

Ignite the Flame of Education

Product Design & 3D Modeling Program

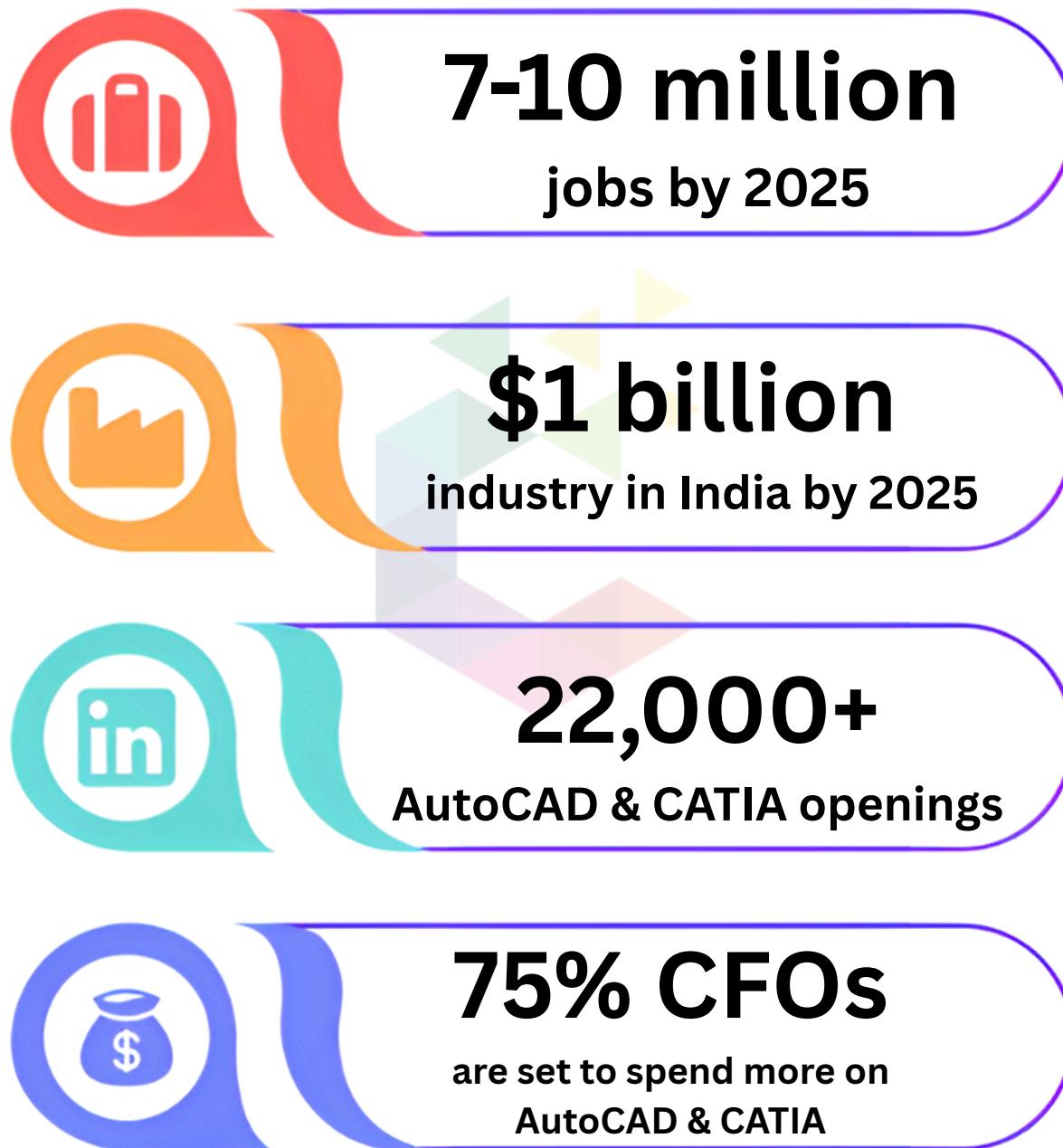
Engage in AutoCAD & CATIA Mastery

Duration: 3 Months | Mode: Online | Level: Beginner to Advanced
Powered by CodeEmy!

 **REGISTER NOW**



Scope of AutoCAD & CATIA



Here is all the **Career Fields** you can excel at

CAD Designer

**Mechanical Design
Engineer**

**AutomotiveDesign
Specialist**

**Aerospace Design
Specialist**

Civil Drafting Engineer

Product Designer

BIM Specialist

Industrial Engineer

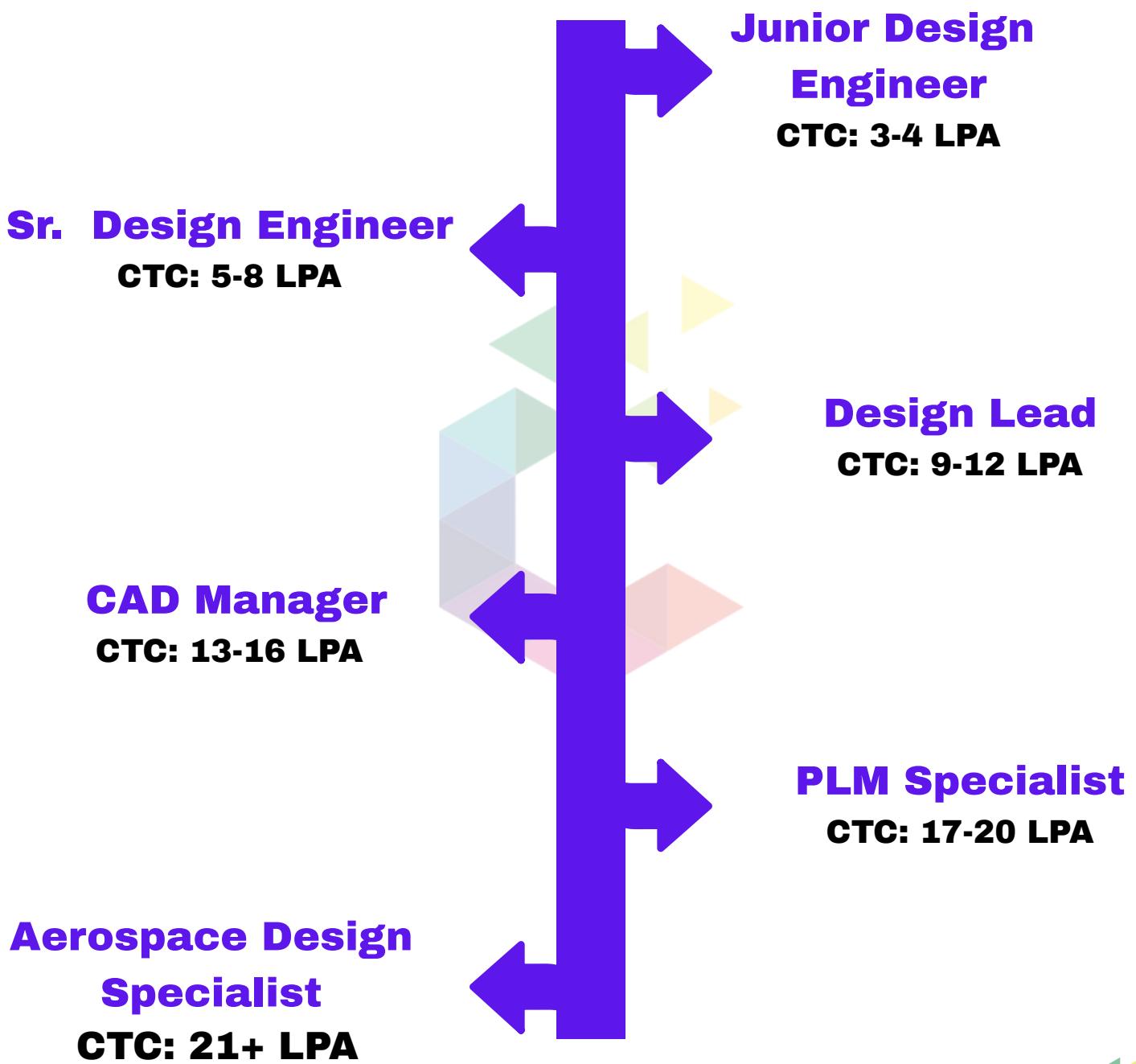
PLM Consultant

Interior Designer

CAREERS



Here is how your **Career Trajectory** will look like



Why **CodeEmy** is Unique ?

Category	CodeEmy	UpGrad	SimpliLearn	Edureka	IIDE
Live Classes	✓	✓	✓	✓	✓
Placement Assistance	✓	✓	✗	✗	✓
Interview Training	✓	✓	✗	✗	✓
LinkedIn Profile & Resume Building	✓	✗	✗	✗	✗
Earn While your Learn	✓	✗	✗	✗	✗
Freelancing	✓	✗	✗	✗	✗
Campus Leader board across the college	✓	✓	✓	✗	✗
Lifetime Access to content	✓	✗	✗	✓	✓
Offline Project Fest (Every 3 Month once)	✓	✗	✗	✗	✗
Course Duration	3 - 4 Months	7-11 Months	5 Months	5 Weeks	4-5 Months
Price	₹15,000	₹ 1,05,000	₹ 1,00,000	₹ 20,000	₹ 72,000

△ **Disclaimer:**

The names of other companies mentioned here are used solely for comparison purposes to highlight the unique features of our offerings. We do not intend to misuse, defame, or misrepresent any organization in any way. There is no affiliation or endorsement implied. Our intent is purely informational and respectful.

UNIQUENESS

Week 1

- What is CAD? Role in Design & Manufacturing
- AutoCAD Interface, Commands, and Workspaces
- Drawing Basics: Lines, Arcs, Circles, Polygons
- **Project:** Simple 2D Mechanical Part Drawing

Week 2

- Layers, Blocks, and Attributes
- Dimensions & Annotations
- Hatching & Gradient
- Plotting & Printing Drawings
- **Project:** Floor Plan for a Residential Building

Week 3

- 3D Tools: Extrude, Revolve, Sweep, Loft
- UCS (User Coordinate System) & Viewports
- Creating 3D Solids & Surfaces
- Rendering & Visualization in AutoCAD
- **Project:** 3D Model of a Machine Component

Week 4

- CATIA Workbenches Overview
- Sketcher Workbench: 2D Sketching & Constraints
- Part Design: Creating Basic 3D Features
- **Project:** Model a Simple Mechanical Part in CATIA



Week 5

- Pad, Pocket, Shaft, Groove, Fillets, Chamfers
- Boolean Operations (Union, Subtract, Intersect)
- Patterns & Draft Angles
- **Project:** Design an Engine Piston

Week 6

- Creating Assemblies
- Applying Constraints (Mate, Coincidence, Offset)
- Exploded Views & Interference Check
- **Project:** Assemble a Gearbox Model

Week 7

- Advanced Surface Modeling
- Generative Shape Design Workbench
- Drafting & Drawing Sheet Generation
- **Project:** Surface Design of a Car Body

Week 8

Major Project Ideas:

- Complete 3D Engine Assembly in CATIA
- Civil Floor Plan + 3D Building Model in AutoCAD
- Product Design with Surface Modeling
(Car/Aerospace Part)
- Exporting Files for Manufacturing (2D & 3D)
- Resume Building & Freelance Opportunities



/// Hands - On Projects

Mini Projects (Beginner to Intermediate Level)

1. 2D Floor Plan Design (AutoCAD)

- **Skills Used:** AutoCAD (2D Drafting, Layers, Dimensions)
- **Goal:** Create a residential floor plan with dimensions and annotations.

2. Mechanical Part Sketching (CATIA)

- **Skills Used:** CATIA Sketcher & Part Design
- **Goal:** Design a simple mechanical part like a bracket or flange with basic constraints.

3. Assembly of Simple Components (CATIA)

- **Skills Used:** CATIA Assembly Design
- **Goal:** Assemble basic machine components like nuts, bolts, and plates.

Major Projects (Advanced Level)

1. 3D Engine Piston Design

- **Skills Used:** CATIA (Part Design, Generative Shape Design)
- **Goal:** Design a piston with accurate dimensions and apply drafting standards.

2. Gearbox Assembly

- **Skills Used:** CATIA Assembly + AutoCAD for 2D drafting
- **Goal:** Create a multi-part gearbox assembly with mating constraints and a 2D drawing sheet.

3. Automotive Component Surface Design

- **Skills Used:** CATIA (Generative Shape Design, Surface Modeling)
- **Goal:** Model a car hood or fender using advanced surfacing techniques.

Tools

You will learn



Showcase

your learning journey

Certificate of Completion from CODEEMY



Certificate of Internship from CODEEMY



Approved by:



अखिल भारतीय तकनीकी शिक्षा परिषद्
All India Council for Technical Education



Contact Us

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