ADVANCED VOCATIONAL TRAINING SCHEME (AVTS)
SHORT TERM COURSES

1. Short - term course of 2-4 Weeks duration in engineering areas are envisaged / being impremented in the NSTIs.
2. Special Course duration can be extended up to 12 weeks also.
3. Courses on Upskilling / Reskilling can also be arranged in basic engineering orientation and foundation in core engineering disciplines in viz, Electrical and Electronics, Manufacturing and Automotive sectors.
4. The said programme will benefit Engineering / ITI / Polytecnic students and also serving industrial personnel in order to get acquaintance of basic engineering skill and practice.

FEE STRUCTURE

FOR REGULAR COURSES (Period up to 1-2 Weeks)	
Candidates sponsored from medium and large - scale Industries in	Rs. 2000/ - per Trainee per week
Candidates sponsored from Small Industries and Private candidates	Rs. 1000/ - per Trainee per week
Candidates nominated by Government Departments like Railways, Defence etc.	Rs. 1250/ - per Trainee per week
Candidates sponsored from Educational Institute like Polytechnic /Engg. College & other related Technical Institutions etc.	Rs. 1000/ - per Trainee per week
FOR TAILOR MADE COURSES / SPECIAL ADVANCED LEVEL COURSES	
Candidates sponsored from medium and large - scale Industries in both Public and Private sector.	Rs. 4000/ - per Trainee per week
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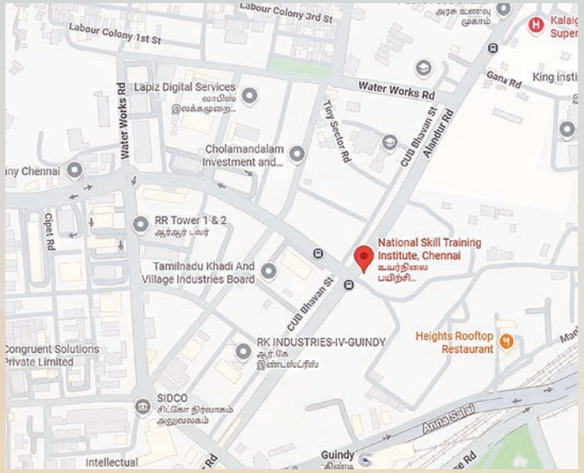
NOTE :

- The Regional Director reserves the right to cancel or postpone a scheduled programme course without assigning any reason.
- In the event of any closed or declared holiday, the programme/course will commence on the next working day and conclude on the last working day of the schedule.

Detailed Road / Rout Map



For Online Registration : https://nstichennai.dgtmsde.in/avtsregform1.php
Map : https://maps.app.goo.gl/JmJb7og6oFv8QWLv6
Website : https://nstichennai.dgt.gov.in/
Email : nsti-chennai@dgt.gov.in / rdsde-tn-msde@gov.in

For further enquiries Contact: P. Namasivayam,
Deputy Director @ 9444632551

Government of India
Ministry of Skill Development and Entrepreneurship
Directorate General of Training
Regional Directorate of Skill Development & Entrepreneurship

Skill India
कौशल भारत-कुशल भारत

Directorate General of Training

NATIONAL SKILL TRAINING INSTITUTE
CHENNAI - 600 032

Training Calender 2026-27

Address for Correspondence

The Regional Director
Regional Directorate of Skill Development and Entrepreneurship
No.10, Alandur Road, CTI Campus, Guindy, Chennai - 600032.
Phone: 044 - 2250 1211,
Email : nsti-chennai@dgt.gov.in / rdsde-tn-msde@gov.in

The DIRECTORATE GENERAL OF TRAINING in Ministry of Skill Development and Entrepreneurship is the apex organisation for development and coordination at National level for the programmes relating to vocational training including Women's Vocational Training. Industrial Training Institutes are under the administrative and financial control of State Governments or Union Territory Administrations. DGT also operates Vocational Training Schemes in some of the specialized areas through field institutes under its direct control. Development of these programmes at national level, particularly in the area concerning common policies, common standards and procedures, training of instructors and trade testing are the responsibility of the DGT. But, day-to-day administration of Industrial Training Institutes rests with the State Governments/ Union Territories Administrations.

NATIONAL SKILL TRAINING INSTITUTE Chennai was established in 1968 under the aegis of Directorate General Training (DGT), Ministry of Skill Development and Entrepreneurship , Government of India, New Delhi with the assistance from United Nations Development Programme (UNDP) / International Labour Organisation (ILO) to impart training and updating the skills of Engineers / Supervisors / Technicians / Executives of Industrial personnel & faculties of educational institutions through courses of short duration conducted in modules and Tailor made courses as per the specific needs of their Industries / Govt Estt. / PSUs / Technical Institutions. The courses are conducted for higher skill upgradation through intensive skill oriented training by using the latest version of equipment and machinery used in industry.

VISION

NSTI Chennai provides innovative, effective and integrated training opportunities for people who need new skills to enjoy the dignity that comes with employment, independence and self reliance.

MISSION

To continuously hone the skills of industrial workforce for higher productivity bridging the gapbetween academics and industries for suitable placement for young generation in technical fields.

COMPUTER NUMERICAL CONTROL

Name of the Course	Course Code	Duration	Regular Course Schedules
BASIC CNC TURNING, OPERATION & PROGRAMMING (FANUC & SIEMENS SINUMERIK CONTROL SYSTEMS)	260101	1 Week	01-06-26 to 05-06-26 20-07-26 to 24-07-26 31-08-26 to 04-09-26 26-10-26 to 30-10-26 28-12-26 to 01-01-27 22-02-27 to 26-02-27
ADVANCED CNC TURNING, OPERATION & PROGRAMMING (FANUC & SIEMENS SINUMERIK CONTROL SYSTEMS)	260102	1 Week	08-06-26 to 12-06-26 27-07-26 to 31-07-26 07-09-26 to 11-09-26 02-11-26 to 06-11-26 04-01-27 to 08-01-27 01-03-27 to 05-03-27
BASIC CNC MILLING, OPERATION & PROGRAMMING (FANUC & SIEMENS SINUMERIK CONTROL SYSTEMS)	260103	1 Week	29-06-26 to 03-07-26 03-08-26 to 07-08-26 05-10-26 to 09-10-26 09-11-26 to 13-11-26 01-02-27 to 05-02-27 15-03-27 to 19-03-27
ADVANCED CNC MILLING, OPERATION & PROGRAMMING (FANUC & SIEMENS SINUMERIK CONTROL SYSTEMS)	260104	1 Week	06-07-26 to 10-07-26 10-08-26 to 14-08-26 12-10-26 to 16-10-26 16-11-26 to 20-11-26 08-02-27 to 12-02-27
ADVANCED CNC MILLING OPERATION & PROGRAMMING WITH MULTIAXIS	260105	1 Week	13-07-26 to 17-07-26 17-08-26 to 21-08-26 30-11-26 to 04-12-26
APPLICATION OF MASTER CAM AND SOLID EDGE CAM IN TURNING & MILLING	260106	1 Week	15-06-26 to 19-06-26 21-09-26 to 25-09-26 07-12-26 to 11-12-26 18-01-27 to 22-01-27 29-03-27 to 02-04-27

REFRIGERATION & AIR CONDITIONING

Name of the Course	Course Code	Duration	Regular Course Schedules
REFRIGERATION AND AIR CONDITIONING	260201	2 Weeks	29-06-26 to 10-07-26 27-07-26 to 07-08-26 31-08-26 to 11-09-26 26-10-26 to 06-11-26 30-11-26 to 11-12-26 01-02-27 to 12-02-27 15-03-27 to 26-03-27

CAD TECHNOLOGY

Name of the Course	Course Code	Duration	Regular Course Schedules
APPLICATION OF AUTOCAD 2D & 3D DRAFTING IN ENGINEERING DESIGN	260301	2 Weeks	13-07-26 to 24-07-26 03-08-26 to 14-08-26 31-08-26 to 11-09-26 05-09-26 to 16-10-26 09-11-26 to 20-11-26 30-11-26 to 11-12-26 01-02-27 to 12-02-27

SOLAR TECHNOLOGY

Name of the Course	Course Code	Duration	Regular Course Schedules
CONSTRUCTION, INSTALLATION & COMMISSIONING OF SOLAR PANEL AND PV SYSTEM	260401	1 Week	03-08-26 to 07-08-26 07-09-26 to 11-09-26 07-12-26 to 11-12-26 18-01-27 to 22-01-27 15-03-27 to 19-03-27

ELECTRICAL DRIVES AND SWITCH GEARS

Name of the Course	Course Code	Duration	Regular Course Schedules
COURSE ON AC MOTOR DRIVES IN SIEMENS G120 TRAINING KIT	260501	1 Week	06-07-26 to 10-07-26 21-09-26 to 25-09-26 05-10-26 to 09-10-26 04-01-27 to 08-01-27 01-02-27 to 05-02-27
COURSE ON LV SWITCHGEARS IN SIEMENS ACBS & MCCBS	260502	1 Week	27-07-26 to 31-07-26 02-11-26 to 06-11-26 22-02-27 to 26-02-27

PROCESS CONTROL INSTRUMENTATION

Name of the Course	Course Code	Duration	Regular Course Schedules
PLC PROGRAMMING USING SIEMENS S7 400/1200/1500	260601	1 Week	08-06-26 to 12-06-26 27-07-26 to 31-07-26 21-09-26 to 25-09-26 05-10-26 to 09-10-26 09-11-26 to 13-11-26 28-12-26 to 01-01-27 15-03-27 to 19-03-27
PLC PROGRAMMING USING SIEMENS S7 1200 WITH HMI AND SCADA	260602	2 Weeks	27-07-26 to 07-08-26 05-10-26 to 16-10-26 28-12-26 to 08-01-27 15-03-27 to 26-03-27
INDUSTRIAL AUTOMATION WITH SIEMENS PLCs AND ELECTRIC DRIVES	260603	2 Weeks	06-07-26 to 17-07-26 31-08-26 to 11-09-26 07-12-26 to 18-12-26 01-02-27 to 12-02-27
TESTING AND CALIBRATION OF INDUSTRIAL INSTRUMENTS	260604	1 Week	15-06-26 to 19-06-26 17-08-26 to 21-08-26 16-11-26 to 20-11-26 18-01-27 to 22-01-27

PNEUMATIC & HYDRAULIC CONTROLS

Name of the Course	Course Code	Duration	Regular Course Schedules
BASIC PNEUMATICS CONTROL	260701	1 Week	06-07-26 to 10-07-26 15-02-27 to 19-02-27
BASIC ELECTRO - PNEUMATICS CONTROL	260702	1 Week	27-07-26 to 31-07-26 09-11-26 to 13-11-26
BASIC HYDRAULICS CONTROL	260703	1 Week	17-08-26 to 21-08-26 05-10-26 to 09-10-26
BASIC ELECTRO - HYDRAULICS CONTROL	260704	1 Week	07-09-26 to 11-09-26 18-01-27 to 22-01-27
ELECTRO – PNEUMATICS AUTOMATION WITH PLC	260705	1 Week	31-08-26 to 04-09-26 01-03-27 to 05-03-27

SEWING TECHNOLOGY

Name of the Course	Course Code	Duration	Regular Course Schedules
DYEING TECHNIQUES	260801	1 Week	06-07-26 to 10-07-26 03-08-26 to 07-08-26 05-10-26 to 09-10-26 07-12-26 to 11-12-26 08-02-27 to 12-02-27 08-03-27 to 12-03-27

ELECTRONIC CONTROLS & MAINTENANCE

Name of the Course	Course Code	Duration	Regular Course Schedules
ARDUINO - BASED IOT APPLICATION DEVELOPMENT	260901	2 Weeks	20-07-26 to 31-07-26 26-10-26 to 06-11-26 01-02-27 to 12-02-27
EMBEDDED SYSTEM PROGRAMMING USING PIC MICROCONTROLLER & ARM	260902	2 Weeks	03-08-26 to 14-08-26 09-11-26 to 20-11-26 15-02-27 to 26-02-27
DRONE DEVELOPMENT FROM ASSEMBLY TO FLIGHT TESTING	260903	2 Weeks	01-06-26 to 12-06-26 31-08-26 to 11-09-26 30-11-26 to 11-12-26
PROGRAMMING AND APPLICATIONS OF 8051 MICROCONTROLLER	260904	1 Week	18-05-26 to 22-05-26 21-09-26 to 25-09-26 18-01-27 to 22-01-27 29-03-27 to 02-04-27
ELECTRONIC CIRCUIT SIMULATION & PCB DESIGN	260905	2 Weeks	06-07-26 to 17-07-26 05-10-26 to 16-10-26 28-12-26 to 08-01-27 15-03-27 to 26-03-27

METROLOGY & ENGINEERING INSPECTION

Name of the Course	Course Code	Duration	Regular Course Schedules
CALIBRATION OF DIMENSIONAL MEASURING INSTRUMENTS & GAUGES	261001	1 Week	16-11-26 to 20-11-26 08-02-27 to 12-02-27
GEOMETRICAL DIMENSIONING & TOLERANCING (GD&T)	261002	1 Week	13-07-26 to 17-07-26 22-02-27 to 26-02-27
IMPORTANCE OF MSA & SPC IN INDUSTRIES	261003	1 Week	28-12-26 to 01-01-27 22-03-27 to 26-03-27
ENGINEERING INSPECTION & QUALITY CONTROL	261004	1 Week	08-06-26 to 12-06-26 02-11-26 to 06-11-26

HEAT TREATMENT & MATERIAL TESTING

Name of the Course	Course Code	Duration	Regular Course Schedules
METALLOGRAPHIC PREPARATION AND IDENTIFICATION OF METALLIC MATERIALS	261101	1 Week	20-07-26 to 24-07-26
HEAT TREATING OF FERROUS ALLOYS	261102	1 Week	30-11-26 to 04-12-26
BASICS OF NON-DESTRUCTIVE TESTING (NDT) TECHNIQUES	261103	1 Week	10-08-26 to 14-08-26 07-12-26 to 11-12-26
ANALYSIS OF FERROUS ALLOYS BY OPTICAL EMISSION SPECTROMETER (OES)	261104	1 Week	04-01-27 to 08-01-27
SUBMISSION OF PRODUCTION PART APPROVAL PROCESS (PPAP)	261105	1 Week	15-06-26 to 19-06-26
UNDERSTANDING OF CORE TOOLS – FMEA & APQP	261106	1 Week	26-10-26 to 30-10-26
ROLES & RESPONSIBILITIES OF QA IN MANUFACTURING INDUSTRIES	261107	1 Week	08-06-26 to 12-06-26 29-03-27 to 02-04-27

AUTOMOTIVE TECHNOLOGY

Name of the Course	Course Code	Duration	Regular Course Schedules
DIAGNOSIS, REPAIR AND MAINTENANCE OF MPFI PETROL ENGINE	261201	2 Weeks	08-06-26 to 19-06-26 10-08-26 to 21-08-26 09-11-26 to 20-11-26 01-02-27 to 12-02-27
DIAGNOSIS, REPAIR AND MAINTENANCE OF CRDI DIESEL ENGINE	261202	2 Weeks	29-06-26 to 10-07-26 31-08-26 to 11-09-26 30-11-26 to 11-12-26 15-02-27 to 26-02-27
DIAGNOSIS AND REPAIR IN AUTOMOBILE ELECTRICAL & AUTOTRONICS	261203	2 Weeks	13-07-26 to 24-07-26 02-11-26 to 13-11-26 07-12-26 to 18-12-26
MAINTENANCE OF LIGHT MOTOR VEHICLE - (PETROL & DIESEL) & CAR AC	261204	2 Weeks	27-07-26 to 07-08-26 26-10-26 to 06-11-26 28-12-26 to 08-01-27 15-03-27 to 26-03-27
REPAIR AND SERVICING OF BS VI ELECTRIC TWO WHEELERS	261205	3 Days	As per demand

PRODUCTION TECHNOLOGY

Name of the Course	Course Code	Duration	Regular Course Schedules
BASIC PROGRAMMING & OPERATION IN CNC - EDM WIRE CUT	261301	1 Week	13-07-26 to 17-07-26 24-08-26 to 28-08-26 26-10-26 to 30-10-26
BASIC PROGRAMMING & OPERATION IN CNC - EDM SPARK EROSION	261302	1 Week	07-12-26 to 11-12-26 04-01-27 to 08-01-27 22-01-27 to 26-02-27
INDUSTRIAL MANUFACTURING ESSENTIALS	261303	1 Week	10-08-26 to 14-08-26 05-10-26 to 09-10-26 14-12-26 to 18-12-26 01-03-27 to 05-03-27
DESIGN AND MANUFACTURING OF PRESS TOOLS	261304	2 Weeks	08-06-26 to 19-06-26 20-07-26 to 31-07-26
MULTI SKILL TRAINING ON TURNING, MILLING AND GRINDING	261305	2 Weeks	07-09-26 to 18-09-26 02-11-26 to 13-11-26

ADVANCED WELDING

Name of the Course	Course Code	Duration	Regular Course Schedules
MIG/MAG WELDING TECHNIQUES AND ITS APPLICATIONS	261401	2 Weeks	03-08-26 to 14-08-26 15-03-27 to 26-03-27
TIG WELDING TECHNIQUES AND ITS APPLICATIONS	261402	2 Weeks	06-07-26 to 17-07-26 26-10-26 to 06-11-26 18-01-27 to 29-01-27 01-03-27 to 12-03-27
ALUMINIUM WELDING USING TIG TECHNIQUES	261403	2 Weeks	07-12-26 to 18-12-26 01-02-27 to 12-02-27
STAINLESS STEEL WELDING USING TIG & MIG	261404	2 Weeks	15-06-26 to 26-06-26 07-09-26 to 18-09-26 02-11-26 to 13-11-26

PLUMBING TECHNOLOGY

Name of the Course	Course Code	Duration	Regular Course Schedules
FOUNDATIONAL CONCEPTS OF SANITARY PLUMBING	261501	2 Weeks	01-06-26 to 12-06-26 29-06-26 to 10-07-26 15-02-27 to 26-02-27
PLUMBING MAINTENANCE AND SERVICING OF SANITARY APPLIANCES	261502	2 Weeks	20-07-26 to 31-07-26 26-10-26 to 06-11-26 01-02-27 to 12-02-27

सत्यमेव जयते

Government of India
Ministry of Skill Development and Entrepreneurship
Directorate General of Training
Regional Directorate of Skill Development & Entrepreneurship

Skill India
कौशल भारत-कुशल भारत

Directorate General of Training

NATIONAL SKILL TRAINING INSTITUTE
CHENNAI - 600 032

TRAINING BROCHURE
2026 - 2027

Address for Correspondence

The Regional Director
Regional Directorate of Skill Development and Entrepreneurship
No.10, Alandur Road, CTI Campus, Guindy, Chennai - 600032
Phone: 044 - 2250 1211, Email : nsti-chennai@dgt.gov.in / rdsde-tn-msde@gov.in
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Directorate General of Training (DGT)

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National Skill Training Institute

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FEE STRUCTURE

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For Online Registration :
https://nstichennai.dgtmsde.in/avtsregform1.php

National Skill Training Institute, Guindy, Chennai – 600 032

RegnNo.....

(for Office Use Only)

APPLICATION FORM

(To be filled **in CAPITAL LETTERS** Only)

(1) COURSE DETAILS

(a) Name of the course:.....

(b) Course Code:.....(c)Duration: No of Weeks.....From.....To.....

(2) CANDIDATE'S PARTICULARS

(a) Name of the Candidate:.....

(b) Father's/Husband's Name:.....

(c) Date of Birth(dd/mm/yy):.....(d) Gender: MALE/FEMALE/ OTHER

(3) CATEGORY

GEN	OBC	SC	ST	PWD

(4) DETAILS FOR COMMUNICATION

(a) Mailing Address :

.....

.....Pincode : .....

(b) Mobile No : ..... E-mail-id .....Fax No.....

(5) ACADEMIC/TECHNICAL QUALIFICATION(BE / DIPLOMA/NTC/NAC/BSc..etc)

Examination Passed	Branch/Trade	% of Marks	Issuing Authority	Year

(6) EXPERIENCE(Including present Job)

Name of the Employee	Designation	Nature of Job	From	To

(1) FEES PAID PARTICULARS BANK DETAILS

Bank Name &Place	DD No	Date	Amount

Place:

Date:

(Signature of the Applicant)

INDEX

COMPUTER NUMERICAL CONTROL (CNC)

Qualification

- ITI / Diploma / Degree in relavent discipline.
- Pre-final & Final year students of diploma / degree in relavent discipline.
- Sponsored candidates with relevant field experience in this sector

Courses Offered

BASIC CNC TURNING, OPERATION & PROGRAMMING (FANUC & SIEMENS SINUMERIK CONTROL SYSTEMS)

Course Code: 260101 | Duration : 1 Week

- Introduction to CNC Turning Centers, Elements of CNC & its Principles, Axis Definition.
- Co-Ordinate systems, Preparatory & Miscellaneous Functions, different Offset methods and its Applications, Jaw Settings, Tool settings, Selection of Tools and application of parameters.
- Simple Part Programming by different methods for OD Turning Operations

ADVANCED CNC TURNING, OPERATION & PROGRAMMING (FANUC & SIEMENS SINUMERIK CONTROL SYSTEMS)

Course Code: 260102 | Duration : 1 Week

- Introduction to CNC Turning Centers, Applying Canned Cycles for OD and ID operations.
- Creating, Editing and checking the program using Simulator, Application of subroutine.
- Direct Drawing Dimension programming, applying different Offset methods.

BASIC CNC MILLING, OPERATION & PROGRAMMING (FANUC & SIEMENS SINUMERIK CONTROL SYSTEMS)

Course Code: 260103 | Duration : 1 Week

- Introduction to CNC Vertical Machining Centers, Elements of VMC and its Principles, Axis Definition.
- Co-ordinate Systems, Preparatory and Miscellaneous Functions for VMC, Work offset and Tool Offset methods. Selection of Cutting Tools and application of Parameters.
- Part Programming by different methods for Milling & Drilling operations. Creating, Editing and checking the Program using Simulator

ADVANCED CNC MILLING, OPERATION & PROGRAMMING (FANUC & SIEMENS SINUMERIK CONTROL SYSTEMS)

Course Code: 260104 | Duration : 1 Week

- Introduction to CNC Vertical Machining Centers,
- Different Offset Methods and its Application using Tool Pre-setter & 3D Probes, and its Advantages.
- Selection of Cutting Tools and Tool Holders, application of Tool Parameters for 2D and 3D machining Part Programming.
- Applying Rotation, Mirroring & Scaling Commands for Part Programming checking the part Program using Simulator.

ADVANCED CNC MILLING OPERATION & PROGRAMMING WITH MULTIAXIS

Course Code: 260105 | Duration : 1 Week

- Introduction to Axis Definitions & Machine Kinematics. Elements of CNC Machines for 4th and 5th Axis Machining.
- Work Offset & Tool Offset on the Machine. Applying Cycle800 for 3+2 Axis Positioning and applying Cycle832 for Advanced Surface.
- Applying Transformation commands for 4th & 5th Axis Machining and making the Part Programs.
- Introduction to Mastercam. Simulating the Program using the Simulator.

APPLICATION OF MASTER CAM AND SOLID EDGE CAM IN TURNING & MILLING

Course Code: 260106 | Duration : 1 Week

- Introduction to Mastercam, Understanding the user Interface, Different commands, Menu bar & Tool Bars, Turning & Milling Modules (2D & 3D),
- Introduction to Multi-axis Tool paths for Advanced Milling application and Art Cam Module for Art applications.

2 REFRIGERATION & AIR CONDITIONING

REFRIGERATION & AIR CONDITIONING

Qualification

- ITI / Diploma / Degree in relavent discipline.
- Pre-final & Final year students of diploma / degree in relavent discipline.
- Sponsored candidates with relevant field experience in this sector

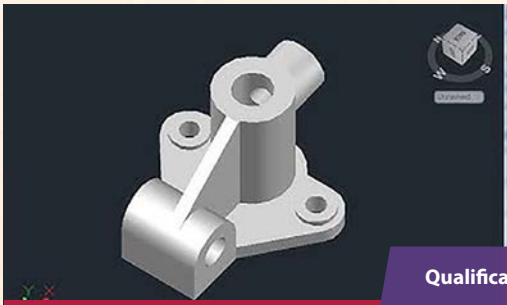
Course Offered

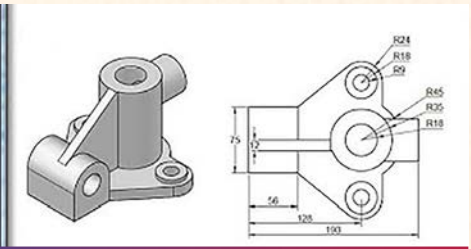
REFRIGERATION AND AIR CONDITIONING

Course Code: 260201 | Duration: 2 Weeks

- Swaging techniques, flaring techniques, bending techniques by using 3D method on plain paper.
- Setting of dual pressure control i.e. HP and LP cut out and pipe joining, Brazing techniques, Leak detection methods.
- Evacuation techniques with use of micron vacuum gauge, 2 stage rotary vacuum pump with gas blast & anti suck back valve.
- Electrical Wiring Practice using the RAC Kit, Adjusting and wiring of Sensors for Temperature measurement etc.,
- Refrigerant charging by weight measuring method, Testing of machine after refrigerant charging.
- Gas recovery methods and benefits for environment and human safety. Safe handling of flammable refrigerants.

3 CAD TECHNOLOGY





CAD TECHNOLOGY

Qualification

- ITI / Diploma / Degree in relavent discipline.
- Pre-final & Final year students of diploma / degree in relavent discipline.
- Sponsored candidates with relevant field experience in this sector

Course Offered

APPLICATION OF AUTOCAD 2D & 3D DRAFTING IN ENGINEERING DESIGN

Course Code: 260301 | Duration : 2 Weeks

- Introduction to Auto Cad, drawing layouts, tool bars, file creation, creation of drawing sheet as per ISO, create line, break, erase, undo, absolute co-ordinate system
- Relative co-ordinate system and polar co-ordinate system, Trim, offset, fillet, chamfer commands drawing practice, drawing practice using arc, circle commands move,
- copy, array, insert block, make block, scale, rotate, hatch commands, creating templates, inserting layers, Drawing practice using dimensioning drawings, creating styles in dimensioning. Drawing practice using 3d primitives, extrude, revolve command setting user co-ordinate systems, rotating, plotting, print preview

SOLAR TECHNOLOGY

Qualification

- ITI / Diploma / Degree in relavent discipline.
- Pre-final & Final year students of diploma / degree in relavent discipline.
- Sponsored candidates with relevant field experience in this sector

Course Offered

CONSTRUCTION, INSTALLATION & COMMISSIONING OF SOLAR PANEL & PV SYSTEM

Course Code: 260401 | Duration : 1 Week

- Construction of solar panels,
- Types of panels / converters, Solar charge controller,
- Types of PV system and solar appliances.
- Installation and commissioning of various type of PV System like standalone AC / DC, Hybrid, On grid and grid interactive PV system.

ELECTRICAL DRIVES & SWITCH GEARS

Qualification

- ITI / Diploma / Degree in relavent discipline.
- Pre-final & Final year students of diploma / degree in relavent discipline.
- Sponsored candidates with relevant field experience in this sector

Courses Offered

COURSE ON AC MOTOR DRIVES IN SIEMENS G120 TRAINING KIT

Course Code: 260501 | Duration : 1 Week

Basics of AC motors, Converters, Breakings, AC drives, control unit, power unit and basic operator panel. Installation, parameterization & commissioning of AC drives through BOP and Siemens tool software. Trace function and diagnostics of parameters.

COURSE ON LV SWITCHGEARS IN SIEMENS ACBS & MCCBS

Course Code: 260402 | Duration : 1 Week

Basic concepts about Siemens switch gear (3WL, 3WT, 3VA and 3VT). Function and operation of Siemens ACBs and MCCBs. Dismantling and assembling of standard accessories of ACBs and MCCBs.

PROCESS CONTROL INSTRUMENTATION

Qualification

- ITI / Diploma / Degree in relavent discipline.
- Pre-final & Final year students of diploma / degree in relavent discipline.
- Sponsored candidates with relevant field experience in this sector

Courses Offered

PLC PROGRAMMING USING SIEMENS S7 400/1200/1500

Course Code: 260601 | Duration : 1 Week

- Understanding of Programmable Controller Systems using TIA PORTAL- Identifying Common PLC Hardware
- Configuring PLC for DIOs and AIOs, creating a New Project with Ladder Logic
- Procedure to connect, communicate, download and execute programs
- Practice on Programming for various Industrial applications using Timers, Counters
- Arithmetic functions and Analog I/Os. Demo. of PLC application trainers - Bottling & Mechatronics applications.

PLC PROGRAMMING USING SIEMENS S7 1200 WITH HMI AND SCADA

Course Code: 260502 | Duration : 2 Weeks

- Understanding of Programmable Controller Systems using TIA PORTAL- Identifying Common PLC Hardware
- Configuring PLC for DIOs and AIOs, creating a New Project with Ladder Logic.
- Practice on Programming for various Industrial applications using Timers, Counters, Arithmetic functions and Analog I/Os.
- Programming of PLC & HMI using SCADA S/W.
- The Management of Screens and Controls, Alarm Management & Trending, OPC / DDE process communication with other PLCs- Bird's eye view of TIA software
- Building application based Project- Bottle filling, lift control working procedures and Overview of Modular Manufacturing System, IoT applications of Automation.

INDUSTRIAL AUTOMATION WITH SIEMENS PLCs AND ELECTRIC DRIVES

Course Code: 260503 | Duration : 2 Weeks

- Overview of Industrial Automation and the Role of PLCs & Drives. Methods of Speed Control of AC / DC motors, Servo motors, BLDC motors etc.
- Power Control concepts, PWM techniques, PID controller & Drive parameters.
- Working principle of Electric Drives, Four quadrant Drive & methods of Braking.
- Demonstration and testing of Drives using DSO.
- Power control of drives with Converters & Inverters.
- Practice on Configuring parameters of VFD.
- Configuring PLC for Interfacing with Digital and Analog modules and programming.
- Programming of PLC for simple applications, motor control and PID.

TESTING AND CALIBRATION OF INDUSTRIAL INSTRUMENTS

Course Code: 260504 | Duration : 1 Week

- Introduction to Measurement System, Process control signals. Signal quality terminology, System standards and Instrument Calibration.
- Principle and Operation of Pressure instruments, Strain gauge. Pressure Sensors, Pressure Measurement & Control (Electronic and Pneumatic). Operation and Calibration of Differential Pressure Switch & Safety Valve
- Operation and Calibration of I/P Converter, Temperature Instruments-Principles, Sensors for temperature measurement, Installation and Commissioning of RTD & Thermocouple, RTD – 2 Wire. 3 Wire and 4 wire Configuration, Thermocouple – Cold junction compensation and compensation cables

PNEUMATIC & HYDRAULIC CONTROLS

Qualification

- ITI / Diploma / Degree in relavent discipline.
- Pre-final & Final year students of diploma / degree in relavent discipline.
- Sponsored candidates with relevant field experience in this sector

Courses Offered

BASIC PNEUMATICS CONTROL

Course Code: 260701 | Duration : 1 Week

- Fundamentals of Pneumatic systems, Identification of Pneumatic systems
- Components and its graphical symbol interpretation,
- Design of pneumatic circuits and stimulated using software package,
- Practical of designed circuits,
- Design of Pneumatic control circuit for industrial applications

BASIC ELECTRO - PNEUMATICS CONTROL

Course Code: 260702 | Duration : 1 Week

- Introduction to Electro Pneumatic systems,
- Electrical control systems for Electro Pneumatic operation,
- Design of Electro pneumatic control circuits and stimulated using software package,
- Practical of designed circuits,
- Design of Electro Pneumatic control circuit for industrial applications

BASIC HYDRAULICS CONTROL

Course Code: 260703 | Duration : 1 Week

- Fundamentals of Hydraulic systems, Introduction of Hydraulic systems
- Components and its graphical symbol interpretation,
- Design of Hydraulic circuits and stimulated using software package,
- Practical of designed circuits,
- Design of Hydraulic control circuit for industrial applications

BASIC ELECTRO - HYDRAULICS CONTROL

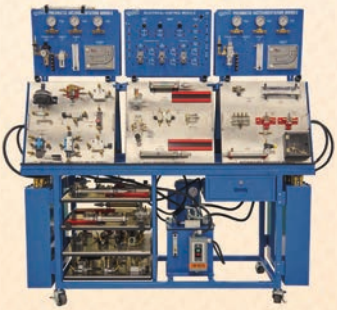
Course Code: 260704 | Duration : 1 Week

- Introduction to Electro Hydraulic systems,
- Electrical control systems for Electro Hydraulic operation,
- Design of Electro Hydraulic control circuits and stimulated using software package,
- Practical of designed circuits,
- Design of Electro Hydraulic control circuit for industrial applications

ELECTRO – PNEUMATICS AUTOMATION WITH PLC

Course Code: 260705 | Duration : 1 Week

- Introduction to Electro Pneumatic systems,
- Electrical control systems and sensor technology for Electro Pneumatic operation,
- Design of Electro pneumatic control circuits and stimulated using software package,
- Practical of designed circuits,
- Introduction to PLC & PLC Programming,
- Design & development of Ladder diagrams for various applications.



SEWING TECHNOLOGY

Qualification

- ITI / Diploma / Degree in relavent discipline.
- Pre-final & Final year students of diploma / degree in relavent discipline.
- Sponsored candidates with relevant field experience in this sector

Course Offered

DYEING TECHNIQUES

Course Code: 260801 | Duration : 1 Week

- Introduction to textile fibres, Preparatory process for all textile fibres and fabrics,
- Bleaching of textile fibres with different bleaching agents like Bleaching powder, Bleaching Solution, Hydrogen peroxide and Sodium chlorite.
- Brief introduction to Dyeing and Printing, Dyeing of natural and synthetic fibres with different class of dye stuffs like Direct, Reactive, Sulphur, Vat, Acid Basic.
- Metal complex & Disperse dyes, Dyeing with natural dyes/colours on celluloses and animal fibres.
- Reserve/Resist styles of Dyeing and Printing like Tie & Dye and Batik etc.,
- Printing of cotton fabric with different methods like block and screen using different styles using pigment colours.
- Marbling technique of natural fabrics like cotton, Silk etc., Records Preparations for submission.

ELECTRONIC CONTROLS MAINTENANCE

Qualification

- ITI / Diploma / Degree in relavent discipline.
- Pre-final & Final year students of diploma / degree in relavent discipline.
- Sponsored candidates with relevant field experience in this sector

Courses Offered

ARDUINO - BASED IOT APPLICATION DEVELOPMENT

Course Code: 260901 | Duration : 2 Weeks

- Microprocessor Vs Microcontroller, Sensors & Actuators, Overview of Internet of Things
- Introduction to Arduino Uno, Installation of Arduino IDE, Variables, data types and functions.
- Programming using C++ for simple applications. Specifications
- Basic configurations of Arduino with Digital and Analog devices, Sensors & Actuators, I/O Interfacing with LEDs, push buttons, Optical sensor
- Temperature sensor, Motion sensor, Proximity sensor, Ultrasound sensor, Soil moisture sensor, buzzer, relay, LCD display, Pump ON/OFF, PWM, DC motor control, Servo motor, etc.
- Use of Communication Protocol - WiFi, I2C, USB, Bluetooth, Ethernet shield interfacing etc. Build your own project.

EMBEDDED SYSTEM PROGRAMMING USING PIC MICROCONTROLLER & ARM

Course Code: 260902 | Duration : 2 Weeks

- Microcontroller vs Microprocessor, Fundamentals of Embedded systems, PIC - MC Architecture
- Installation of MPLAB IDE, GPIO ports and registers, Programming of PIC MC, Interfacing sensors, actuators, and communication modules, UART Communication
- Basics of SPI & I2C, Interfacing LCD display, Overview of ARM Cortex-M architecture,
- Programming using Embedded C, ARM development environment setup (Keil / STM32CubeIDE), use of Communication Protocol - UART, SPI, I2C etc. in ARM. development of real-time embedded applications.

DRONE DEVELOPMENT FROM ASSEMBLY TO FLIGHT TESTING

Course Code: 260903 | Duration : 2 Weeks

- Introduction to Drone Aerodynamic principles, Classification of drones & their applications
- Block description of Drone system, Sensors & Actuators. Servo motors & BLDC motors used in drones, RF communication concepts, GPS & its significance, Safety precautions, Configuration of Drone System Hardware
- Flight Controllers used in Drones, ESCs, flying test. Identify and resolve common error messages by Software debugging method. Inspect, test and trouble-shoot based on symptoms noticed.

PROGRAMMING AND APPLICATIONS OF 8051 MICROCONTROLLER

Course Code: 260904 | Duration: 1 Week

- Microprocessor Vs Microcontroller, Introduction to 8051 Microcontroller Architecture and features
- variables, data types and functions, Programming using C++ for simple applications, Sensors & Actuators, Timer and Counter, I/O interfacing & comm. protocols.

ELECTRONIC CIRCUIT SIMULATION & PCB DESIGN -

Course Code: 260905 | Duration : 2 Weeks

- Introduction to circuit design workflow, Overview of simulation & PCB tools, Creating simple circuits (LED, voltage divider) etc., Frequency response of RC circuits, Timer circuits (555 IC), Simple microcontroller Simulation, Introduction to KiCad / EAGLE / ALTIUM
- Creating schematic diagrams, Assigning footprints to components, PCB basics (layers, tracks, vias), Routing techniques (manual & auto-routing) Design rules and constraints. Design schematics and convert them into PCB layouts, Generating Gerber files, Multilayer PCB basics. Simple DIY project.

METROLOGY & ENGINEERING INSPECTION

Qualification

- ITI / Diploma / Degree in relavent discipline.
- Pre-final & Final year students of diploma / degree in relavent discipline.
- Sponsored candidates with relevant field experience in this sector

Courses Offered

CALIBRATION OF DIMENSIONAL MEASURING INSTRUMENTS & GAUGES

Course Code: 261001 | Duration : 1 Week

- Terminology used in Metrology, Calibration procedure for Vernier calipers, External Micrometer, Vernier height gauges
- Plunger type dial gauges, Lever type dial gauge (IS-11498)
- Calibration of Micrometer (Internal & External)
- Vernier caliper, Vernier Height gauge, Dial test Indicator
- checking flatness of reflective surfaces by using Monochromatic light and optical flat, Dial Gauge Calibrator
- Calibration practices using Slip Gauges, Caliper Checker, 2D Height Master, Surface Roughness Measurements
- Measurements using Video Measuring Machine.

GEOMETRICAL DIMENSIONING & TOLERANCING (GD&T)

Course Code: 261002 | Duration : 1 Week

- Terminology used in metrology
- checking of straightness of Straight surface by using Spirit level and checking by Dial gauges
- V-Block and checking flatness of reflective surfaces by using Monochromatic light and optical flat
- Measure/inspect straightness, flatness and roundness
- GD&T Features (Tolerances of Form, Orientation, Location & Runout, Positioning)
- Dimensional Measurement using Video Measuring Machine (VMM) and 2D Height Master

IMPORTANCE OF MSA & SPC IN INDUSTRIES

Course Code: 261003 | Duration : 1 Week

- Purpose of MSA, Understand MSA and the statistical tests employed to determine measurement variation and measurement uncertainty for the effective management of measurement systems
- Analysis of measurement errors using various samples and interpreting the results. Gage R&R Studies
- How to conduct MSA & SPC and interpret results
- Understand the need of SPC, Apply SPC in process of work
- acquire statistical knowledge about measurement results, Quality Tools – Control charts
- Understanding the plotting and interpretation of the various control charts used in SPC.

ENGINEERING INSPECTION & QUALITY CONTROL

Course Code: 261004 | Duration : 1 Week

- Linear and Angular Measurement
- Surface Finish, Calibration of Instruments
- Practice of dimensional measurements using VMM & 2D Height Master
- Role of Quality Assurance & Quality Control, Importance of Seven Basic QC Tools – Fishbone Diagram, Histogram, Control Chart, Check Sheets, Scatter Diagrams
- Pareto Charts, Sampling Plans and its Types.





HEAT TREATMENT & MATERIAL TESTING

Qualification

- ITI / Diploma / Degree in relavent discipline.
- Pre-final & Final year students of diploma / degree in relavent discipline.
- Sponsored candidates with relevant field experience in this sector

Courses Offered

METALLOGRAPHIC PREPARATION & IDENTIFICATION OF METALLIC MATERIALS

Course Code: 261101 | Duration : 1 Week

- Introduction to Crystal Structure
- Imperfections in Solids, Effect of Alloying Elements in Steel, Fe-C phase diagram of steels and cast irons
- Practice on metallography preparation of samples by sectioning, mounting, grinding, polishing samples
- Etching the metals and alloy samples for development of microstructures, Image analysis of the microstructures using Inverted Metallurgical Microscope. Quantification of microstructure such as grain size. Inclusion rating and case depth measurement.

HEAT TREATING OF FERROUS ALLOYS

Course Code: 261102 | Duration : 1 Week

- Basic metallurgical theory of Heat Treatment
- Introduction to steel and its mechanical properties
- Purpose and types of heat treatment process,
- Annealing, Normalizing, Hardening, Tempering, Importance of TTT diagram
- Case Hardening process and its types, Practice on selection of heat-treating temperature
- Practice on annealing process, normalizing process, hardening process, tempering process, Practice on different quenching media.

BASICS OF NON-DESTRUCTIVE TESTING (NDT) TECHNIQUES

Course Code: 261103 | Duration : 1 Week

- Introduction to Non-Destructive Testing (NDT), Types of discontinuities in weldments
- Defect identification in Liquid Penetrant Testing (LPT) Dry powder and wet fluorescent method in Magnetic Particle Testing (MPT). Principle of Sound Wave Propagation
- Flaw detection in Ultrasonic Testing (UT), Eddy current flaw detector, Hand-on-Training in LPT, UT, MPT & ECT.

ANALYSIS OF FERROUS ALLOYS BY OPTICAL EMISSION SPECTROMETER (OES)

Course Code: 261104 | Duration : 1 Week

- Overview of Ferrous Alloys, Effect of Alloying Elements on Steel, Purpose of Spectrometer
- Using the OES software for instrument control, data acquisition, and results display. interpreting elemental concentration data and understanding
- Calibration procedures for working with Certified Reference Materials (CRM)
- Practice on preparation of samples for identifying elements in Spectrometer.

SUBMISSION OF PRODUCTION PART APPROVAL PROCESS (PPAP)

Course Code: 261105 | Duration : 1 Week

- Purpose and Importance of Production Part Approval Process (PPAP). Customer notification and submission document requirements, PPAP process requirements and the submission levels of evidence (1-5). Preparation to submit a PPAP to meet customer-specific requirements.

UNDERSTANDING OF CORE TOOLS – FMEA & APQP

Course Code: 261106 | Duration : 1 Week

- Focus on New product Development Assurance through APQP
- Changes in FMEA and the new standards, 7 step methodology of FMEA, Steps needed for an APQP process

ROLES & RESPONSIBILITIES OF QA IN MANUFACTURING INDUSTRIES

Course Code: 261107 | Duration : 1 Week

- Defining Quality Assurance (QA) and its Importance
- Role of QA in Ensuring Product and Service Quality
- Ethical Considerations in QA, Introduction to QMS Standards
- Continuous Improvement through PDCA, Key Performance Indicators, Risk-Based Thinking in QA. Capability Analysis, Sampling Plans and Inspection Methods

AUTOMOTIVE TECHNOLOGY

Qualification

- ITI / Diploma / Degree in relavent discipline.
- Pre-final & Final year students of diploma / degree in relavent discipline.
- Sponsored candidates with relevant field experience in this sector

Courses Offered

DIAGNOSIS, REPAIR AND MAINTENANCE OF MPFI PETROL ENGINE

Course Code: 261201 | Duration: 2 Weeks

- Principle and working of four stroke engine, engine components and variable valve timing technology
- Function, components and working of lubrication system & cooling system,
- Engine diagnostic methods and Troubleshooting of MPFI Petrol Engine.
- Check the compression pressure, vacuum pressure & oil pressure on the engine.
- Dismantling, cleaning, inspecting and reassembling the petrol engine,
- Onboard diagnosis using scan tool, checking of sensors and actuators.

DIAGNOSIS, REPAIR AND MAINTENANCE OF CRDI DIESEL ENGINE

Course Code: 261202 | Duration: 2 Weeks

- Principle and working four stroke engine, engine components, valve operating mechanism, function,
- Components and working of lubrication, cooling and fuel system and its types, CRDI system in diesel engine, emission control, Euro & BS emission norms,
- Turbo charged engine, maintenance of engine, Engine diagnostic methods and Troubleshooting,
- Checking and adjusting valve tappet clearance, overhauling of cooling, lubrication and fuel systems,
- Onboard diagnosis using scan tool, checking of sensors and actuators in CRDI, checking of exhaust gas using exhaust gas analyzer.

DIAGNOSIS AND REPAIR IN AUTOMOBILE ELECTRICAL & AUTOTRONICS

Course Code: 261203 | Duration: 2 Weeks

- Basic principles and function of auto electrical system, reading of electrical wiring diagram of a vehicle,
- Troubleshooting on Electrical system-checking and charging of battery, overhauling and testing of starter motor and alternator.
- Basic electronic components principle, working and their applications in automobiles,
- Working principles and testing of different sensors and actuators, ECM and onboard diagnostic system, use of scan tool, Read and erase of DTC.

MAINTENANCE OF LIGHT MOTOR VEHICLE - (PETROL & DIESEL) & CAR AC

Course Code: 261204 | Duration: 2 Weeks

- Specification of light motor vehicles, principle and working of four stroke engine, engine systems and its maintenance.
- Transmission, brake system, suspension system, steering system components and their maintenance, tyre maintenance, importance of wheel alignment and wheel balancing,
- Preventive maintenance of light motor vehicles, Identification of engine and vehicle fault using scan tool
- Air conditioning system and inspection, replacing of spark plug, adjustment of clutch, brake and steering free play, vehicle lubrication,
- Checking of exhaust gas using exhaust gas analyzer emission norm, maintenance schedule of light motor vehicle, fuel saving methods.

PRODUCTION TECHNOLOGY

Qualification

- ITI / Diploma / Degree in relavent discipline.
- Pre-final & Final year students of diploma / degree in relavent discipline.
- Sponsored candidates with relevant field experience in this sector

Courses Offered

BASIC PROGRAMMING & OPERATION IN CNC EDM-WIRE CUT

Course Code: 261301 | Duration: 1 Week

- Safety and Occupational Hazards
- Introduction of EDM and Principle
- Advantages of CNC EDM - WIRE CUT
- CNC EDM machine Tool and Power Supply
- Dielectric fluid as De- Mineralized Water and Function
- G. Code Meaning, Functions & Examples
- M. Code for Machine Meaning & Machining Key functions
- Machine Reference Mode and Jog Mode Axis / MDI Mode
- Tool Off set and Work Off Set
- Jog mode X, Y Z movements
- Path Using Entry and Exit Point
- Path Using Start and End Point

BASIC PROGRAMMING & OPERATION IN CNC EDM SPARK EROSION

Course Code: 261302 | Duration: 1 Week

- Safety and Occupational Hazards
- Introduction of EDM and Principle
- Concept of CNC EDM wire Cut & Spark Erosion
- Advantages of CNC EDM Spark Erosion
- Familiarisation of X-PERT Guru Offline Software
- Learning the software menus, programming flow, and machine operation basics.
- Writing of Model programme,
- To Change/ remove the Auto E code
- Single cavity programme

INDUSTRIAL MANUFACTURING ESSENTIALS

Course Code: 261303 | Duration: 1 Week

- Safety and Occupational Hazards
- ISI, ISO and BIS Standards
- Mode of Productions
- Interchangeable Component
- Selective and Non Selective assembly
- Device , Machine and Machine Tool
- Accuracy & Precision
- General Tolerance and Fundamental Deviation

DESIGN AND MANUFACTURING OF PRESS TOOLS

Course Code: 261304 | Duration: 2 Weeks

- Safety and Occupational Hazards
- Types of Tooling and Its applications
- V and U bending
- Draw Tool
- Advance Machine Tools of CNC and EDM
- Types of Hardness Testing machine
- Importance of HRC and Machine- ability
- Importance of Heat Treatment
- Heat Treatment Process and Quenching Methods
- Assembly , Trail out, Trouble shooting and Maintenance

MULTI SKILLS TRAINING ON TURNING, MILLING & GRINDING

Course Code: 261305 | Duration: 2 Weeks

- GSafety and Occupational Hazards
- Introduction of Lathe and its Purposes
- Types of Lathe Machine Tool and Its Applications
- Types of Lathe Operations and Types of Cutting Tools
- Introduction of Grinding and its Purposes
- Types of Grinding Machine Tool and Its Applications
- Types of Grinding Operations and Types of Wheels
- Machine-ability and Grinding Allowances
- Stranded Grinding Wheel Marking Systems.
- Wheel Balancing, Glassing ,Truing & Dressing
- Importance of Heat Treatments and Hardness (HRC)

ADVANCED WELDING

Qualification

- ITI / Diploma / Degree in relavent discipline.
- Pre-final & Final year students of diploma / degree in relavent discipline.
- Sponsored candidates with relevant field experience in this sector

Courses Offered

MIG/MAG WELDING TECHNIQUES AND ITS APPLICATIONS

Course Code: 261401 | Duration: 2 Weeks

- Awareness of welding & safety
- Edge preparation
- weld symbols
- weld measurement, Introduction to Gas metal Arc Welding (GMAW),
- Welding Terms and Definitions,
- Electrical terms power source & equipment,
- Various shielding gases and its character on GMAW
- Cylinders colour code & Identifications, GMAW welding electrodes – codes, Torches,
- Maintenance& trouble shooting
- Wire Feed unit, Modes of metal transfer,
- Synergic & pulsed MIG Welding,
- FCA Welding process,
- Defects causes and remedy.

TIG WELDING TECHNIQUES AND ITS APPLICATIONS

Course Code: 261402 | Duration: 2 Weeks

- Awareness of welding & safety
- Terms & definition of welding
- Electrical terms & AC
- DC Polarity control system
- Introduction to GTAW equipment and power source
- Types of tungsten electrodes and their uses
- Filler rod specification
- Grinding of electrode tip
- Types of Inert gases and their character in shielding Properties of ferrous & non-ferrous metals
- Principle of HF unit & DC suppressor
- torches and maintenance
- Concept of pulsed TIG Welding
- Defects, causes and remedy.

ALUMINIUM WELDING USING TIG TECHNIQUES

Course Code: 261403 | Duration: 2 Weeks

- Basic Electrical Terms & Arc Voltage concepts
- Power source of GTAW welding
- AC, DC Suppressor& HFU
- Types of tungsten electrodes and its tip preparation
- Characteristic of inert gas
- Properties of Aluminium
- Filler wire specification
- Introduction of TIG Welding on Aluminium
- Current setting, Arc Voltage parameter
- Defects causes and remedy.

STAINLESS STEEL WELDING USING TIG & MIG

Course Code: 261404 | Duration: 2 Weeks

- Safety, Basic Electrical Terms & Arc voltage concepts
- Power source of GTAW welding & HFU, Types of tungsten electrodes and its tip preparations
- Characteristic of Inert gas
- Types of SS and its metallurgy for welding,
- Challenges in fabrication
- Introduction of MIG welding on S, Current setting
- Arc voltage – parameter
- Defects, causes and remedy.

PLUMBING TECHNOLOGY

Qualification

- ITI / Diploma / Degree in relavent discipline.
- Pre-final & Final year students of diploma / degree in relavent discipline.
- Sponsored candidates with relevant field experience in this sector

Courses Offered

FOUNDATIONAL CONCEPTS OF SANITARY PLUMBING

Course Code: 261501 | Duration : 2 Weeks

- Introduction to personal protective equipment (PPE), fire safety, and first aid.
- Worksite discipline, housekeeping, and waste disposal.
- Identification and use of pipe wrenches, spanners, hacksaws, and pliers.
- Reading measurements (metric/imperial) and basic marking on pipes.
- Hands-on practice in cutting, reaming, and deburring various pipes (PVC, CPVC, and metal).
- Introduction to solvent cement (PVC), threading (metal), and basic push-fit systems.
- Prevention of leaks through proper sealing techniques.
- Understanding cold water distribution, service lines, and storage tank connections. Assembling a simple pipe circuit and testing for leaks.
- Principles of gravity flow, laying pipes with proper slope, and floor trap installation.
- Fixing basic bathroom fixtures: washbasins, taps, and showerheads.
- Installing WCs (water closets), flushing tanks, and connecting kitchen sinks. Replacing washers, repairing leaky faucets, and unblocking simple drains.
- Installation and basic repair of gate valves, non-return valves, and simple electric pumps.
- Communicating with clients, basic estimation/ costing, and site handover procedures.
- Complete installation of a small bathroom unit as per a provided sketch.
- Evaluation based on dimensional accuracy (±0.25mm) and joint integrity.

PLUMBING MAINTENANCE AND SERVICING OF SANITARY APPLIANCES

Course Code: 261502 | Duration : 2 Weeks

- Reading of Plumbing Drawing
- Dos and Don'ts in plumbing
- Pipe joints Metal and Non-Metal Pipes
- Tools and Equipment's
- Assemble the Pipe fittings and other assertories as per lay out, Pipes, Fittings and Its Joints
- Install and Service Sanitary appliances, Sanitary Soil Fittings
- Angle / Pillar / Bib Cock Service-Cocks, Valves, and Pumps in Plumbing-Sensor Flush Service-Sensors and its applications
- Health Faucet Service-Sanitary Waste fittings-EWC Push Cock Service-Codes and symbols in Plumbing-Water Supply Pipeline Service-Water supply system
- Sewage & wastewater Line, Sewerage system, Sanitary Ware Pipeline Laying-Drainage system

प्रमाणपत्र संख्या
Certificate No.

सत्यमेव जयते
Govt. of India

प्रशिक्षण महानिदेशालय
Directorate General of Training
कौशल विकास एवं उद्यमिता मंत्रालय
Ministry of Skill Development and Entrepreneurship
भारत सरकार
GOVERNMENT OF INDIA

Skill India
कौशल भारत-कुशल भारत

CERTIFICATE / प्रमाणपत्र

Certified that / प्रमाणित किया जाता है Shri/ Smt/ Kumari श्री/ श्रीमति/ कुमारी .....

..... Son/ Daughter/

Wife of Shri. सुपुत्र/सुपुत्री/पत्नी/श्री .....

has successfully completed the training programme as per the detail given below and awarded this certificate / ने सफलतापूर्वक नीचे दिये गए विवरण के अनुसार प्रशिक्षण प्राप्त किया जिसके तहत इस प्रमाण पत्र से सम्मानित किए जाते है।

Name of the Course / पाठ्यक्रम का नाम .....

.....

Course conducted at / पर पाठ्यक्रम का आयोजन **NATIONAL SKILL TRAINING INSTITUTE, GUINDY, CHENNAI - 600032** under RDSDE, Tamil Nadu

Duration of the Course / पाठ्यक्रम की अवधि.....

From/ से ..... To/ तक.....

Deputed / Private / प्रतिनियुक्त / निजी.....

Place / स्थान: Chennai
Date / दिनांक

स्वच्छ भारत
एक कदम स्वच्छता की ओर

संस्थान की मुहर
Seal of the Institute

क्षेत्रीय निदेशक
Regional Director
RDSDE, Tamil Nadu

INFRASTRUCTURE AND FACILITIES

CONFERENCE HALL AND LIBRARY

CONFERENCE HALL

A Conference hall with a seating capacity of 40 seats equipped with modern audio-visual facilities such as Wi-FI DLP projector , audio systems, interactive board, visual presenter, computer with internet connections etc.

LIBRARY

A well equipped library is available for reading, reference & borrowing books. The library houses a good collection of technical books, periodicals, newspapers, wallcharts & transparencies for the use of trainees & staff

CANTEEN AND HOSTEL

A canteen available in the campus premises with hygienic refreshment & food during working hours.

Limited Hostel Accommodation is available on first come first serve basis. Cooking inside hostel rooms is strictly prohibited. In case of nonavailability of hostel, candidates have to make their own arrangements. Limited hostel facility for Women is also available separately.

- Nominal rent of Rs.100/- per day per room.
- A spacious hostel comprising of 100 rooms with double bed accommodation is available for the trainees.
- Moderate aminities like play area with sports goods,television room, & hygienic drinking water facilities are provided for the inmates.
- Family accommodation not available.
- Located from 1km from main campus close to inner ring road at Ekkattuthangal

LAB FACILITIES

Advanced Welding Lab

Process Control Instrumentation Lab

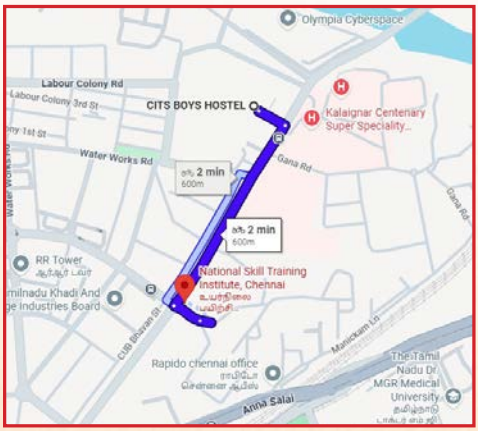
Pneumatic & Hydraulic Control Lab

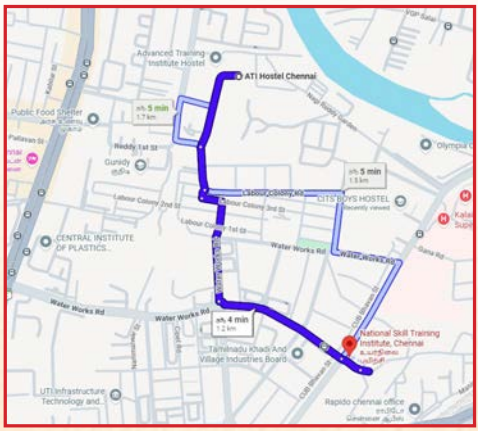
CNC Lab

Sewing Technology Lab

Metrology & Engg. inspection Lab

Detailed Road / Route Map





For Online Registration : https://nstichennai.dgtmsde.in/avtsregform1.php
Map : https://maps.app.goo.gl/JmJb7og6oFv8QWLv6
Website : https://nstichennai.dgt.gov.in/
Email : nsti-chennai@dgt.gov.in / rdsde-tn-msde@gov.in

For further enquiries Contact: P. Namasivayam, Deputy Director @ 9444632551