



## STUDENT ELIGIBILITY FOR ADMISSION

- ITI in Turner/ Machinist/ Fitter/Machinist Grinder/ Mechanic Machine Tool Maintenance.
- Diploma or B. Tech/ B.E. in Mechanical/ Industrial/ Production Engineering.

## ACADEMIC SCHEDULE

Admissions are accepted twice a year for 240 students

- January Cycle - 120 seats
- July Cycle - 120 seats
- Admission based on merit marks obtained in ITI / Diploma/ B.E/ B.Tech
- Reservation : As per Government norms
- 5% reservation for international candidates
- 30% reservation for women
- Scholarship to eligible trainees under Mukhyamantri Jan Kalyan Yojana

## PLACEMENT OPPORTUNITIES

- Students gain expertise in programming complex 3D profiles on FANUC and Siemens controllers and manufacturing parts on CNC machines.
- After successful completion of the course the candidates will become CNC programmers, experts in CAD/CAM, CNC machine operator, Quality Assurance Technicians and Supervisors.
- Excellent job opportunities in precision engineering sectors like automobile, aerospace, biomedical, heavy engineering, capital goods, defence, tool room, in India and abroad.



## PLACEMENT AND ON JOB TRAINING PARTNERS OF SSR GSP-CC



For more information please visit  
[www.globalskillspark.mp.gov.in](http://www.globalskillspark.mp.gov.in)  
 Or Call on 0755-2925649

## OUR PRIDE



Shivam Singh (Diploma)  
JSW Abu Dhabi (U.A.E.)



Karan Saliya (B.E.)  
Jaivel Aerospace  
Ahmedabad



Ashish Sharma (B.E.)  
JBM Group, Ahmedabad



Hariom Punde (B.E.)  
JBM Group, Pant Nagar



Arun Mishra (B.E.)  
Harsha Engineering  
International Ltd.



Avanish Singh (Diploma)  
Omega Rank Bearings  
Pvt. Ltd., Bhopal



Jyoti Bhilodiya (B.E.)  
Crompton Greaves,  
Mandideep



Anand Singh (Diploma)  
Volvo Eicher Powertrain,  
Pithampur



Karishma Singh (B.E.)  
International Ltd.  
Ahmedabad



Mo. Afzal (B.E.)  
Bangera Product Pvt. Ltd.  
Mandideep



Shivendra Kushwaha (Dip)  
Omega Rank Bearings Pvt.  
Ltd., Bhopal



Mohit Vishwakarma (ITI)  
JSW Abu Dhabi (U.A.E.)



Hariom Rajput (ITI)  
JSW Abu Dhabi (U.A.E.)



Ankit Gavande (ITI)  
JSW Abu Dhabi (U.A.E.)



Lokesh Makode (ITI)  
Welspun Corp Pvt. Ltd.,  
Anjar - Gujarat



Nisha Kori (ITI)  
Bangera Product Pvt., Ltd.  
Mandideep



Shivam Malviya (Dip)  
VEPT, Pithampur



Amit Dhaker (Diploma)  
VEPT, Pithampur



Tulsi Vishwakarma (ITI)  
JCB, Jaipur



Vivek Soni (B.E.)  
Light Guide Optics Pvt. Ltd.  
Indore

## SSR Global Skills Park- City Campus (SSR GSP-CC)

ITI Govindpura Campus, Raisen Road, Bhopal, M.P.  
 Tel: 0755-2925649, Email: admission.SSR GSP@mp.gov.in  
 Website: [www.globalskillspark.mp.gov.in](http://www.globalskillspark.mp.gov.in)

Directorate of Skill Development, Department of Technical Education,  
 Skill Development and Employment, Government of Madhya Pradesh



## SANT SHIROMANI RAVIDAS GLOBAL SKILLS PARK (SSR GSP)

DEPARTMENT OF TECHNICAL EDUCATION, SKILL DEVELOPMENT & EMPLOYMENT  
 GOVERNMENT OF MADHYA PRADESH



## SSR GLOBAL SKILLS PARK

### City Campus (GSP-CC)

SSR Global Skills Park aims to develop highly-skilled workforce for the state, nation and the world to meet the growing economic demands.

Global Skills Park City Campus (GSP-CC) is established to cater to the Precision Engineering sector and offers a 1-year course “Advance Certificate In Precision Engineering”.

It is modelled on international institutions with state-of-the-art infrastructure including high-end laboratories, international quality equipment, industry demand mapped courses delivered through the finest trainers available in the country.

### KEY FEATURES

- Tie-up with ITEES, Singapore for course design, training and certification.
- World-class state-of-the-art facilities and equipment including:
  - ❖ Multi-axis CNC machines, 5-Axis CNC and 4-Axis CNC (from DMG Mori, Germany).
  - ❖ CNC Turning and CNC Milling Machines and Turn-mill centre with Fanuc Siemens and Mitsubishi controllers.
  - ❖ CNC EDM Wire Cut (Submerged, Flushed and Smart EDM Drill Machines).
  - ❖ Advanced CAD-CAM lab.
- ❖ Metrology Lab with Coordinate Measuring Machine (CMM), Profile Projector, Optical Microscopic Projector, Roundness Tester and all measuring instruments.8130168864
- ❖ Conventional precision milling, turning and grinding machines with DRO.
- Industry-like workshops & on-the-job exposure through industry tie-ups for internships.
- Special focus on communication, computer, IT & leadership development skills.
- One machine per student for training.
- Overall personality development through extra-curricular activities.

### COURSE OFFERED

**Course Name:** Advance Certificate in Precision Engineering

**Duration:** One year (2040 Hrs)

**Location:** SSR GSP-CC, ITI Campus, Govindpura, Bhopal(MP)

### ABOUT THE COURSE

Precision engineering is a multidisciplinary study and practice of high-accuracy engineering design, metrology and manufacturing. This is a practice-oriented workshop-based 1-year programme with hands-on experience on state-of-the-art CNC machines, the latest design software, and metrology equipment.

#### THE COURSE CONSISTS OF THE FOLLOWING TECHNICAL MODULES

#### MODULE-1 ENGINEERING DRAWING AND 3D CAD

Engineering drawing is the language of engineers for communicating ideas, thoughts and designs. The course includes orthographic and isometric projections, sectioning, limits and fits, assembly drawings BOM, blueprint readings in accordance with the needs of industry. AutoCAD software exposure for the designing, creating drawings and models is provided on 60 work station in 3 labs with AutoCAD Software

Trainee will be able to understand / create:

- In-depth knowledge to interpret the engineering drawing
- 3D CAD model of industrial Components and Assembly.
- Orthographic views from 3D models in AutoCAD



#### MODULE-2 PRECISION MACHINING (Turning, Milling, Surface Grinding)



Precision machining is a subtractive process used where material needs to be removed from a raw material to create the finished product. Precision machining workshops have installation of conventional (Lathe, Milling and Grinding) machines in each section.

Trainee to machine ratio is 1:1. On completing this module student will have in-depth skills to produce Turned, Milled & Grinded Components under IT-10 tolerance grade.

#### MODULE-3 METROLOGY AND COORDINATE MEASURING MACHINE (CMM)



This module serves the purpose of checking the quality of the manufactured workpiece, calibrating instruments, systems of measurement, and researching the science of measuring. This module includes Linear and Angular instruments, gauges, surface roughness measurement, GD&T Applications, Comparative & Optical Measurement and CNC, CMM probing and programming.

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#### MODULE-4 CNC TURNING AND CAM



CNC Turning Course helps students master the fundamentals of computer numerical control for turning operations. This course is designed for individual who would like to improve their knowledge and experience of CNC machining skills.

The course enables the students to enhance their knowledge of CNC turning process, programming, tooling and work holding using CAM Software (CADEM). Students can meet the current industrial need and can produce any turning job under IT-7 Tolerance Grade. We have Trainee-Machine ratio of 3:1 on CNC Machines & 1:1 in CAM Labs

#### MODULE-6A 5-AXIS CNC MACHINING & CAM



The most advanced machining in CNC technology is the 5-Axis machining operations. This is required for most complex engineering product's machining for Defence, Aerospace, Medical and Automobile sectors. GSP-CC is installed with latest 3rd generation 5-Axis CNC machining center of DMG Mori, Germany with Siemens 840D Controller. The student learn CAM programming using 'Power-Mill' for complex profiles and use DMG Mori DMU50 for machining practice.

After completion of the module students will learn:-

1. Programming for 5 – Axis CNC using CAM
2. Job setting and fixtures, tool and work offset.
3. Create manual part programs using cycles on Siemens 840 D
4. Operating 5-Axis CNC machine to produce impeller, blisks, port etc.

**Modules on Soft Skills and Internship (On-Job-Training) are included in this program**



#### MODULE-5 CNC MILLING AND CAM



This Module is designed to impart adequate Technical knowledge and hands-on skills to students of CNC Vertical Machining Centers and CAD-CAM software (CADEM/CAPSMill) after completing this module, trainee can produce any 2.5/3-Axis CNC machining job in milling under IT7 Tolerance Grade. We have Trainee-Machine ratio of 3:1 on CNC Machines & 1:1 in CAM Labs.

#### MODULE-6B ELECTRICAL DISCHARGE MACHINING EDM



Electrical discharge machining (EDM) is a non-traditional machining process. Student will learn the fundamental concept of electrical discharge machining process, Workplace Safety and Health (WSH), set up the CNC EDM wire-cut machine, machine functions and processes, work holding devices, CNC EDM Wire-Cut programming, Generating part programs & Graphic simulation, Produce CNC EDM - wire components & perform Quality check. Student will also learn the CAM software (ELCAM) to create cutting profile & generation of tool path.