

ASME Learning & Development

EMPOWERING ACADEMIA. ENGINEERING THE FUTURE.

Industry-relevant learning solutions
designed for academic excellence
and real-world impact.



Expert-Led
Courses



Global
Standards



Academic
Partnerships



Future-Ready
Workforce



CURRICULUM
ALIGNED



FLEXIBLE LEARNING
Online | In-person



STRONGER
OUTCOMES



STRONGER
ENGINEERING

PARTNER WITH ASME
Inspiring minds



ASME India Academic Solutions

As on June 2026



About ASME

The American Society of Mechanical Engineers

140+

Years of technology leadership & knowledge exchange

170+

Engineering colleges engaged through student sections

Uniquely positioned at the intersection of

Industry

Academia

Research



Professional Certifications

Globally respected ASME credentials



Academic Partnerships

Institutional tie-ups across disciplines



Skilling in Emerging Tech

Future-ready skills for Industry 4.0

Actively supporting India's Manufacturing, Energy & Sustainability Missions

Changing Manufacturing Landscape and Academic Readiness in India

India's manufacturing is shifting to smart, digital & sustainable production

Traditional roles → Future-ready, technology-driven professionals

Industry 4.0

Automation, AI, IoT & smart factories

Additive Manufacturing

3D printing & advanced processes

Digital + Core Skills

Blending engineering with digital fluency

Sustainability

Energy-efficient, green manufacturing

Job-Ready Talent

Multi-skilled, industry-ready graduates

Expanding Sectors

Automotive, aerospace, electronics & MSMEs

Academia must equip mechanical engineers to be future-ready and job-ready

ASME India: Building Industry-Ready Engineers for Make in India

Make in India, PLI & Viksit Bharat 2047 demand industry-ready, innovation-driven engineers — **ASME India** aligns student skills with national manufacturing priorities & Industry needs



NEP 2020 Aligned

Industry-linked, experiential learning with an **employability** focus



Industry 4.0 Skills

Automation, digital manufacturing & sustainability for PLI sectors



Academia-Industry Bridge

Cuts “time-to-talent” for manufacturing roles



Industry-Ready Engineers

Multi-skilled talent for manufacturing ecosystems



Global Certifications

Improves job readiness and mobility worldwide



Workforce Readiness

For smart factories & the Make in India supply chain

Embrace ASME's Academic Partner Program and Credit Courses

Enhance the Value Chain of your students and institution



Strategic Pillars of the Academic Partner Program



01

Industry Integrated Curriculum & Certifications

Micro-credentials and ASME-aligned curriculum integration packs



02

Faculty Capability Development

Advanced FDP tracks and faculty research mentorship



03

Student Career Acceleration Services

Career accelerator and placement-focused training tracks



04

Research, Innovation & IP Development

Innovation sprints with IP and patent development support



05

Institutional Brand Enhancement & Global Collaborations

ASME partner branding, conclaves and global collaborations

1. Enhanced Curriculum & Academic Integration (Core Engineering Powered)



1.1 Core Engineering Micro-Credentials

Blended & eLearning short programs for Mechanical & allied branches:

- GD&T & Finite Element Analysis (FEA)
- Additive Manufacturing & Robotics
- Industrial IoT, Digital Twins & AI in Manufacturing
- Industry 4.0, Welding & NDT, HVAC & more



1.2 ASME-Approved Curriculum Integration Pack

Ready-to-deploy resources provided to colleges:

- CO–PO mapping templates
- Industry-aligned lab manuals
- Design projects aligned to ASME standards
- Tools for Outcome-Based Education (OBE)

Why it matters: Structured, industry-validated content supports NAAC / NBA accreditation, strengthens teaching quality, and helps students build portfolios that matter for engineering jobs.

2. Capstone & Mini Project Enhancement (High Demand)



2.1 ASME Project Challenge Bank

30–50 curated, real engineering problem statements across:

- Digital Twins, AI in Manufacturing & Industrial IoT
- Robotics, Automation & Process Control
- Energy Analytics & Additive Manufacturing
- FEA, GD&T & HVAC

Outcome: Industry-grade final-year projects.



2.2 ASME Industry Mentor for Capstone

Structured mentorship for every department:

- 1–2 ASME volunteer engineers per department
- Monthly virtual mentoring for student teams
- Real-world guidance from practicing professionals

Value: Stronger projects that drive higher placements.

Why it matters: Real industry problems paired with expert ASME mentorship elevate project quality, sharpen practical skills, and drive stronger placements.

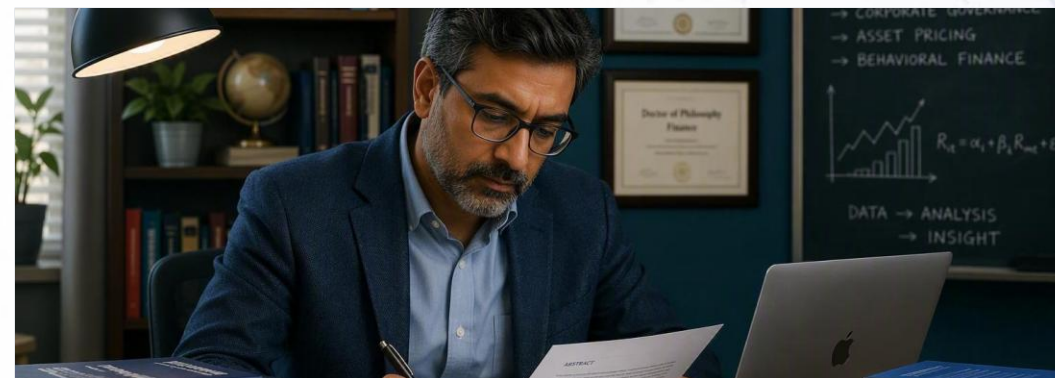
3. Faculty Enhancement (Key for Accreditation & Academic Quality)



3.1 Advanced FDP Tracks

Faculty development programs across high-impact areas:

- Modern Manufacturing & Engineering Design pedagogy
- AI/ML Applications in Core Engineering
- Simulation software integration in teaching
- Research Methodology & Scopus/SCI publishing



3.2 Faculty Research & Publication Mentorship

ASME experts mentor faculty end-to-end:

- ASME experts guide faculty writing
- Templates for technical papers
- Pre-submission review support

Outcome: Improved research output for NAAC/NIRF.

Why it matters: Stronger faculty capability and research output directly lift teaching quality and NAAC / NBA / NIRF accreditation standing.

4. Student Career Readiness & Placement Support



4.1 ASME Career Accelerator

A structured job-readiness program:

- Mechanical aptitude test training
- Portfolio building & resume + LinkedIn optimization
- Mock technical & recorded interview practice



4.2 Job Role-Aligned Training Tracks

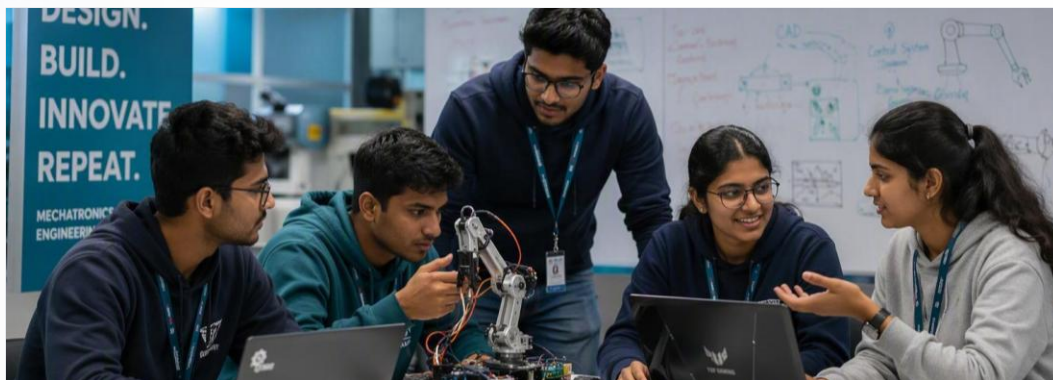
Targeted tracks for specific engineering roles:

- Product Design & Manufacturing Engineering
- Robotics, Automation & Process Control
- Maintenance / Plant & HVAC / MEP Engineer

Outcome: Much higher placement success rate.

Why it matters: Job-ready students with strong portfolios and role-specific skills convert directly into stronger placement outcomes for the institute.

5. Innovation, Research & Leadership Development



5.1 ASME Innovation Sprints

1–3 Days challenges every semester on:

- Product Design & Cyber-Physical Systems
- Industry 4.0 & Mechatronics automation
- Engineering for Sustainability & data analysis



5.2 Patent Awareness & IP Creation

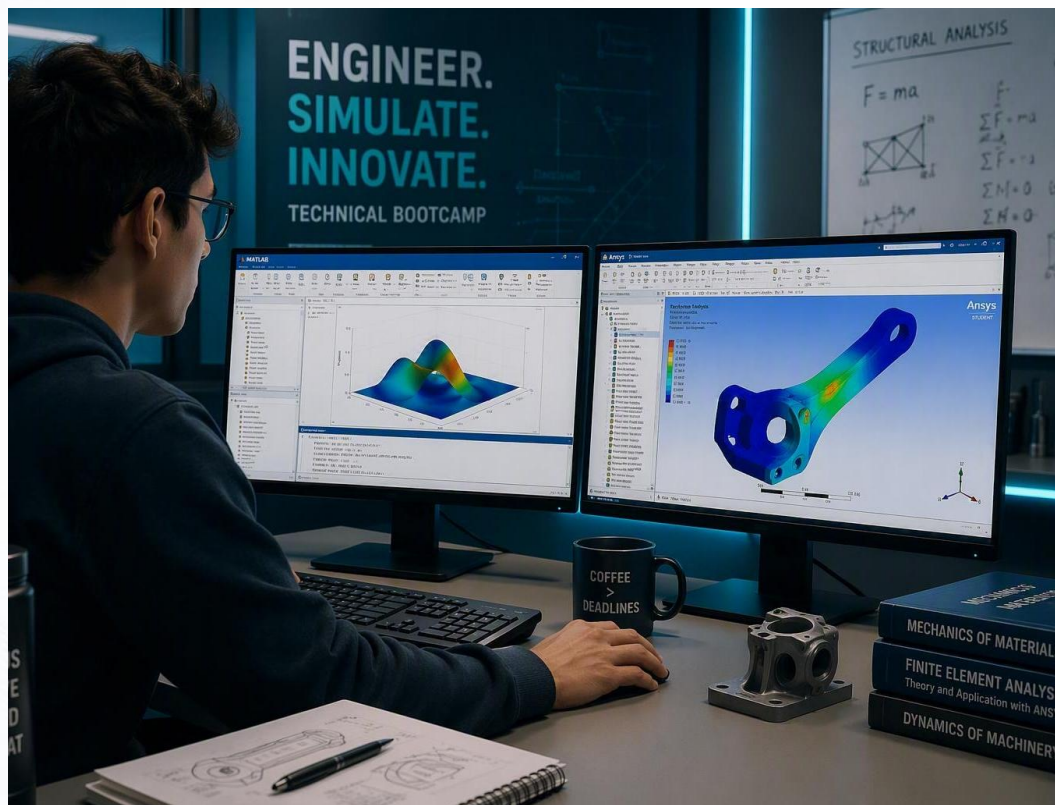
End-to-end support for student innovation:

- Patent drafting basics with templates & mentoring
- Innovation documentation guidance
- What can and cannot be patented

Outcome: Boosts ARIIA ranking & innovation ecosystem.

Why it matters: Structured innovation and IP support build a measurable research culture that strengthens national innovation rankings.

6. Industry Exposure & Hands-on Engineering



6.2 Engineering Tools Bootcamps

Fast, practical, tool-focused upskilling:

- CAD Basics in 10 Hours
- Python for Engineers & MATLAB Essentials
- ANSYS / Simulation Basics
- COMSOL for Faculty, PG & Research Scholars
- And more...

All delivered in a way that aligns with engineering fundamentals.

Why it matters: Hands-on command of industry-standard tools makes students immediately productive in real engineering environments.

7. Institute Branding & Prestige Enhancement



7.1 ASME Academic Partner Badge

Official recognition colleges can display:

- On website & in brochures
- During admissions outreach
- On campus signage



7.2 Annual ASME Engineering Conclave

Flagship event hosted on campus:

- ASME engineers & industry panels
- Project showcases
- Student competitions

Outcome: Positions the institute as a leading engineering campus.

Why it matters: A recognized partner badge and a marquee campus conclave elevate the institute's brand with students, parents and industry.

8. Governance & Long-Term Impact Tracking



8.1 Quarterly Impact Report

Shared with institute leadership:

- Students trained & events conducted
- Internship conversions
- Project outcomes & research outputs



8.2 Steering Committee

Joint oversight for accountability:

- ASME reps, department heads & faculty champions
- Student leaders
- Activities tracked via Credit Point System

Outcome: Ensures sustainability & measurable results.

Why it matters: Transparent quarterly reporting and joint governance keep the partnership accountable and its impact measurable over time.

Summary of Value Addition to Stakeholders



For Students

- Career-ready engineering training
- Engineering portfolio development
- Internship & job readiness
- Design, simulation & manufacturing skills



For Faculty

- Advanced Faculty Development Programs
- Research & publication guidance
- Curriculum support for NBA / OBE
- Accreditation-aligned documentation

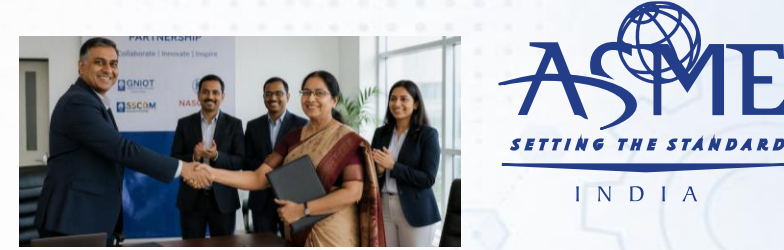


For Institute

- Real ASME-graded projects
- Annual ASME Conclave & branding support
- Innovation & IP push
- Industry visibility & accreditation edge

This becomes a **truly world-class offering**, positioning ASME as a **strategic partner** rather than just a course provider.

Partnership Categories & Value Proposition



S. No	Particulars	Gold · ₹ 5,00,000	Silver · ₹ 2,00,000
1	eLearning Licences	100	50
2	Experiential Learning Engagement (PBL)	50	25
3	Student Membership & Section	25 + 2 Faculties	15 + 1 Faculty
4	Faculty Development Program (FDP)	10	5
5	Access to Industry Leader Virtual Talk Show	Y	Y
6	Access to ASME Podcast Series	Y	Y
7	Industry-Led Technology Workshop	2 / Year	1 / Year
8	Free / Subsidized Entry to Student Hackathon	10	5
9	Free / Subsidized Entry to Efx / MEEed	10	5
10	Project Funded Faculty Development Program - CSR	1st Priority	2nd Priority
11	Project Funded Student Training Program - CSR	1st Priority	2nd Priority
12	Support for Industrial Visits	Y	N
13	Internship & Placement Support	Y	Y
	Total Value Delivered	₹ 15,00,000	₹ 8,00,000

3-Year Partnership Plan: Gold ₹ 12,00,000 · Silver ₹ 5,00,000 — institutions unlock up to 3-4× the value of their investment.

Credit Courses

Bridging Classrooms with Industry



Academic Courses & Course Structure (APP Pricing)

Course Catalog · 9 Courses (First Cohort Pricing)

#	Course	Hrs.	Cost (INR)
1	Geometric Dimensioning & Tolerancing101	45	6000
2	Finite Element Analysis101	30	5000
3	Foundation of Additive Manufacturing101	45	7000
4	Foundation of Robotics & Applications101	45	8000
5	Intermediary Robotic Systems and Industrial Applications201	45	8000
6	Principles of Welding101	30	5000
7	Fundamentals of Nondestructive Testing101	30	5000
8	Foundation of Digital Twins	45	8000
9	Foundation of AI in Manufacturing	45	8000

Course Structure

Component	Version · 30 Hrs.		Version · 45 Hrs.	
	Hybrid	Self-Learning	Hybrid	Self-Learning
Guided Learning Workshop (GLW)	12	-	18	-
Self-paced learning (e-Learning)	8	8	10	10
Capstone Project	9	9	16	16
Assessment	1	1	1	1
Duration (in Hours)	30	18	45	27
Credit System	2 credits		3 credits	

Minimum batch size: 40 learners • Credits: 2 (30 hrs) · 3 (45 hrs)

Project Categories & Selection Process for PBL

Project Categories

1 Digital Twin

6 Energy Analytics

2 AI in Manufacturing

7 Design for Additive Manufacturing (DfAM)

3 Process Control Engineering

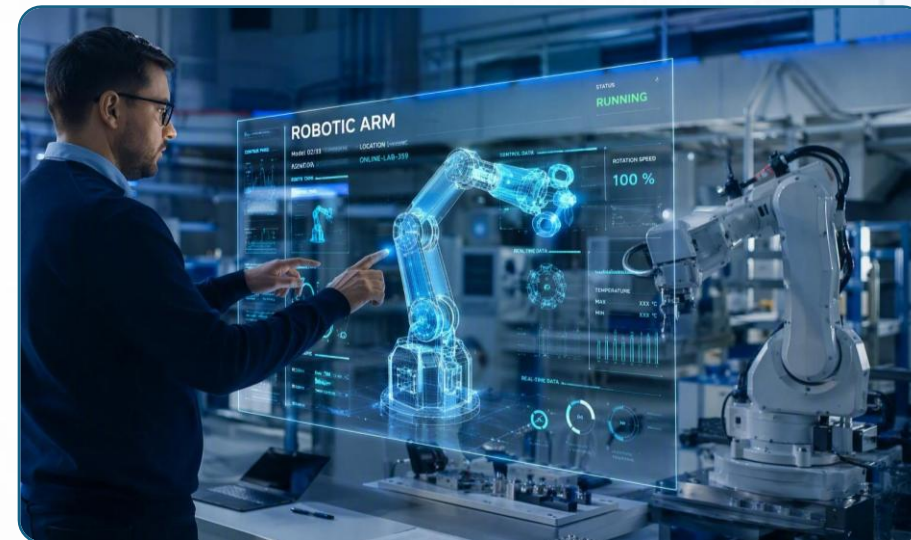
8 Finite Element Analysis (FEA)

4 Robotics & Automation

9 GD&T (Geometric Dimensioning & Tolerancing)

5 Industrial IoT (IIoT)

10 HVAC (Heating, Ventilation & Air Conditioning)



How to Select a Project Topic

Under each category, **three (3) project titles** are provided.

Students choose **any one topic** to work on, based on their interest and preference.

Cost - Rs. 4500/- Per Student (for APPs)

Self Learning Course

Course Catalog · 7 Courses (First Cohort Pricing)

#	Course	eLearning Hrs.	Project Hrs.
1	Geometric Dimensioning & Tolerancing 101	15	30
2	Finite Element Analysis 101	15	30
3	Foundation of Additive Manufacturing 101	15	30
4	Foundation of Robotics & Applications 101	18	30
5	Intermediary Robotic Systems and Industrial Applications 201	18	30
6	Foundation of Digital Twins	15	30
7	Foundation of AI in Manufacturing	15	30

Self-Learning Components



Concept / Theory / Principles

Core engineering fundamentals



Use Cases

Real-world industry applications



Case Study

In-depth applied examples



Simulations

Hands-on virtual practice

**Cost per Course – Rs. 2000/-
(for APP)**

Program Value & Institutional Benefits

Students completing the program earn a Certificate from ASME — one of the world's most respected professional engineering organizations.

✓ Industry-Aligned Curriculum

✓ Hands-on Learning

✓ Simulation-Based Training

✓ Capstone Project

✓ Globally Recognized Certificate

Curriculum Enhancement

- Industry-designed curriculum
- Ready-to-deploy program
- Minimal faculty development requirement
- Flexible integration into existing programs

Academic Excellence

- Supports Outcome Based Education (OBE)
- Aligns with Bloom's Taxonomy Level 3+
- Supports NEP skill-based learning

Institution Branding

- Association with ASME
- Globally respected certification
- Strengthens accreditation profile

Academic Differentiation

- Leader in emerging technologies
- Strengthens NBA/NAAC outcome-based education
- Improves industry collaboration
- Enhances placement outcomes

THE ASME ACADEMIC PARTNER PROGRAM (APP)

Not just a training program — A Full Academic Transformation Platform

APP reimagines how your institution builds industry-ready engineers — end to end, from curriculum to globally recognized certification.

ONLY

30

Institutes across India

Exclusive cohort for Year 1 of launch —
limited seats

FOR DETAILS, CONTACT

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