile butadiene styrene (ABS)
- Polycarbonate (PC)

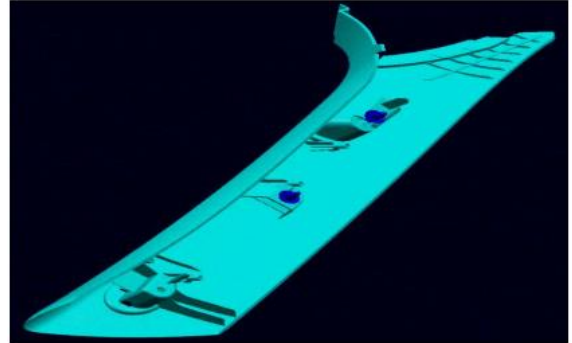


Introduction to Injection moulding and Types of Molding

- Injection Molding
- Blow Molding
- Rotational molding

Project 01: Pillar Design Process

- Class A Surface analysis.
- Product Design
- Creation of Attachment features
- Draft analysis
- Master section study and development



Project 02: Bumper Design Process

- Class A Surface analysis.
- Product Design
- Creation of Attachment features
- Draft analysis
- Master section study and development



CERTIFICATE



DISENOSYS
CERTIFICATE
OF ACHIEVEMENT

This certificate is presented to

Jayant K

for successfully completing the 3 months program on

Automotive Plastic Trims – Interiors and Exteriors

Certificate UDIN: 19110976

Completion Date: 05-10-2020



Praveen Kumar
Director, Disenosys

CONTACT US

Website: www.disenosys.com

Linkedin: <https://www.linkedin.com/school/disenosys/>

WhatsApp: [+91 9962149069](https://wa.me/919962149069)

Facebook: [Disenosys India](https://www.facebook.com/disenosysindia)

Instagram: [Instagram.com/disenosys India](https://www.instagram.com/disenosys_india)