MSME TECHNOLOGY CENTRE, ROHTAK

एमएसएमई प्रौद्योगिकी केंद्र, रोहतक

MINISTRY OF MICRO, SMALL AND MEDIUM ENTERPRISES

सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय

GOVERNMENT OF INDIA

भारत सरकार

www.msmetcrohtak.org

MAKE IN INDIA

information brochure

PROFILE

Greetings from DGM MSME Technology Centre, Rohtak .....

I am very happy to note that you are planning for technical education or skill enhancement, and in particular you are considering MSME Technology Centre, Rohtak as one of your choice. India is fast emerging as a knowledge economy and in the next decade or so, we would emerge as a major centre for technical education and skill development. In this context, your decision to pursue technical education from MSME Technology Centre, Rohtak would definitely have a significant impact on your long-term career prospects.

Here, you will not only be provided training on Technical aspect but we shall also look for your overall development.

Keeping this in mind, Ministry of MSME, Govt. of India has developed its course curriculum for MSME Technology Centres in such a manner that a pass out from here can face the industry challenges with ease and are considered as a valuable asset to the organization.

The institute continuously strives to align the curriculum of existing academic programmes and is always on the lookout for introducing new programmes, keeping in view the ever-increasing level of volatility, uncertainty, complexity and ambiguity of the business environment

Our vision is to strive for 120 % quality in terms of skill imparted to students, consultancy we provide and product we produce.

With this I welcome you to the family of MSME Technology Centre, Rohtak. Looking for a long term association with you.

ABOUT THE INSTITUTE

MSME Technology Centre, Rohtak was developed by Ministry of Micro, Small Medium Enterprises (M.S.M.E) under its flagship program Technology Centre Systems Program (TCSP) with World Bank assistance

There are three important Objective that the MSME Technology Centre, Rohtak has:

a) **Produce highly skilled technical workforce,** with greater career prospects in the General Engineering industry.

b) **Production support** to MSMEs, Tool Rooms, OEM's and their tier I, II & III supplier in the catchment area and beyond.

c) **Consultancy** in the field of Design support, Engineering solutions, Project consultancy, Low cost automation support and productivity improvement.

Campus & Infrastructure:

Technology Centre campus is constructed in 19.8 acre land, consisting of Training block, Production Block, Admin Block with Auditorium, Exclusive canteen, Separate Hostel for Girls and Boys and Staff Quarters.

It has state of an art infrastructure including latest machines like EDM, Wire cut, CNC, VMC, 3D Scanner, Surface grinding, Mechatronics lab, Solar lab, Pneumatic, hydraulic & automation lab.

Location:

The Centre is located in Industrial Model Town (IMT) Rohtak, Sector 30 B and is well connected with National Capital Delhi and other important cities of Haryana. It is around 76 km from Delhi & 250 km from state capital Chandigarh.

SKILL DEVLOPMENT / TRAINING CENTRE

- Training Centre is completely equipped with latest CNC & Conventional machines. We are offering scientifically designed Long, Medium & Short Term Courses in the field of Tool & Die, CAD/CAM, CNC Technology, Industrial Automation Technology & General Engineering.
- Scientifically designed curriculum ensures optimum blending of theory and practical using latest pedagogical techniques and teaching aid by trainers.
- Training aims at :
  a. Bridging the gap of industries and academic culture.
  b. Professional Ethics, Work Culture & Personality Development.
  c. Gainful employment in high-tech area.
  d. Awareness towards the Nation, Society & Environment.
  e. Awareness for self–employment among the youth.

ACTIVITIES

TRAINING

- Long Term Courses
- Medium Term Courses
- Short Term Courses
- Winter and Summer vacation Courses
- Internship Courses for Under Graduate, Graduate and Post graduate
- Skill up-gradation courses for trainers of the institutes.
- Skill enhancement programmes for industry persons.
- E-SDP (Entrepreneurship cum Skill Development program).

PRODUCTION

- Design, development and manufacturing of precision dies and tools, moulds, jigs & fixtures etc. and their appropriate use and maintenance.
- Tool manufacturing using latest technology.
- Tool related innovation for improved product design.

CONSULTANCY

- Product & process development
- Technology Upgradation.
- Training Programme/ course curriculum development for Training Institutes / technical institutions.
- Productivity & Quality improvement.
- QMS/ Internal Audit
- Entrepreneurship Development

TRAINING PROGRAMMES

LONG TERM COURSES (Approved by AICTE & affiliated to HSBTE, Panchkula, Haryana)

- Advance Diploma In Tool And Die Making (4 years)
- Diploma In Mechatronics (3 years).

MEDIUM TERM COURSES (6 Months)

- Master Certificate Course in CNC Technology
- Master Certificate Course in CAD/CAM
- Master Certificate Course in Mechatronics
- Advanced Certificate Course in CNC Machining.
- Certificate Course in CNC Turning
- Certificate Course in CNC Milling.
- Certificate Course in Machine Operation.

SHORT TERM COURSES (96 hours)

- AutoCAD
- Solidworks
- Unigraphics
- CATIA
- CREO Parametric
- ANSYS
- Master-CAM
- Del-CAM
- Electrical CAD
- CNC Programming Lathe (Turning)
- CNC Programming Milling
- CNC Machining Lathe (Turning)
- CNC Machining Milling
- PLC Programming

LONG-TERM COURSES
(APPROVED BY AICTE & AFFILIATED TO HSBTE, PANCHKULA, HARYANA)

CAREER ORIENTED COURSES FOR SSC PASS OUTS

1. Advance Diploma In Tool and Die Making (ADTDM)

Objective : To Design and Manufacture intricate tools like Press Tool, Plastic Moulds, Jigs Fixtures & Gauges etc., with exposure to modern Die Design & Manufacturing Technology independently.

Eligibility : 10th Std. with 50% marks in aggregate (40% for SC/ST Candidates)

Duration : 04 years **Intake** : 60 **Course Fee** : ₹ **40,000 Per year**

Age : 15-19 years (3 years relaxation for SC/ST candidates)

Admission : Entrance Test

2. Diploma In Mechatronics (DIM)

Objective : To Provide knowledge of mechatronics system, controls & skill to operate a wide variety of Mechatronics equipment's & controls.

Eligibility : 10th Std. with 50% marks in aggregate (40% for SC/ST candidates)

Duration : 03 years **Intake** : 60 **Course Fee** : ₹ **40,000 Per year**

Age : 15-19 years (3 years relaxation for SC/ST candidates)

Admission : Entrance Test

MEDIUM TERM COURSES

FOR DEGREE / DIPLOMA

1. Master Certificate Course In CNC Technology (NSQF LEVEL-6)

Objective : Qualifying learners attain skills to work in Production department to carry out Manufacturing of Jigs and Fixtures, Press Tools, Moulds and Die Casting Dies using CNC Technology and CAM Software.

Course Content :

- Conventional machine operations (Lathe& Milling)
- CNC Programming (Lathe & Milling- Fanuc & Siemens)
- CNC Machining (Lathe & Milling)
- Del CAM
- Advance CAM (Master CAM & UG CAM)
- Business Communication
- Project

Eligibility : Preferably Diploma in (Mech. Engineering / Prod. Engineering / Automobile Engineering or equivalent).

Duration : 780 hrs. **Intake** : 30/Batch **Course Fee** : ₹ **25,000/-**

2. Master Certificate Course In CAD /CAM (NSQF LEVEL-6)

Objective : Qualifying learners attain skills to work in Design department to carry out designing of various CAD model, create drafting for production drawing and develop CAM programming.

Course Content :
- Computer Aided Design(Auto CAD & Solid works)
- Computer Aided Design & Manufacturing (Unigraphics CAD & Unigraphics CAM)
- Advance Computer Aided Design(CREO & CATIA)
- CNC Programming & CNC Machining
- Computer Aided Engineering (ANSYS)
- Entrepreneurship
- Project

Eligibility : Preferably Diploma / Degree (Mech. Engineering or equivalent)

Duration : 780 hrs. **Intake** : 30/Batch **Course Fee** : ₹ **25,000/-**

3. Master Certificate Course In Mechatronics (NSQF Level-6)

Objective : Qualifying learners attain skills to work in the field of Automation Technology, develop an ability to identify, formulate, and solve engineering problems, and analyse electrical and mechanical systems and their interconnection.

Course Content :
- PLC programming
- Electrical CAD
- Sensors & Actuators
- Industrial Pneumatics & Hydraulic
- Mechatronics Technology & Kit
- SCADA
- Entrepreneurship Skill
- Project

Eligibility : Preferably Diploma/Degree (Mechanical Engineering/Production Engineering/Electronics Engineering/Electrical Engineering or equivalent).

Duration : 780 hrs. **Intake** : 30/Batch **Course Fee** : ₹ **25,000/-**

COURSES FOR ITI PASS

4. Advanced Certificate Course in CNC Machining (NSQF Level -5)

Objective : Learners attain skills to work in Production department to carry out Manufacturing of Jigs and Fixtures, Press Tools, Moulds and Die Casting Dies using CNC Technology and CAM Software.

Course Content :
- CNC Programming & CNC Machining
- Engineering Metrology & Quality Assurance – Theory
- Engineering Metrology & Quality Assurance – Practical
- Production planning & controls
- CAM (Master CAM)
- Total Quality Management
- Fundamental of Metal Cutting Tools
- Entrepreneurship
- Project

Eligibility : Preferably I.T.I (Machinist/Turner/Bench Fitter/Tool & Die Maker or equivalent)

Duration : 1560 hrs. **Intake** : 30/Batch **Course Fee** : ₹ **40,000/-**

COURSES FOR SSC / 10th PASSOUTS

5. Certificate Course in CNC Turning (NSQF LEVEL-4)

Objective : Learners who attain this qualification are competent in Programming and operation of CNC Turning/Milling Machines and get a job in the CNC Turning machine shop.

Course Content :
- Engineering Drawing-Theory & Practical
- Engineering Metrology
- Workshop Technology
- Workshop Practise
- CNC programming-Turning
- CNC Machining-Turning
- On job training

Eligibility : Preferably SSC passed or its equivalent minimum age 15 years.

Duration : 780 hrs. **Intake** : 30/Batch **Course Fee** : ₹ **25,000/-**

6. Certificate Course in CNC Milling (NSQF LEVEL-4)

Objective : Learners who attain this qualification are competent in Programming and operation of CNC Milling Machines and get a job in the CNC Milling machine shop.

Course Content :
- ? Engineering Drawing-Theory & Practical
- ? Engineering Metrology
- ? Workshop Technology
- ? Workshop Practise
- ? CNC programming-Milling
- ? CNC Machining-Milling
- ? On job training

Eligibility : Preferably SSC passed or its equivalent minimum age 15 years.

Duration : 780 hrs. Intake : 30/Batch Course Fee : ` 25,000/-

COURSES FOR 8th PASS

7. Certificate Course in Machine Operation (NSQF Level -4)

Objective : Learners who attains this qualification are competent to work on conventional machine tools in order to produce / Manufacture components as per predefined shape and size. Qualified learners get employed into work.

Course Content :
- ? Machine Shop Theory
- ? Engineering Metrology
- ? Engineering Drawing
- ? Workshop calculation and Science
- ? Employability Skill
- ? Project

Eligibility : Passed 8th Standard and Minimum age 15 years.

Duration : 1560 hrs. Intake : 30/Batch Course Fee : ` 40,000/-

SHORT TERM COURSES

FOR STUDENTS/INSTITUTES & INDUSTRIAL PROFESSIONALS

1. AUTO CAD

Objective : Learners attain skills to work in Design department to carry out various designs and models in AutoCAD and draft them.

Course Content :

- Introduction to AutoCAD.
- Introduction to AutoCAD.
- File Types \ File Formats
- Using Absolute, Relative, Polar, Tracking Dynamic.
- Creating & Modifying Objects.
- Object Properties
- Annotation – Text & Dimensioning.
- Working with Layers & Blocks.
- Plotting \ Printing.

Duration : 96 Hrs

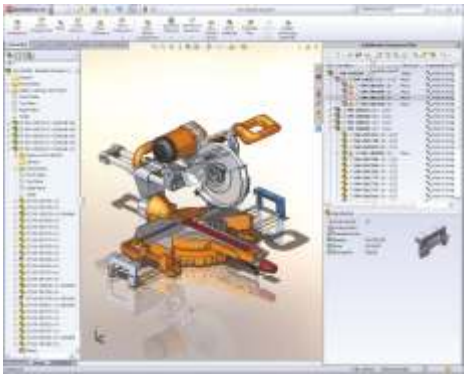
Course Fees : ₹ **5,000/- + GST Extra** **Intake** : 30/Batch

2. SOLIDWORKS

Objective : Learners attain skills to work in Design department to carry out various 2-D & 3-D models in Solid works.

Course Content :

- Introduction Of Sketcher and Sketch Constraints Command
- Part Design
- Surface Modelling
- Part Assembly
- Drafting And Detailing



Duration : 96 Hrs

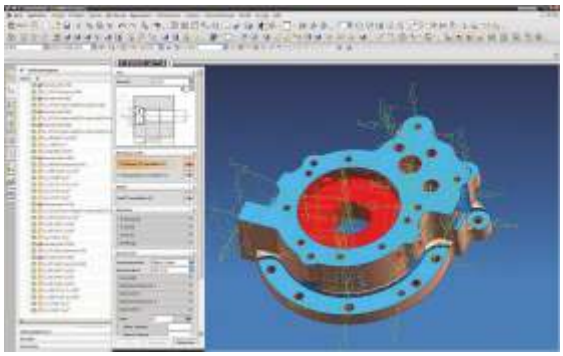
Course Fees : ₹ **9,500/- + GST Extra** **Intake** : 30/Batch

3. UNIGRAPHICS

Objective : Learners attain skills to work in Design department to carry out 2-D , 3-D models and advance surface modelling and assembly.

Course Content :

- Introduction and Interface To Unigraphics – Nx
- Unigraphics Sketcher
- Advance Part Design and Surface Modelling
- Assembly Modelling
- Drafting
- Introduction To Unigraphics CAM
- Tool Path Generation
- CAM Program Generation



Duration : 96 Hrs

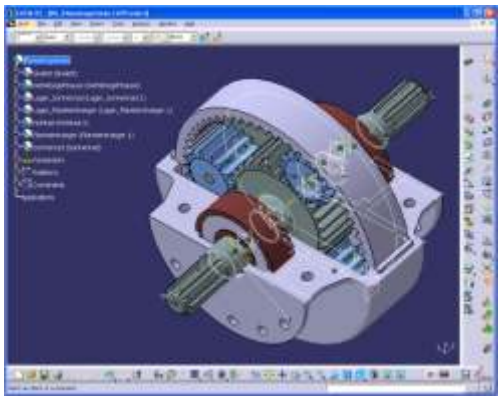
Course Fees : ₹ **12,000/- + GST Extra** **Intake** : 30/Batch

4. CATIA

Objective : Learners attain skills to work in Design department to carry out various 2-D & 3-D models and surface-modelling in CATIA with help of advance design tools.

Course Content :

- Introduction To CATIA and Workbenches
- Sketcher Workbenches
- Constraining Sketches and Creating Features
- Editing Features
- Part Design
- Surface Modeling
- Assembly Modeling & Simulation
- Sheet Metal
- Drafting & Detailing



Duration : 96 Hrs

Course Fees : ₹ **9,500/- + GST Extra** **Intake** : 30/Batch

5. CREO PARAMETRIC

Objective : Learners attains skills to work in Design Department to carry out various 2-D & 3-D models and surface modelling in CREO PARAMETRIC with help of advance tools.

Course Content :

- Interface introduction to CREO Parametric
- Create 2D Parametric sketches by using CREO Parametric CAD software
- Solid modelling & editing
- Develop Top down & Bottom up assembly models
- Surface modelling & editing
- Drafting & Detailing

Duration : 96 Hrs

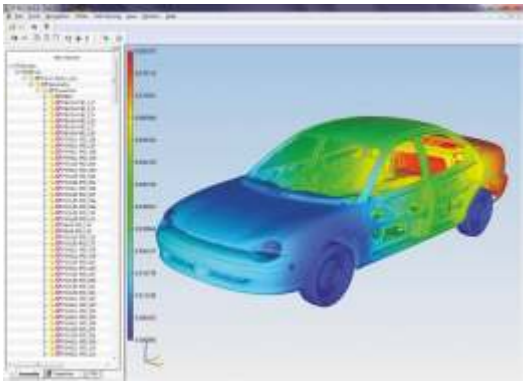
Course Fees : ₹ **9,500/- + GST Extra** **Intake** : 30/Batch

6. ANSYS

Objective : Learners attain skills to work in Design department to find out the engineering solution & optimize the design using CAE software and able to solve problems that are not amendable to an analytical approach.

Course Content :

- Understand Finite Element Methods & GUI of ANSYS
- Design & Analysis of 1D Structure
- Design & Analysis of 2D Structure
- Design & Analysis of 3D Structure
- Analysis of Trusses And Frames
- Understanding Thermal Behaviour
- Design & Analysis of 1D,2D,3D Thermal Elements



Duration : 96 Hrs

Course Fees : ₹ **9,500/- + GST Extra** **Intake** : 30/Batch

7. MASTER CAM

Objective : Learners attain skills to work in Design & Manufacturing department to carry out various 2-D & 3-D model development by performing CNC operations on 3-D models to generate program for various controllers like Fanuc & Sinumerik.

Course Content :

- Introduction To Master- CAM
- Creation of 2D Drawing
- Creation of 2D Tool Paths
- Creation of 3D Models
- Creation of 3D Tool Paths
- Post Processing

Duration : 96 Hrs

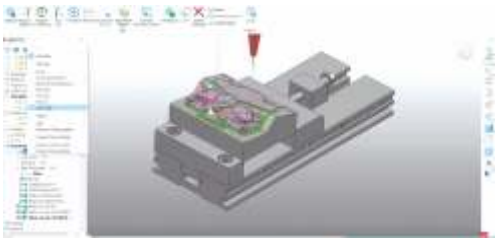
Course Fees : ₹ **9,500/- + GST Extra** **Intake** : 30/Batch

8. DELCAM

Objective : Learners attain skills to work in Design department and carry out various 2-D drafting and 3-D wire frame and surface modelling for Post Processing.

Course Content :

- 2-D Drafting
- Wire Frame Modeling
- Surface Modeling
- Tool Path Generations
- Transfer To Machine / Post Processing



Duration : 96 Hrs

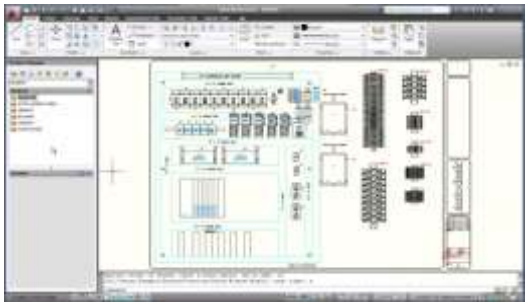
Course Fees : ₹ **9,500/- + GST Extra** **Intake** : 30/Batch

9. ELECTRICAL CAD

Objective : Learners attain skills to work in Designing of electrical control design (PLC & Relay), Power wiring design (3-phase & 1-phase) documentation, panel layout, schematic design and project management.

Course Content :

- Auto – CAD and Co-ordinate System
- Array, Mirror, Copy, Move
- Inserting Component
- Wire & Ladders, Trim
- Bus – Bar
- Control Wiring Layout
- Power Wiring Layout



Duration : 96 Hrs

Course Fees : ₹ **6,000/- + GST Extra** **Intake** : 30/Batch

10. CNC PROGRAMMING LATHE (TURNING) OR MILLING

Objective : Learners attain skills to work in Production Department/Tool Room to carry out programming of CNC Lathe (Turning) or Milling with Fanuc/ Sinumerik controls.

Course Content :

- Principle, Applications & Use of CNC Lathe (Turning) or Milling machines
- Concepts of Work, Geometry & Tool Offsets
- Types of tools used in CNC Lathe (Turning) or Milling machines
- Concept of tool nose radius compensation
- Operations performed on CNC Lathe (Turning) or Milling machines
- Programming using all major Lathe (Turning) or milling cycles
- Offline Programming concept & Data transfer

Duration : 96 Hrs

Course Fees : ₹ **12,500/- + GST Extra** **Intake** : 30/Batch

11. CNC MACHNING LATHE (TURNING) OR MILLING

Objective : Learners attain skills to work in Production Department/Tool Room to carry out machining operations on CNC Lathe (Turning) or Milling machines with Fanuc/Sinumerik controls.

Course Content :

- Principle, Applications & Use of CNC Lathe (Turning) or Milling machines
- Detailed Concepts of Work, Geometry & Tool Offsets
- Working with various measuring instruments
- Types of tools used in CNC Lathe (Turning) or Milling machines
- Loading & Setting of job on CNC Lathe (Turning) or Milling machines
- Various Operations performed on CNC Lathe (Turning) or Milling machines
- Detailed machining practical concepts

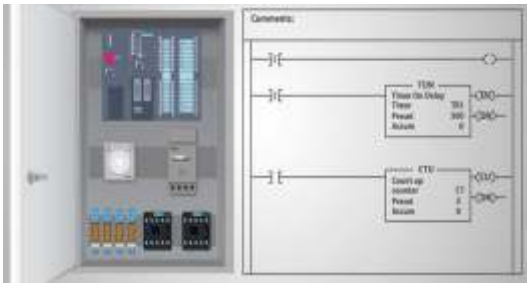
Duration : 96 Hrs

Course Fees : ₹ **12,500/- + GST Extra** **Intake** : 30/Batch

12. PLC PROGRAMMING

Objective : To provide knowledge levels needed for PLC programming & to make students understand various types of PLC registers, Timers and Counters for the control of industrial processes & to make them understand functions and Data Handling.

Course Content :



- Introduction of Ind. Automation
- Detail of PLC hardware
- Programming Languages
- Introduction to Digital Electronics (BIT LOGIC)
- Relay logic
- Programming of Ladder logic used in live projects
- Interfacing between PLC and various field devices.

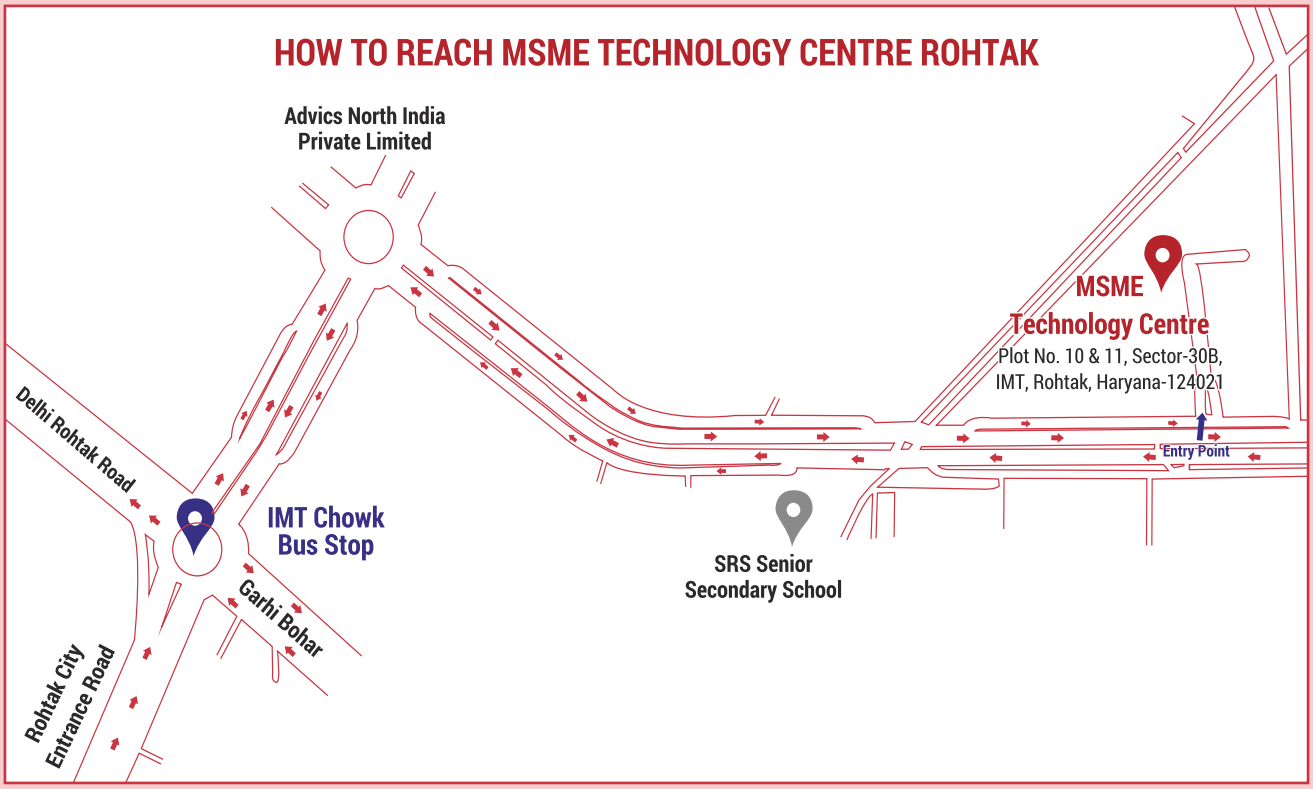
Duration : 96 Hrs

Course Fees : ₹ **12,500/- + GST Extra** **Intake** : 30/Batch

ADMISSION PROCEDURE

1. Eligible candidates will be offered admission on first-cum-first-served basis.
2. Candidates seeking admissions should submit application on prescribed form (MSME TECHNOLOGY CENTRE, ROHTAK Registration Form) along with attested copies of following documents:
   - Aadhaar Card (Compulsory for admission in any courses), Qualification details, Age proof, Two passport size Colour photographs and Cast Certificate.
3. No Tuition fee will be charged from SC/ST candidates as per rule of Govt. of India subject to production of authentic cast certificate issued by competent authorities only.
4. MSME TECHNOLOGY CENTRE, ROHTAK reserve the right to incorporate any changes in proposed schedule dates / Batch size without assigning any reason.
5. MSME TECHNOLOGY CENTRE, ROHTAK reserves the right to reject any application without assigning any reason. Incomplete applications are liable to be rejected.
6. Admission to the course will be confirmed only on deposit of fees.
7. Placement assistance may be provided by MSME TECHNOLOGY CENTRE, ROHTAK.
8. Hostel facility may be provided subject to availability.
9. Study material will be provided on extra cost as applicable.
10. Visit http://www.msde.gov.in/nsqf.html for more information about NSQF compliant courses.
11. After successful completion candidate must enrol themselves at www.sampark.gov.in portal. It will assist in job search.
12. For course related query contact :
    - Mechanical & its equivalent Course - 9478354588
    - Electrical/Electronics & its equivalent Course - 9780011220

HOW TO REACH MSME TECHNOLOGY CENTRE ROHTAK



CLEAN, GREEN & DUST FREE ENVIRONMENT



INFRASTRUCTURE AT GLANCE

- Three Floor Training Block
- Two Floor Production Block
- Administration Block with Auditorium
- Central Air Condition
- Medical Room
- Boys Hostel
- Girls Hostel
- Executive Hostel
- Residential Complex
- Boys & Girls Recreation Room
- Cafeteria
- Library
- 24x7 CCTV Cameras & Internet
- TV/ Video Conference Room
- Sports & Parking Facility

MACHINES & LABS

WIDE SPECTRUM OF LATEST & ADVANCE MACHINE SET UP

- CNC MILLING (FANUC & SIMENS CONTROL)
- CNC LATHE (FANUC & SIMENS CONTROL)
- CNC DIE SINKING
- PRECISION SURFACE GRINDER
- TOOL & CUTTER GRINDER
- CONVENTIONAL MILLING
- CONVENTIONAL LATHES
- CAD/CAM LAB
- AUTOMATION LAB
- HYDRAULIC LAB
- PNEUMATIC LAB
- LANGUAGE /COMMUNICATION LAB
- METROLOGY LAB
- BASIC SCIENCE LAB

MSME TECHNOLOGY CENTRE, ROHTAK

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