

International Professional Technologist Program – Automation (iPTP-A)

(Offered by NAMTECH School of Social Impact)



**Industry
4.0
curriculum**

Learn. Make. Evolve

Creating highly skilled world class professionals with proficiency in hands-on implementation and application of Industry 4.0 technologies



**Global
Perspective**

**World class
training
infrastructure
& faculty**



AN EDUCATION
INITIATIVE BY

**AM/NS
INDIA**

ArcelorMittal Nippon Steel India

Manufacturing

is turning smart

Manufacturing is turning smart with the advent of Industry 4.0 technologies such as intelligent automation, cyber-physical systems, and robotics. The global smart manufacturing market was valued at \$249.5 billion in 2021 and is projected to reach \$860 billion by 2031 growing at a CAGR of 13.7% from 2022 to 2031.

careers are global

India is investing heavily to attract global manufacturing firms to establish large-scale manufacturing facilities in India. This will require a future manufacturing workforce that has exposure to global manufacturing technologies and standards. **By 2027 one out of every five global workers is expected to be from India.**

sector is key to India's growth

India is estimated to become the third-largest economy in the world with a **GDP of \$ 6.25 trillion by 2030**. The manufacturing sector is key to achieving this growth and presents huge opportunities locally and globally for manufacturing professionals

Evolution of Industry 4.0 & Future of Manufacturing

80-90%

of companies worldwide want to accelerate automation



86%

of global manufacturing leaders agree smart manufacturing is an **integral part of their strategy**



84%

(of who) agree that **smart manufacturing** will increase competitiveness

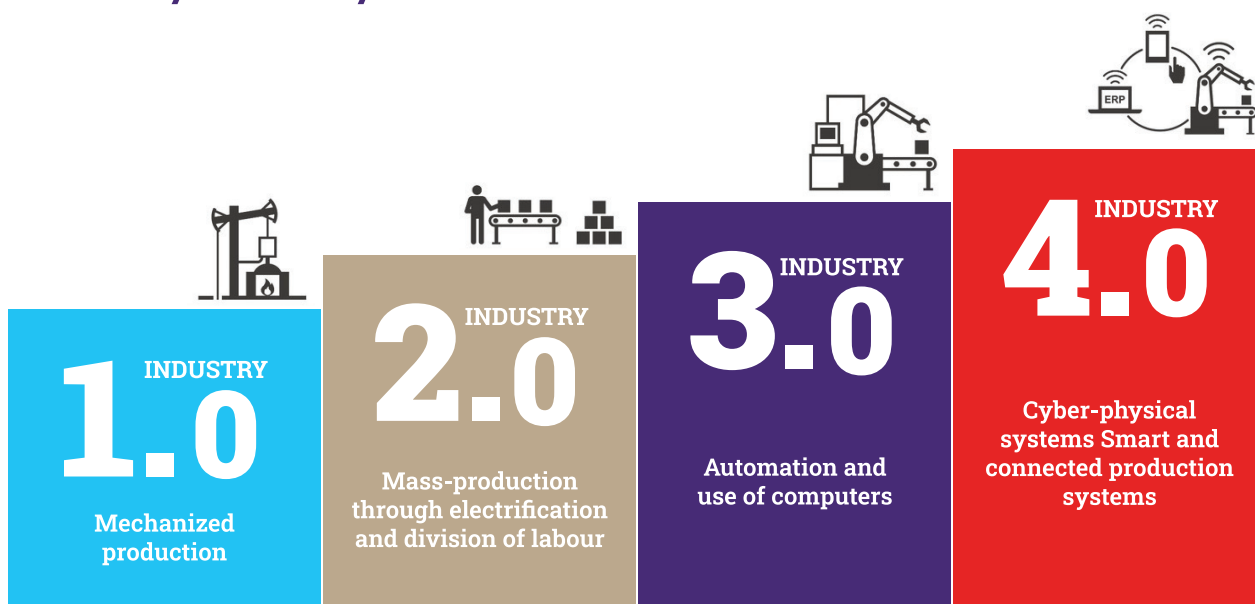


>70%

of global manufacturers expect to report **extensive Industry 4.0 deployments** by 2025



The Journey to Industry 4.0



Committed to Support Industry 4.0 Transition

NAMTECH is dedicated to empowering the next generation of enterprising learners by providing advanced training in industry 4.0 and cutting-edge technologies through tailored programs. Our goal is to create the cadre of next-generation manufacturing workforce with a global mindset rooted in Indian value systems with knowledge, and skills to thrive in the evolving technology landscape of the manufacturing industry.

About

NAMTECH School of Social Impact (NSSI)

The NAMTECH School of Social Impact works towards catalyzing the transformation of the Technical Vocational Education and Training (TVET) ecosystem to an outcome-oriented one, by sharing 'NAMTECH's intellectual capital' through on-campus programs & innovative outreach programs. NSSI aims to create a cadre of next-generation manufacturing workforce with a global skills and mindset rooted in Indian value systems.

About

NAMTECH

New Age Makers' Institute of Technology (NAMTECH), an education initiative of ArcelorMittal Nippon Steel India (AM/NS India), aims to reimagine technical education and training in the era of Industry 4.0

Our value proposition of Inspiring Human Capital is based on three pillars:



Make it yourself

With **Experiential Learning** at the core of our pedagogical model, we provide our students with a truly transformative learning experience.



Industry aligned programs

NAMTECH's curriculum is designed in collaboration with industry experts. **This focus on real-world skills & practical knowledge equips students** with the tools they need to thrive in today's dynamic job market



Inculcating timeless, yet global values

Of sustainability, solidarity, digital, industry readiness, and well-being.



Founder

ArcelorMittal Nippon Steel India

(AM/NS India)

ArcelorMittal is the world's 2nd largest steel manufacturer and operates out of 16 countries. Nippon steel is the world's 4th largest steel manufacturer and operates in more than 15 countries. ArcelorMittal & Nippon Steel have come together to bring the best of technologies in steel making to India.

AM/NS India through NAMTECH is committed towards nation building initiatives like Make in India and Atmanirbhar Bharat. NAMTECH has taken the responsibility of creating world class training infrastructure with support from its internal and global expertise in emerging technologies in areas of manufacturing, energy and aligned sustainability

About the program

International Professional Technologist Program –Automation (iPTP-A)

The iPTP-A program offered by NAMTECH School of Social Impact (NSSI), is a full-time, residential program aimed to prepare highly skilled world-class technologist in Automation. It is a one-year program offered to top-ranked ITI students and diploma holders.

iPTP-A is designed in collaboration with ITE Education Services (ITEES), Singapore with inputs from prominent industry experts in Industry 4.0. iPTP-A will equip and enable learners to pursue global job opportunities. Upon successful completion of the program, a joint certification will be provided by NAMTECH & ITEES Singapore.

The program includes 9 months of residential training in NAMTECH Campus and 3 months of internship.

The Program Offers:

Cutting-edge Tech facilities to enhance practical learning



Curriculum enriched with leading **Industry-Academia interface**



Skill-centric teaching paradigm enhances vocational competency



Knowledge and expertise to pursue **present & future careers**



Curriculum designed at global standard (ITEES Singapore)



Access to advanced Labs equipped with **Industry 4.0 technology**



Industry linkages and assured placements



Training on high-end industry grade equipment delivered by **top-notch faculty**



Joint certification by **NAMTECH and ITEES, Singapore**



Curriculum Highlights

Our transnational curriculum designed in collaboration with ITEES Singapore, opens multiple job horizons around the globe for our learners

CAD and Mechanical Applications

- Computer-Aided-Design (CAD)
- Assembly drawing
- Mechanical measurement
- Precision engineering



Electrical & Electronics Applications

- AC/DC fundamentals
- Analog & digital electronics
- In-circuit measurement
- Electrical safety



Pneumatics and Automation

- Electro- mechanical control systems
- Pneumatics and electro-pneumatics systems



PLC and Motor Control

- PLC programming & communication
- Sensor technology
- Motion control system - Stepper/Servo Motors



Cyber Physical Systems

- Cyber physical system
- Flexible manufacturing system
- Human machine interface (HMI)
- Internet of Things (IoT)



Robotics Systems

- Robot programming
- I/O interfacing
- Robotics applications
- Microcontroller



Hydraulics

- Hydraulic power transmission system
- Control system design
- Electro-hydraulic system



Life / Communication Skills

- English & communication Skills
- Interpersonal skills
- Teamwork & Decision making
- Emotional Intelligence



An impactful Collaboration with the Global Best

Academic Partner



ITEES is a principal provider of career and technical education and a key developer of national occupational skills certification and standards to enhance Singapore's workforce competitiveness

Established in 2003 with the objective of sharing TVET experience with the international community



Supports more than 30 countries in developing TVET capabilities

Brings international expertise in the technical training space

NAMTECH is the first industry driven academic partnership done by ITEES in India

Industry Partners

FESTO

Festo is global leader in hydraulic and pneumatic systems. Festo is leader in supplying automation technology and technical education solutions and caters to over 35 leading industries in industry 4.0 space.

AM/NS INDIA

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Schneider Electric

Schneider is a French company & a global giant in electrical power distribution and energy conservation equipment space and specializes in digital automation and energy management.

ASDC

The Automotive Skills Development Council (ASDC) is a joint initiative of the Government of India, the Society of Indian Automobile Manufacturers (SIAM), the Automotive Component Manufacturers Association (ACMA) and the Federation of Automobile Dealers Associations (FADA). It is the first Sector Skill Council of India and was established to build a sustainable skill development ecosystem to ensure adequate availability job-ready and quality workforce to meet the automotive industry requirements.

Micron

Micron is a global pioneer in groundbreaking memory solutions that revolutionize the way the world utilizes information. For more than 45 years, Micron has played a crucial role in the world's most significant technological advancements, by delivering optimal memory and storage systems for various applications.

CISCO

Cisco is an American multinational digital communications technology conglomerate corporation. Their products and services include networking, collaboration solutions, security solutions, wireless and mobility, data center, Internet of Things (IoT), video, analytics, and software solutions.



Industry partners bring in opportunities for internships, learning from industry experts, and greater industry immersion



Provide support for establishment of industry 4.0 labs, and commissioning of industry grade equipment's



Designing of training kits, and other teaching-learning aids



Enhance placement prospects by offering access to diverse job opportunities, and a direct connection to potential employers.



Increased industry exposure enables students to engage in meaningful capstone projects to bridge theory and practical application.

INVESTING in you for India's FUTURE

India's manufacturing dreams is dependent on enabling establishment of relevant industry and creating human capital that can work in those industries. NAMTECH is taking a small step of creating industry ready workforce by investing in you. It offers you a platform to equip yourself with industry-aligned skill sets to pursue a gainful career.

Committed to fostering diversity, inclusivity, and cultivating the invaluable human potential that propels nation's development, NAMTECH is offering scholarship to exceptional students hailing from diverse socio-economic backgrounds

Get Ready for a Global Career

Collaborative insights from our global academic and industrial partners has enabled us to create a program that empowers our learners to pursue a career globally. The iPTP program aims to provide skill sets from both technological systems and operating systems.



Calling all Enterprising Learners

NAMTECH invites ITI Certificate & Diploma holders to enroll in our iPTP program & explore the opportunities for global careers, be a part of competitive workforce that will help India become a global manufacturing hub.

Eligibility criteria

ITI Students

ITI Certificate holder or pass out from year 2020 onwards in 2 Year trades of **Fitter, Electrician, Electronic Mechanic, Instrumentation mechanic** are eligible

Should have obtained **60% or more marks** (aggregate)

Diploma Students

Diploma pass outs from year 2020 onwards in **Electrical, Electronics, Mechanical, Mechatronics, and Instrumentation and Control discipline** are eligible

Should have obtained **60% or more marks** (aggregate)



Note: For experienced candidates, work experience in relevant disciplines is preferred.

Scholarships and Fee Structure

	Actual Fee (₹)	NSSI Scholarship	Fee Applicable (In INR, to be paid by candidates)
Academic fee	250,000	100% (for Diploma, ITI and female students)	Nil (for Diploma, ITI and female students)
Hostel, food and transport charges	200,000	Diploma – 70% ITI – 85% All Female Students – 93%	Diploma – 60,000 ITI – 30,000 All Female Students – 15,000
Total fees	450,000	-	Diploma – 60,000 ITI – 30,000 All Female Students – 15,000

Security Deposit

Refundable security deposit of ₹ 5000 at time of admission (refundable at end of the program)

Payment Schedule

Fee payment to be done in two installments:

1. On admission
2. End of second trimester

Inclusions

The program fee is inclusive of academic fee, hostel, food, and transportation charges for first 9 months.

Application and Process

1

Nomination by Head of ITI /Diploma institutions
OR Direct apply

2

Online Application on
www.namtech.ac

3

Entrance test during application form
fill-up

4

Personal Interview, and Counselling at NAMTECH
campus, Research Park, IIT Gandhinagar

5

Selection confirmation by e-mail and on
www.namtech.ac

Program Schedule

Last Date to apply
29/02/2024

Program commencement
at IIT Gandhinagar campus
15/03/2024



NAMTECH Campus

On the banks of Sabarmati,
Nestled within the precincts of IIT Gandhinagar,
And at the crossroads of values and
global growth opportunities

NAMTECH's state-of-the-art learning facility is located at Research Park, IIT Gandhinagar.

Strategically located around some of the fastest-growing industrial hubs in the country which provides easy access to future employers, meaningful internships and professors of practice.



Scan the code
to **APPLY**

NAMTECH

New Age Makers Institute of Technology

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