



**TRAINING DURATION:
160 HOURS**

SKILLS BUILDING TRAINING

Join our training program to upgrade your skills and accelerate your career growth with confidence and excellence.

Real-World Industry Experience

Professional Networking Ecosystem

Experiential Skill-Based Training

Personalized Career Roadmapping



Contact Us

+ 91- 9009015026 | 7748888320 | 9302956564

www.certedtechnologies.com

REGISTER NOW

Gwalior

Noida



FOLLOW NOW



Master Certificate in Product Design

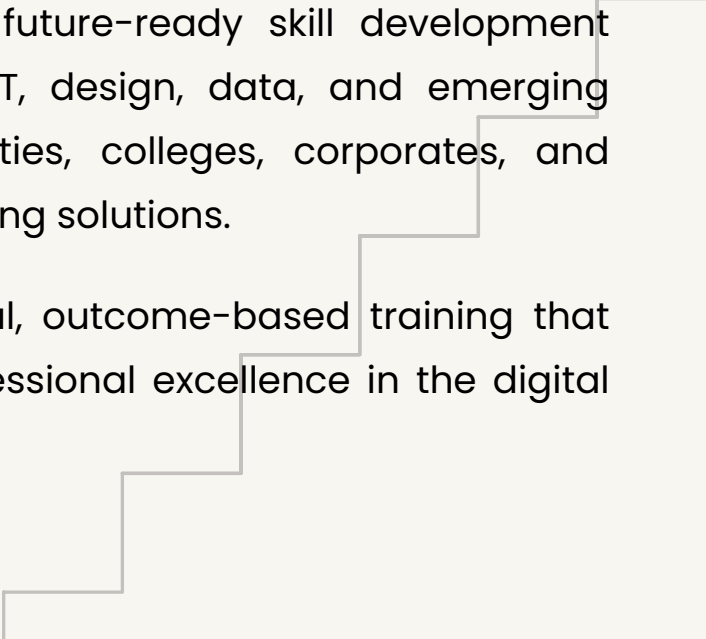
The Master Certificate in Product Design is a career-focused, professional certification program designed to develop highly skilled product design professionals capable of meeting modern industry demands. The program is ideal for mechanical engineering students, diploma holders, graduates, and working professionals who aspire to build or enhance their careers in product design, mechanical design, and R&D engineering.

This program delivers a complete understanding of the product development lifecycle, starting from concept creation and engineering fundamentals to advanced 3D modeling, assembly design, sheet metal design, and detailed manufacturing documentation. It integrates design theory, engineering principles, and hands-on software training, ensuring learners gain both conceptual clarity and practical competence.

About Company

Certed Technologies is a leading EdTech and corporate training organization committed to delivering industry-relevant, future-ready skill development programs. With a strong portfolio across IT, design, data, and emerging technologies, we collaborate with universities, colleges, corporates, and training institutes to deliver job-oriented training solutions.

Mission: To empower learners with practical, outcome-based training that enhances employability, creativity, and professional excellence in the digital economy.



Market Scope – Master Certificate in Product Design

Industry Overview

The product design industry is a key driver of innovation across manufacturing, automotive, aerospace, and industrial sectors. With increasing adoption of digital design and CAD-based product development, companies require skilled engineers proficient in tools like AutoCAD, Creo, and NX CAD. The growing focus on efficient, manufacturable, and sustainable product designs has created strong demand for industry-ready product design professionals, making it a high-growth and future-oriented career domain.

Career Opportunities

- Product Design Engineer
- Mechanical Design Engineer
- CAD Engineer
- Tool Design Engineer
- R&D Design Engineer
- Automotive Design Engineer

Key Benefits of the Program

✓ Industry-Aligned Curriculum

Covers SEO, Google Ads (SEM), social media, content marketing, email marketing, web analytics, CRO, and performance marketing.

✓ Hands-On Learning

Live campaigns, real-time tools, case studies, and a business-focused capstone project.

✓ Creative + Technical Skills

Strategy, content creation, paid ads, analytics, automation, and AI-powered marketing tools.

✓ Portfolio Development

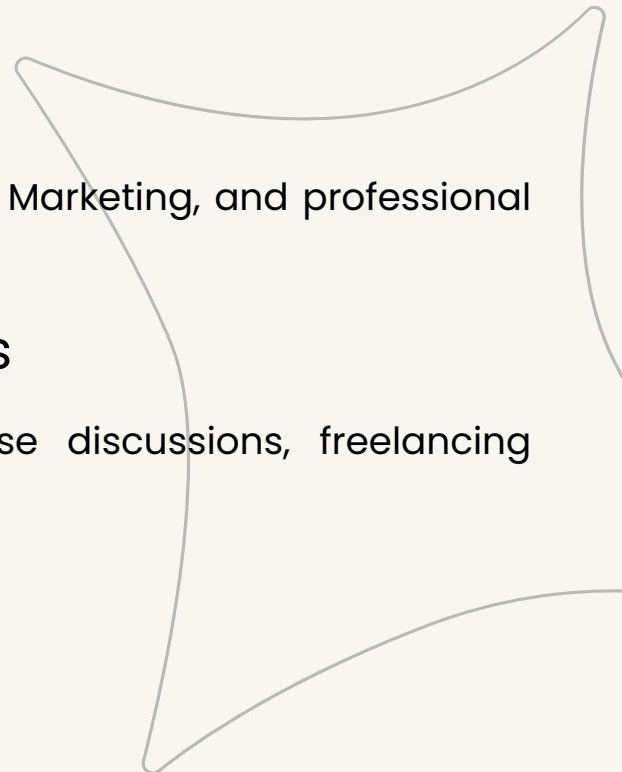
SEO audits, ad campaigns, social calendars, analytics reports, landing pages, and dashboards.

✓ Certification Support

Guidance for Google Ads, Google Analytics, Meta Marketing, and professional digital marketing certifications.

✓ Interview & Placement Readiness

Resume building, campaign presentations, case discussions, freelancing guidance, and placement support.



Course Structure

Duration: 10 Hours

Module 1: Fundamentals of Product Design & Engineering Concepts

Topics:

- Introduction to Mechanical Design Process
- Engineering drawing standards (ISO, BIS, ANSI)
- Orthographic projections
- Isometric and perspective views
- Dimensioning techniques and tolerances
- Fits, limits, and surface finish symbols
- Reading and interpreting industrial drawings

MODULE 2: AutoCAD – 2D Drafting & Documentation

Duration: 40 Hours

Topics:

Core Concepts

- AutoCAD Interface & Workspace Customization
- Coordinate Systems & Drawing Setup
- Precision Drawing Techniques

2D Drafting

- Lines, Polylines, Circles, Arcs
- Modify Commands & Object Properties
- Layers, Blocks & Xrefs
- Annotation: Dimensions, Text & Leaders

Engineering Drawings

- Orthographic Projections
- Sectional Views
- Auxiliary Views
- Isometric Drawings
- Title Blocks & BOM

Standards & Output

- ISO / ANSI Drawing Standards
- Plotting & Printing
- Industry-level drafting practices

Mini Project:

- 2D Working Drawing of a Mechanical Component

Module 3: Creo Parametric – 3D Modeling & Assemblies

Topics:

Duration: 45 Hours

Part Modeling

- Sketcher & Constraints
- Feature-Based Modeling
- Datum Planes, Axes & Points
- Extrude, Revolve, Sweep, Blend
- Holes, Rounds, Chamfers

Advanced Modeling

- Patterns & Relations
- Family Tables
- Sheet Metal Design
- Weldments & Structural Members

- **Assembly Design**
- Bottom-Up & Top-Down Assembly
- Assembly Constraints
- Exploded Views
- Mechanism Connections
- Interference & Clearance Check
- **Drafting**
- 3D to 2D Drawing Generation
- Dimensioning & Tolerancing
- Assembly Drawings & BOM

Project:

- Design and Assembly of a Mechanical Sub-System

Module 4: NX CAD – Advanced Product Design

Topics:

Duration: 45 Hours

NX Fundamentals

- NX Interface & Navigation
- Sketching & Feature Modeling
- Parametric Design Concepts

Advanced Modeling

- Solid Modeling Techniques
- Surface Modeling (Class-A Basics)
- Sheet Metal Design
- Feature Reuse & Expressions

Assembly Design

- Assembly Structure & Constraints
- Large Assembly Handling
- Exploded Views & Arrangement
- Product Validation Tools

Drafting & Validation

- Professional Drawing Creation
- PMI (Product Manufacturing Information)
- Design Validation & Checks

Project:

- Complete Product Design using NX CAD (Automotive / Industrial Component)

Module 5: Industry Projects & Case Studies

Topics:

Duration: 20 Hours

- Automotive Component Design
- Manufacturing Industry Case Study
- Reverse Engineering Project
- Sheet Metal Product Design
- Portfolio Development
- Design Review & Presentation Skills

Outcomes of the Program

2D and 3D mechanical designs

manufacturable and cost-effective products

complex assemblies and mechanisms

sheet metal and industrial product designs

GD&T, tolerances, and global drafting standards

professional, job-ready product design portfolio

Career Roles After Completion

Product Design Engineer

Mechanical Design Engineer

CAD Engineer

R&D Design Engineer

Tool Design Engineer

Automotive Design Engineer

THANK YOU!



Contact Us

 Website

www.certedtechnologies.com

 Phone

+91-89201-58923 | +91 -90090-15026



support@certedtechnologies.com

 HQ address

Abhilasha Bhawan, Pinto Park Tiraha,
Gwalior, 474005, Madhya Pradesh.