



Empowering MSMEs

The Role of Skill & Training Centres
in Pune's Industrial Growth

mcca[®]

MAHARATTA CHAMBER OF COMMERCE,
INDUSTRIES AND AGRICULTURE

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FOREWARD

Micro, Small, and Medium Enterprises (MSMEs) are the backbone of India's economy, contributing significantly to employment, innovation, and industrial growth. Pune, with its strong industrial base and vibrant entrepreneurial ecosystem, plays a pivotal role in this sector. However, as industries evolve with rapid technological advancements and shifting market dynamics, the need for continuous skill development and upskilling has never been more crucial.

This report highlights the various skill and training centers in Pune that are dedicated to empowering MSMEs by bridging skill gaps and fostering technological adaptability. These institutions provide specialized training programs tailored to industry needs. Their efforts ensure that MSMEs are well-equipped to embrace new opportunities, enhance productivity, and stay competitive in an increasingly digital and automated world.

By documenting the contributions of these skill development centers, this report serves as a valuable resource for MSMEs looking to leverage training opportunities to drive business growth. We hope this comprehensive overview inspires businesses, policymakers, and industry leaders to invest in skilling initiatives that strengthen Pune's position as a leading industrial hub.

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INTRODUCTION

In India, Maharashtra has the maximum number of MSMEs operating businesses. Within Maharashtra, Pune alone accounts for approximately 25% of MSMEs, contributing significantly to employment, innovation, and industrial growth. However, to remain competitive in an evolving market, skill development and continuous training are crucial for MSMEs. MSMEs in Pune operate in diverse sectors, including manufacturing, IT, automotive, food processing, and engineering services. While they contribute significantly to the local and national economy, they often face challenges related to technology adoption, financial literacy, marketing, and quality control. Structured skill development programs are essential to address these challenges and ensure long-term sustainability. Pune has a thriving ecosystem for MSMEs, with multiple upskilling centers designed to equip them with the necessary skills to enhance productivity, innovation, and efficiency. These centers play a crucial role in helping MSMEs adapt to technological advancements, market demands, and regulatory compliance.

The importance of upskilling centers for MSMEs cannot be overstated. As the city continues to be an industrial and economic powerhouse, the role of structured training programs becomes even more crucial. These centers not only help MSMEs overcome challenges but also prepare them for future opportunities in a rapidly evolving business landscape. Investing in skill development ensures sustainability, innovation, and long-term success, making it imperative for MSMEs to leverage these upskilling resources to stay ahead in the market.

Pune is home to several skilling and upskilling centers that cater specifically to MSMEs. These institutions provide specialized training in various domains to bridge skill gaps and improve operational efficiencies. In this report discuss about these upskilling Centres and how they are contributing to skilling MSMEs.



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1.

THE AUTOMOTIVE RESEARCH ASSOCIATION OF INDIA

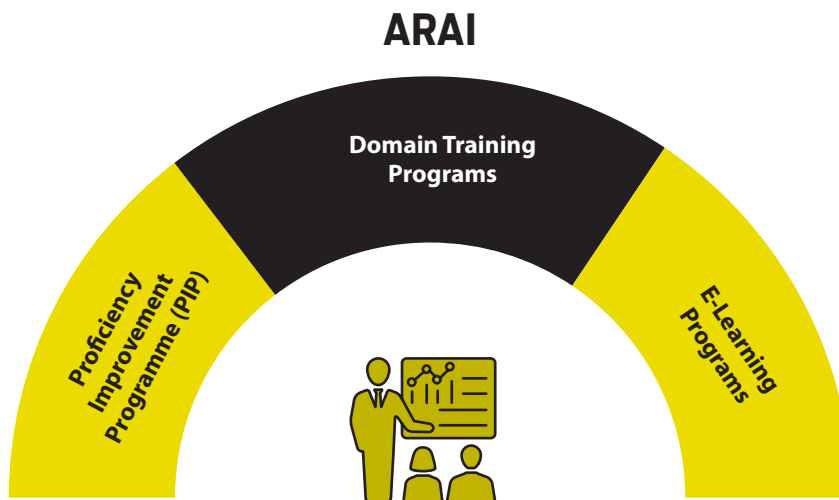
It is a very well-known fact that Pune is known for its automotive sector, one of the main backing factors for this is also presence of ARAI in Pune. ARAI is a leading automotive R&D organization of the country set up by the Automotive Industry established in 1966 with the Government of India.

ARAI is an autonomous body affiliated to the Ministry of Heavy Industries, Government of India. The Department of Scientific and Industrial Research, Ministry of Science and Technology, Government of India, has recognized ARAI as a Scientific and Industrial Research Organisation (SIRO). Further, ARAI is a prime Testing and Certification Agency notified by Government of India under Rule 126 of Central Motor Vehicle Rules, 1989.

But it is a lesser-known fact that ARAI also has its own academy. ARAI Academy offers various Proficiency Improvement Programmes (PIPs). It offers knowledge and technical expertise as per the latest industry standards on wide range of automotive disciplines. It helps in understanding systems view point for automotive design and manufacture, with specific skills in formulating automotive engineering solution in terms of their function and performance, through optional modules.

Every year ARAI offers 30+ training programmes and more than 1400 delegates are trained.

The various training programs offered by ARAI are as follows



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Proficiency Improvement Programme

These Programs are mostly 2- days certificate programs or seminars on topics like

- Electric vehicle NVH
- High voltage safety for electric vehicles
- Hybrid electric vehicle
- Automotive cybersecurity – advanced
- Role of AI/ML in EV applications

These are some examples of courses. These courses are up to date with current trends and accordingly such more programmes coming up and revised continuously.

These programs are also offered through online mode. To make these courses highly engaging and effective ARAI use real-life industry scenarios, visually rich graphic icons and images. They also use animations to explain working and processes wherever required.

Domain Training Programs

ARAI Academy conducts Domain Training Programmes for engineers from Automotive & Allied Industries and Service Providers. It can be conducted at ARAI or at any other place. These Domain Training Programmes are customized, based on the requirement.

Automotive Engineering	Powertrain Engineering	Engine Design & Development	DEMEA for Engine Systems
Automotive Testing & Certification	Fundamentals of Air Intake, Exhaust and After Treatment Deices with NVH Analysis	Engine Cooling Systems	Failure Analysis of Engine & Engine Components
Automotive Electrical & Electronic Systems with Emphasis on 2/3 Wheelers	Engine Testing & Certification	Testing of Seating System	Fundamentals of Automotive Electricals and Electronics
Heat Treatment			



2.

CENTRAL INSTITUTE OF ROAD TRANSPORT

The Central Institute of Road Transport was established as a joint initiative of the Ministry of Shipping & Transport & the Association of State Road Transport Undertakings in 1967. The main vision of CIRT is to improve the efficiency & productivity of the transport sector, with particular emphasis on the State Transport Units. CIRT has been offering technical training, consultancy and automobile component testing services to the STU fraternity for the last 45 years.

CIRT provides management development courses in maintenance engineering, transportation operations, and general management. The programs are intended for managers in STUs and other transportation service providers, in addition to road transport officials. Each program lasts from one week to four weeks and is residential in nature.

Training programs are offered by CIRT's Management Development Center (MDC), which has existed since 1967. Over 54,000 senior officials from a consortium of automotive component manufacturers, vehicle manufacturers, bus body builders, freight operators, private operators, motor vehicle departments, police departments, state transport undertakings, municipal corporations, and development authorities have been trained by CIRT through more than 1800 training programs, including three-, one-, two-, and thirty to forty-five-day foundation programs.

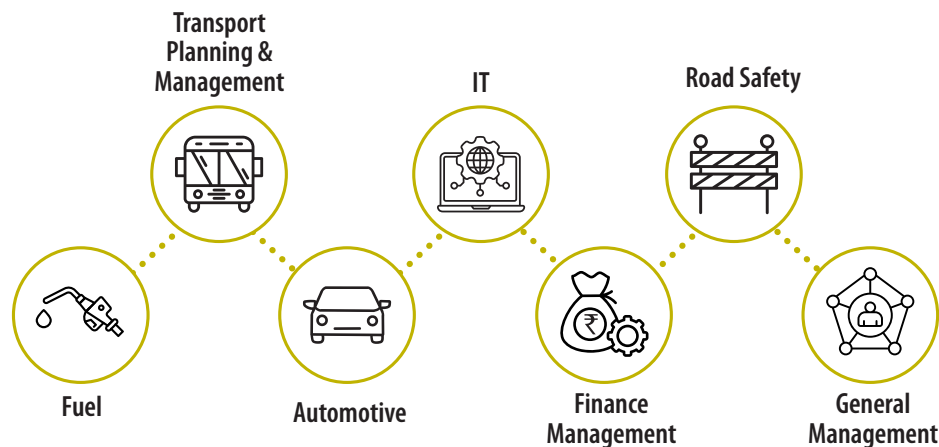
CIRT offers following alternatives for training to best suit the needs of clients

Foundation Training Programme for newly recruited officers	The training duration ranges from 30 to 40 days
Advance Training Programme	These are thematic training programmes of mostly one week duration
Allied Training Programmes	These programmes are of contemporary type, designed to address the needs of day-to-day management like General Management, Right to information, Stress Management, Soft Skills etc
In-Situ Programmes	To meet the specific needs of the client organisation, the institute conducts programme in their premises
Customised Solutions	The programmes are intended for meeting the specific needs of the stakeholders.



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Apart from these trainings they also cover technical modules such as



Indian Machine Tool Manufacturers' Association (IMTMA) – Manufacturing Technology Training

The Indian Machine Tool Manufacturers' Association (IMTMA), established in 1946, is the apex industry body for the machine tool sector in India. It comprises large, medium, and small-scale units, including manufacturers of metalworking machine tools, accessories, and ancillary equipment. IMTMA's primary objectives are to enhance the competitiveness, technology, productivity, and quality of the Indian machine tool industry. The association actively supports initiatives aimed at advancing the metalworking manufacturing sector in the country.

To promote skill development, IMTMA has established Technology Centres in Bengaluru, Pune, and Gurugram. IMTMA has trained around 41,901 Participants through 2,311 training programs.

These centres offer hands-on, on-site, and online training programs for both fresh engineers and industry professionals. The Pune centre, in particular, provides specialized courses to meet the needs of the local industry.

IMTMA conducts short term 'Seminars & Workshops,' organises 'Technology Mission' to international Trade fairs for CEOs and voices the 'demands of the industry' to the government.

The Association also conducts training programs throughout the year, with skill development as its motto. Through various long term and short-term training programs the Association bridges the gap between the academics and the industry requirement and upskill the working professionals for the benefit of the machine tool industry.

The IMTMA cover a wide range of trainings through its different department institutes. Details are as follows

Productivity Institute

The IMTMA Productivity Institute is well-equipped with CNC machines, CMM, CAD/CAM systems, and industrial automation accessories to provide hands-on training for both working professionals and fresh engineers.

The institute aims to make participants industry-ready as Production or Automation engineers. It offers practical, short-term training programs lasting 2 to 5 days for professionals across various functions, including Design, Manufacturing Engineering, Production, Assembly, Quality Assurance, Maintenance, and Automation.

Additionally, career-oriented hands-on courses spanning six weeks are available, specializing in Production Engineering and Industrial Automation, to prepare new recruits for industry roles.



Design Institute

IMTMA has also established a high-end design institute for the cause of moulding fresh engineers into specialized machine tool designers. IMTMA Design Institute aims to extend the Machine Design Training programmes to machine tool and other companies for the benefit of training their fresh hires. IMTMA Design Institute provides a comprehensive course on machine design to meet the above challenges in industry and make them more employable and productive.

eLearn

IMTMA has developed self-paced E-learning courses which are simplified and presented in an understandable manner with an industry application oriented approach.

They have the following industry-relevant subjects in which about 75 Hours of Learning content are available.

- Geometric Dimensioning and Tolerancing (GD&T)
- Failure Mode & Effects Analysis (FMEA)
- Overall Equipment Effectiveness (OEE)
- Fundamentals of Painting & Coating Applications (PC)
- Selection, Assembly & Troubleshooting of Linear Motion Guideways (LMG)
- Selection, Assembly and Troubleshooting of Ball Screws (BS)
- Heat treatment-Metallurgy and Processes (HTMP)
- Arc Welding Processes (ArcWP)
- Advanced Welding Processes (AWP)
- Gear Manufacturing (GM)



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3.

NAFARI

The National Agriculture and Food Analysis and Research Institute (NAFARI) is a premier institute based in Pune that provides specialized training, research, and consultancy services in agriculture, food processing, and allied industries. Established with the objective of promoting food safety, quality control, and innovation, NAFARI plays a significant role in supporting MSMEs operating in the food and agribusiness sectors.

National Agriculture & Food Analysis & Research Institute (NAFARI) is established since 2002 and is promoted by the Consortium of Food Industry & Trade (COFIT) and Maharashtra Chamber of Commerce, Industries and Agriculture (MCCIA) Pune, with support from the Ministry of Food Processing Industries MFPI (GOI), SIDBI, NABARD, and UNIDO. NAFARI is an autonomous, not for profit organization, registered under Section 8 of the Companies Act 2013. The Institute is recognized by the Department of Scientific and Industrial Research (DSIR), Government of India for In-house R&D unit. NAFARI is also an Approved "PAN India Training Partner" of "FoSTaC" under Food Safety Standards Authority of India (FSSAI) to conduct mandatory Food Safety Supervisor Training Programs.. At NAFARI, we provide 360°C services to the food industry & its supply chain including Food Analysis, Training & Education, and Consultancy Services related to Product / Process Development etc. These services are provided not only to the region near Pune, but are also made available across India & also to NAFARI clients from overseas.

The NAFARI cover a wide range of short term trainings, such as follow:

- Export Marketing & Capacity Building
- Training to SHGs, FPOs, MSMEs & Women Entrepreneurs on Branding, FSSAI Labelling Regulations, Licensing & Packaging Technologies.
- FoSTaC: NAFARI is an approved "Training Partner" of FoSTaC" under FSSAI to conduct these mandatory Food Safety Training Programs and recommend certification of the candidate to FSSAI.
- Storage and handling of food and its preservation
- Quality Assurance and Food Safety Management System
- Training on FSSC 22000, HACCP, ISO22000 - Awareness implementation
- Packaging of Food Products
- Food Legislation and labelling for fruit processing Jams, Jellies, Sweets and Other Products
- Business Development Program.
- FSSAI (Food Law's Act and Regulations)
- Street Smart Program on Food Hygiene and Sanitation for Street Food Vendors/Hawkers
- Open Day Events and Interaction: For Networking, Sharing Ideas and Showcase Industry Good Manufacturing Practices
- Operational Excellence Program on 5S, 7 QC tools, Problem Solving & Kizen.
- FSSAI: Food Labelling and Regulation.
- Practical Oriented Training on Fruit Processing – Jam, Jelly, Ketchup & Puree.
- Practical Oriented Training on Bakery Processing – Bread, Cake, Cookies & Puffs.
- Practical Oriented Training on Food Microbiology Techniques.



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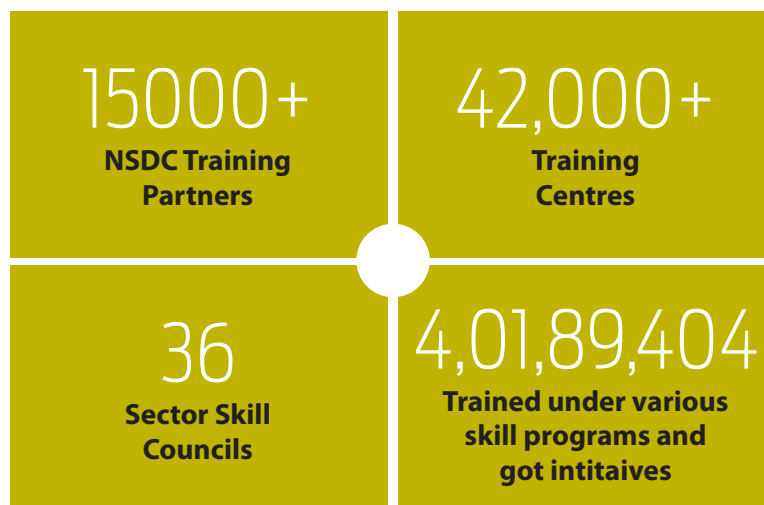
4.

NATIONAL SKILL DEVELOPMENT CORPORATION

The National Skill Development Corporation (NSDC), established in 2008 under the Ministry of Skill Development & Entrepreneurship, operates as a Public-Private Partnership (PPP) to strengthen India's skill ecosystem. With 49% government and 51% private sector ownership, NSDC drives vocational training through funding support, concessional loans, and strategic initiatives. As a key partner of the Skill India Mission, it fosters industry-aligned training, promotes futuristic skills, and empowers youth to contribute to national growth.

NSDC, prioritises initiatives that create a multiplier effect rather than directly operating in the skill development space. Their strategy emphasises industry engagement at every stage, fostering partnerships with multiple stakeholders and enhancing existing efforts instead of duplicating them. To scale their impact and achieve the goal of skilling or upskilling 150 million people, they focus on collaboration and strategic expansion.

NSDC has



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Till date, they have trained under various schemes of Government of India.

NSDC is itself situated in Pune and offers a significant advantage for MSMEs by enhancing access to a skilled workforce and industry-aligned training programs. As a major educational and industrial hub, Pune provides MSMEs with a steady pipeline of trained professionals, helping them stay competitive in evolving markets. NSDC fosters collaboration between industries and training institutions, ensuring that skilling initiatives are tailored to the specific needs of MSMEs. Its presence also strengthens MSMEs' integration with government initiatives, ensuring compliance with industry standards and expanding their market reach.

NSDC conducts training under the following GoI initiatives

- Pradhan Mantri Kaushal Vikas Yojana (PMKVY)
- PM Vishwakarma
- Technical Intern Training Program
- Seekho or kamado
- Entrepreneurship and Skill Development Programme (ESDP)
- Assistance to Training Institutions Scheme

The National Skill Development Corporation (NSDC) conducts training programs through extensive collaboration with over 40 Sector Skill Councils (SSCs), designing industry-specific programs based on emerging trends and market requirements. It works with a wide network of accredited training partners across India, offering both hands-on and classroom-based training. The focus remains on addressing sector-specific skill gaps to ensure trainees are industry-ready. NSDC adopts a blended learning approach, combining traditional classroom sessions with digital learning through platforms like eSkillIndia for flexible access. Many programs include placement assistance, entrepreneurship support, and financial literacy to encourage self-employment and business creation. Special emphasis is placed on high-priority sectors such as manufacturing, IT, logistics, retail, hospitality, digital marketing, and artificial intelligence.



5.

SWAYAM SHIKSHA PRAYOG

Swayam Shikshan Prayog (SSP) was founded in 1998, following its collaboration with the Government of Maharashtra on the Latur earthquake reconstruction project, which covered 1,200 villages. SSP transformed a traditional beneficiary program into a pioneering, community-driven initiative led by women.

To date, SSP has impacted over 6 million people and empowered more than 300,000 women, predominantly from farming communities, to revitalize agriculture, build enterprises, and take on leadership roles in their households, communities, and local economies. Its efforts have earned numerous national and global recognitions, including the UNDP Equator Award for Women and Agriculture, the UNFCCC Lighthouse Award for Climate Change, and the Schwab Foundation Social Entrepreneur Award between 2017 and 2019.

With a focus on empowering women in water-scarce and drought-prone regions across seven states in India, SSP primarily works with women's farmer collectives in Maharashtra's Marathwada region. SSP has also has its presence in Pune as well.

Their one of the major initiatives is fostering Women Entrepreneurship

They provide Training and leadership for women entrepreneurship to give them social capital to catapult into business Leadership. So that they can become ready to secure funding through investors pitch.



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6.

SYMBIOSIS CENTRE FOR ENTREPRENEURSHIP AND INNOVATION

Symbiosis Centre for Entrepreneurship and Innovation is a 'Technology Business Incubator Centre' which also has its presence in skilling and training in entrepreneurial space for existing and new entrepreneurs. The centre is established by Symbiosis International University (SIU) and supported & promoted by the Department of Science and Technology, Government of India.

It is been established as a Section 8 (Not for Profit) company, with a mission of fostering and encouraging entrepreneurship in order to support socioeconomic development in the area. At SCEI, we consider entrepreneurship to be a mindset.

SCEI acts as a growth accelerator for technology start-ups by utilizing Symbiosis's sophisticated research skills in fields such as waste management, medical imaging, health technology, AI/ML, nanotechnology, etc.

The centre has a special focus on training entrepreneurs and creating & developing entrepreneurial ecosystem.

The centre has focus on training in following domains

- Pre-Incubation
- Certificate in Entrepreneurship with Design Thinking
- Women Entrepreneurship Development Program
- 3 D Printing
- IOT

Mind to Market (M2M) Pre- Incubation

It is a 12-week-long pre-incubation Programme in online mode with the aim of developing an entrepreneurial mindset and nurturing innovative ideas.

They follow a three-step approach,

- Training
- Mentoring
- Ideation Workshop
- The training takes place in the following manner



Certificate

Network with industrial
Experts and Trainers

Over 12 Weekends of live
instructor-led immersive
experience

Exclusive training videos
and live online sessions with
entrepreneurs & investors



Certificate in Entrepreneurship with Design Thinking

The Certificate in Entrepreneurship with Design Thinking (CEDT) is a hands-on course, facilitated by startup mentors, entrepreneurs, investors, business founders, etc., is aimed at equipping participants for a growing career trajectory in the times to come.

Women Entrepreneurship Development Programme

SCEI's Women Entrepreneurship Development Programme (WEDP) empowers aspiring and early-stage women entrepreneurs to launch and grow businesses aligned with their talents, interests, and skills. The program combines live training sessions, group and individual mentoring, hands-on experiential tasks such as market research, and valuable feedback on venture progress. Delivered by entrepreneurs, investors, and industry experts, WEDP also provides participants with additional support through SCEI's Women Entrepreneurship Wing (WeW). WeW extends nurturing assistance by offering incubation, personalized mentorship, and connections to market specialists, further enhancing the entrepreneurs' growth journey.

Internet of things

It is a 20-hour program and an experiential learning with the internet of things. The training equip trainers with ability to develop a sophisticated IoT prototype & seamlessly connect into the world.

3 D Printing

Under 3D printing training enable the Participants to understand the significance of 3D Printing Technology in Prototyping and also help equip participants with the knowledge and skills required to successfully execute 3D printing of complex designs.



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7.

C4i4 LAB – CENTRE FOR INDUSTRY 4.0

The Centre for Industry 4.0 (C4i4 Lab) is a premier advisory hub guiding manufacturing enterprises through the adoption of Industry 4.0 technologies. Established as an initiative of the Ministry of Heavy Industries, Government of India, C4i4 Lab is dedicated to driving organizational transformation by facilitating a seamless transition to advanced manufacturing technologies. Through strategic industry engagement, it ensures businesses are well-prepared to embrace technological advancements that lead to significant cost savings and improved efficiency. The lab achieves this by offering exposure, hands-on experience, a conducive learning environment, and expert education. Emphasizing the power of innovations such as Industrial IoT, Connected Factories, Artificial Intelligence, and Discrete Event Simulation, C4i4 Lab is currently developing a cutting-edge experience center to showcase these transformative solutions. Committed to accelerating Industry 4.0 adoption, making Indian manufacturers globally competitive, and fostering a technologically advanced ecosystem, C4i4 Lab stands at the forefront of shaping the future of smart manufacturing.

C4i4 has an initiative of iFactory Network which is based in Pune. At iFactory Training, they offer a dynamic learning experience designed to prepare businesses for revolutionizing the landscape of Industry 4.0. Their comprehensive programs cover

- Advanced automation techniques
- Data analytics
- AR/VR applications
- Digital twin technology
- IoT integration strategies and more.

The trainings are conducted by industry experts, which includes both theoretical and practical sessions, enabling participants to design, implement, and optimize strategies for digital transformation. Through interactive learning experiences, participants gain insights into the potential of Industry 4.0 technologies to revolutionize manufacturing operations.



8.

AUTO CLUSTER DEVELOPMENT AND RESEARCH INSTITUTE

Auto Cluster Development and Research Institute is a Common Facility Centre located in the Chinchwad-Talegaon-Chakan in the district of Pune. The Auto Cluster was set up in 2006-07 under the Industrial Infrastructure Up-gradation Scheme (IIUS) of the Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, Government of India (GoI). Supported by Government of Maharashtra (GoM), Pimpri Chinchwad Municipal Corporation with the initiative of Maharashtra Chamber of Commerce, Industries and Agriculture (MCCIA).

The primary goal of the Auto Cluster is to assist MSMEs in meeting their developmental requirements, to promote innovations and collective learning in the areas of product design and development to local industry by providing appropriate and focused support. Also, enabling them to align with OEM expectations regarding product development, quality, reliability, and cost competitiveness. ACDRI also extends additional support to help MSMEs in appropriate technology transfer and adoption of new technologies.

Auto Cluster also focuses on Upskilling of MSMEs. Auto Cluster has signed MoU with many Educational Institutes for sharing knowledge, Industry Awareness.

Auto Cluster, through its dedicated Skill Development Team, conducts specialized training programs aimed at empowering MSMEs with industry-relevant skills.

- **3D Printing** – This program provides hands-on training in additive manufacturing, covering design, prototyping, and production applications.
- **CREO Design Software** – Focused on 3D CAD modeling.
- **Embedded Systems**
- **Welding Technology** – A crucial program for the manufacturing and fabrication sector, this training covers various welding techniques, safety protocols, and quality assurance for industrial applications.



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Mahratta Chamber of Commerce, Industries and Agriculture

The Maharashtra Chamber of Commerce, Industries and Agriculture (MCCIA) is one of India's Oldest Chamber of Commerce established Pre-Independence. MCCIA was established in 1934, to promote industrial and economic growth in the region and beyond. MCCIA serves as a platform for businesses, industries, and entrepreneurs to collaborate, share knowledge, and advance economic development.

In the previous fiscal year 2023-24, MCCIA impacted 9,335 participants across 2,637 companies through 201 events, showcasing its proven capacity in organizing business-focused training programs.

Conclusion

Pune's thriving MSME ecosystem benefits immensely from a strong network of skill development and training centres that cater to diverse industries. These Institutions play a crucial role in equipping businesses with the necessary skills to remain competitive in an evolving market. These centres offer specialized training programs, industry collaborations, and technological advancements to ensure MSMEs are prepared for future challenges and opportunities. By addressing skill gaps, promoting innovation, and fostering sustainable growth, these institutions collectively enhance Pune's position as a hub for industrial and economic development. As the demand for skilled professionals continues to rise, leveraging these resources will be key to driving the success and sustainability of MSMEs in the region.



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