INDUSTRY Driven
Job Oriented Courses”

WORKSHOP DIVISION
Training Calendar
2016 - 2017

NSIC Technical Services Centre
National Small Industries Corporation
(A Govt. of India Enterprises)
(Under Ministry of Micro, Small & Medium Enterprises, Govt. of India)
## Master Certificate course in “Advance Air Conditioning” (MCAAC)

- **Duration:** 4 Months  
- **Fee:** Rs. 24,000/-  
- **Selection Procedure:** First Come First Serve Basis  
- **Content:** Introduction to Air Conditioner (AC), Trouble shooting of AC (Split and Window), HVAC Design, MEP (Mechanical, Electrical, Plumbing), using Revit, Project Work etc.

## Master Certificate course in “Quality Control & Inspection (Mech.)” (MCQCI)

- **Duration:** 4 Months  
- **Fee:** Rs. 21,000/-  
- **Selection Procedure:** First Come First Serve Basis  
- **Content:** Introduction to Metrology, Application of different measuring Instruments, Non Destructive Testing, Co-ordinate Measuring Machine (CMM) etc.

## HVAC (Heating, Ventilation & Air Conditioning) Design

- **Duration:** 1 Month  
- **Fee:** Rs. 8,000/-  
- **Selection Procedure:** First Come First Serve Basis  
- **Content:** Heating and Cooling Load analysis, Logical systems, Mechanical systems and duct work, Mechanical Piping systems, Inspect System, Schedules, Documentation, Sheet Setting etc.

## MEP using REVIT

- **Duration:** 6 Weeks  
- **Fee:** Rs. 18,000/-  
- **Selection Procedure:** First Come First Serve Basis  
- **Content:** BIM, Basic Draw and modify tools, Basic system Tools, Starting system Projects, Working with views, Spaces and Zones, Energy Analysis, HVAC Networks, Plumbing Networks, Advance Systems for HVAC and Plumbing, Electrical systems, Creating Construction Documents, Adding Tags and schedules creating details etc.

## Job Oriented Courses for B.E./B.Tech. Students

## Advance Certificate Course in "Refrigeration and Air Conditioning" (ACRAC)

- **Duration:** 6 Months  
- **Fee:** Rs. 18,000/-  
- **Selection Procedure:** First Come First Serve Basis  
- **Content:** Basic Electrical & Introduction to R&AC, Trouble Shooting and Maintenance of Refrigerator, Air Conditioner (Window & Split) etc.

## Certificate Course in “Welding Operation” (CCWO)

- **Duration:** 3 Months  
- **Fee:** Rs. 9000/-  
- **Selection Procedure:** First Come First Serve Basis  
- **Content:** Basic Theory on Welding Process, Practices on ARC, TIG, MIG Welding etc.

## Certificate Course in “Quality Control & Inspection (Mech.)” (CCQCI)

- **Duration:** 2 Months  
- **Fee:** Rs. 6,000/-  
- **Selection Procedure:** First Come First Serve Basis  
- **Content:** Introduction to Metrology, Application of different measuring Instruments, Introduction to NDT etc.
## Summer / Winter Vacation Courses for Engineering Students

### Non Destructive Testing (NDT) Level I / Level II

<table>
<thead>
<tr>
<th>Duration</th>
<th>Fee: Rs. 8000/- L-I</th>
<th>Fee: Rs. 12000/- L-II</th>
<th>Selection Procedure: First Come First Serve Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level I: 4 weeks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level II: 6 weeks</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Content:** Ultrasonic Testing, Magnetic Particle Testing, Die Penetrant Testing, Radiographic Analysis (L-II)

### Refrigeration & Air Conditioning

<table>
<thead>
<tr>
<th>Duration</th>
<th>Fee: Rs. 20,400/- (Weekdays) / 25,000/- (Evening / Weekend)</th>
<th>Selection Procedure: First Come First Serve Basis</th>
</tr>
</thead>
</table>

**Content:** Basic Refrigeration, Vapour Compression Cycle, Refrigerant, Air Conditioning Cycle, system types, Heat Load, Psychometry, Heat Exchange, Fan Blower and Motor, Expansion Devices, Accumulator, Reversible Value- Cooling/ Heating. Installation, Gas Charging, Troubleshooting, Assembling and disassembling, preventive maintenance etc.

### Machinist with CNC

<table>
<thead>
<tr>
<th>Duration</th>
<th>Fee: Rs. 24,000/-</th>
<th>Selection Procedure: First Come First Serve Basis</th>
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</table>

**Content:** Practice on Fitting, Drilling, Turning, Milling, Grinding, Programming and Machining Practices on CNC Milling and Lathe Machines etc.

### Tool & Die Maker (TDM)

<table>
<thead>
<tr>
<th>Duration</th>
<th>Fee: Rs. 16,800/-</th>
<th>Selection Procedure: First Come First Serve Basis</th>
</tr>
</thead>
</table>

**Content:** Identifying tool and die specifications from Design, Plan, Organize, for making of Tool & Die, performing fitting activities using hand tools, Practices on conventional machines, assemble and prove the tool.

### Fitter Fabrication

<table>
<thead>
<tr>
<th>Duration</th>
<th>Fee: Rs. 15,600/-</th>
<th>Selection Procedure: First Come First Serve Basis</th>
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**Content:** Safety precautions, Marking, Types of Hacksaw blades, Types of Flames, Types of hammers, Chisels, Types of Files, Engineering Metrology, Types of Electrode, Types of Gases and welding processes etc.

### TIG & MIG Welding

<table>
<thead>
<tr>
<th>Duration</th>
<th>Fee: Rs. 6,000/-</th>
<th>Selection Procedure: First come First serve</th>
</tr>
</thead>
</table>

**Content:** Safety precautions, GTAW, Type of Gases, Type of electrodes, Weld, Preparation of surface, Weld Faults. GMAW, Principal of operations, Safety precautions, Welding Procedure, Preparation of surface, Weld Faults etc.

### Quality Control & Inspection (Mech.)

<table>
<thead>
<tr>
<th>Eligibility: 12th</th>
<th>Duration: 1 Year</th>
<th>Fee: Rs. 20,400/-</th>
<th>Selection Procedure: First Come First Serve Basis</th>
</tr>
</thead>
</table>

**Content:** Understanding of Engineering Drawing, Workshop Technology, Engineering Metrology, Practices, on different kinds of measuring instruments etc.

**Job Oriented Courses for 12th / 10th Students**

### Refrigeration & Air Conditioning

- **Duration:** 1 Year
- **Fee:** Rs. 20,400/- (Weekdays) / 25,000/- (Evening / Weekend)
- **Selection Procedure:** First Come First Serve Basis
- **Content:** Basic Refrigeration, Vapour Compression Cycle, Refrigerant, Air Conditioning Cycle, system types, Heat Load, Psychometry, Heat Exchange, Fan Blower and Motor, Expansion Devices, Accumulator, Reversible Value- Cooling/ Heating. Installation, Gas Charging, Troubleshooting, Assembling and disassembling, preventive maintenance etc.

### Tool & Die Maker (TDM)

- **Duration:** 1 Year
- **Fee:** Rs. 16,800/-
- **Selection Procedure:** First Come First Serve Basis
- **Content:** Identifying tool and die specifications from Design, Plan, Organize, for making of Tool & Die, performing fitting activities using hand tools, Practices on conventional machines, assemble and prove the tool.

### Fitter Fabrication

- **Duration:** 1 Year
- **Fee:** Rs. 15,600/-
- **Selection Procedure:** First Come First Serve Basis
- **Content:** Safety precautions, Marking, Types of Hacksaw blades, Types of Flames, Types of hammers, Chisels, Types of Files, Engineering Metrology, Types of Electrode, Types of Gases and welding processes etc.

### TIG & MIG Welding

- **Duration:** 3 Months
- **Fee:** Rs. 6,000/-
- **Selection Procedure:** First come First serve
- **Content:** Safety precautions, GTAW, Type of Gases, Type of electrodes, Weld, Preparation of surface, Weld Faults. GMAW, Principal of operations, Safety precautions, Welding Procedure, Preparation of surface, Weld Faults etc.

### Non Destructive Testing (NDT) Level I / Level II

- **Duration:**
  - Level I: 4 weeks
  - Level II: 6 weeks
- **Fee:** Rs. 8000/- L-I, Rs. 12000/- L-II
- **Selection Procedure:** First Come First Serve Basis
- **Content:** Ultrasonic Testing, Magnetic Particle Testing, Die Penetrant Testing, Radiographic Analysis (L-II)

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For Admission please contact: 9911326420/9811540701
**Automobile Air Conditioning**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Course Name</th>
<th>Qualification</th>
<th>Fees</th>
<th>Duration</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>MEP using Revit</td>
<td>B.E./B. Tech/Diploma</td>
<td>18,000/-</td>
<td>6 Weeks</td>
</tr>
<tr>
<td>2</td>
<td>HVAC Design</td>
<td>B.E./B. Tech/Diploma</td>
<td>8,000/-</td>
<td>4 Weeks</td>
</tr>
<tr>
<td>3</td>
<td>Non Destructive Testing (NDT) (Level I)</td>
<td>B.E./B. Tech/Diploma</td>
<td>8,000/-</td>
<td>4 Weeks</td>
</tr>
<tr>
<td>4</td>
<td>Troubleshooting of Auto AC</td>
<td>Diploma/ITI</td>
<td>3,000/-</td>
<td>4 Weeks</td>
</tr>
<tr>
<td>5</td>
<td>Troubleshooting of AC</td>
<td>Diploma/ITI</td>
<td>4,000/-</td>
<td>4 Weeks</td>
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**Eligibility:** 10th with Science & Math

**Duration:** 2 Years
- Draughtsman (Mech.)
- Machinist
- Turner
- Fitter

**Content:** Refrigeration cycle, Evaporative cooling, Power Consumption, Automatic climate control, Refrigerants, Gas Charging, Trouble Shooting, Wiring Diagram, Installation, Preventive Maintenance etc.

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**NCVT Approved Course (ITI)**

**Eligibility:** 10th with Science & Math

**Duration:** 2 Years
- Draughtsman (Mech.)
- Machinist
- Turner
- Fitter

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**Summer/Winter Vacation Courses for Engineering Students**

For the year 2016-17, we offer following summer/winter vacation courses during June, July, December 2016 & January 2017 specially designed for Mechanical / Production / Automobile Engineering students.

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<tr>
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**Notes:**
1. In-plant training facility is also available.
2. Course fee may be paid in installments.
   (Not Applicable for short term courses)
3. Course may be customized as per requirement
4. Service tax extra as applicable.
   (Not Applicable for NCVT courses)

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**For Details Please Visit Our Website:**
www.nsic.co.in/pdfs/MechanicalWorkshop2015.pdf

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**For Registration, please send your bio-data with Contact Details at ntsccont@gmail.com and for further information please contact /send SMS To +91-9811540701 / +91-9911326420.**

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**NSIC Technical Services Centre**
National Small Industries Corporation Limited
(A Govt. of India Enterprises)
(Under Ministry of MSME, Govt. of India)
Okhla Industrial Estate Phase-III
Near Govindpuri Metro Station, New Delhi - 110020
E-mail: ntsccont@gmail.com

**For Registration, please contact:**
8013 606 040