

# SCHEDULE OF TRAINING PROGRAMMES FROM APRIL 2018 TO MARCH 2019

Sr. No.	Code	Name of the course	Starting dates	Timings	Brief Contents			
<b>CAD/CAM COURSES</b>								
1	ST 01	Auto CAD (Sunday Session)	May, Aug, Nov 2018 & Feb 2019	60 Hours	9.00 AM -5.00PM Sundays only	Rs. 4,956/-	Basics of Engg. Drg. Creating and Editing objects, Layers, Line Types, Dimensioning, Layout, 3-dimensional CAD, Exercised based practice.	Pursuing Degree/Diploma, ITI, Mech.Trades or 10th
2	ST 01	Auto CAD (Regular Session)	Every Month	60 Hours	9.00 AM -5.00PM	Rs. 4,956/-	Same as above	- do -
3	ST 02	Integrated CAD/CAM Pro-E (Sunday Session)	May, August, November 2018	120 Hours	9.00 AM-5.00PM Sundays only	Rs. 12,390/-	Fundamentals, Sketcher, Modeling, Pro-surface, Assembly, Machining, Exercised based practice	Pursuing Degree, Diploma, ITI in Mech.
4	ST 02	Integrated CAD/CAM Pro-E (Regular Session)	Every Month	120 Hours	9.00 AM-5.00PM	Rs. 12,390/-	Same as above	- do -
5	ST 03	Integrated CAD/CAM Solid works (Regular Session)	Every Month	80 Hours	9.00 AM-5.00PM	Rs. 8,732/-	Sketcher, Part Modeling, Advance Part Modeling, Surfacing, Assembly, Exercised based practice	- do -
6	ST 04	Integrated CAD/CAM Master CAM (Regular Session)	Every Month	60 Hours	9.00 AM-5.00PM	Rs. 7,434/-	Sketcher, Part Modeling, Surface Modeling, Manufacturing, Exercised based practice	- do -
7	ST 05	Integrated CAD/CAM NX/Unigraphics	Every Month	120 Hours	9.00 AM-5.00PM	Rs. 14,868/-	Sketcher, Part Modeling, Advance Part Surface Modeling, Assembly, Drafting, Manufacturing and Simulation, Exercised based practice	- do -
8	ST 06	Integrated CAD/CAM CATIA	Every Month	120 Hours	9.00 AM-5.00PM	Rs. 12,390/-	Sketcher, Modeling, Surfacing, Assembly, Machining, Exercised based practice	- do -
<b>ANALYSIS SOFTWARES</b>								
9	ST 07	Mechanical Analysis with Hyper Works:	Every Month	02 weeks	9.00 AM-5.00PM	Rs. 9,204/-	Basics of FEA and Numerical schemes, Introduction to Hypermesh, 2D & 3D Meshing, Introduction to Optistruct/ Radioss, Structural linear & Modal analysis, Basics of FEA and Numerical schemes, Introduction to Hypermesh, 2D, 3D & CFD Meshing, Introduction to Accusolve	Pursuing Degree, Diploma, ITI in Mech. Trades
10	ST 08	Thermal & CFD Analysis with Hyper Works:	Every Month	02 weeks	9.00 AM-5.00PM	Rs. 9,204/-	Basics of FEA and Numerical schemes, Introduction to Hypermesh, 2D, 3D & CFD Meshing, Introduction to Accusolve	- do -
11	ST 09	Analysis with Ansys	Every Month	02 weeks	9.00 AM-5.00PM	Rs. 9,204/-	Introduction to FEA and Ansys, APDL & Workbench interface, Structural analysis, Thermal analysis, Modal analysis	- do -
12	ST 10	Moldflow Analysis with Moldex 3D	Every Month	02 weeks	9.00 AM-5.00PM	Rs. 9,204/-	Introduction to Molds, 2 plate molds & 3 plate molds, Introduction to Moldex3D software, Conformal cooling system design, Solid meshing, Flow, Pack, Cool & Wrap analysis	- do -
<b>CNC MACHINING COURSES</b>								
13	ST 11	CNC Turning	Every Month	02 Months	11.00AM-5.00PM 5.00 PM-9.00 PM	Rs. 31,270/-	Fundamentals and basics of CNC Turning using machine controls e.g. Sinumeric and Fanuc, Practical on machines	Pursuing Degree, Diploma, ITI in Mech. Trades
14	ST 12	CNC Milling	Every Month	02 Months	11.00AM-5.00PM 5.00 PM-9.00 PM	Rs. 31,270/-	Fundamentals and basics of CNC Milling using machine controls e.g. Haidenheim, Sinumeric and Fanuc, Practical on machines	- do -
15	ST 13	CNC Wire Cut & EDM	Every Month	One Month	11.00AM-5.00PM 5.00 PM-9.00 PM	Rs. 12,390/-	Fundamentals and basics of CNC Wire Cut using Elapt machine control, Practical on machine.	- do -
16	ST 14	Advance CAD/CAM & CNC Machines	Every Month	17 weeks	9.00AM-5.00PM	Rs. 43,660/-	Computer Aided Drafting, Pro-E, Solid works, Master CAM, Unigraphics, Programming of CNC Turning, CNC Milling, CNC Wire Cut and practical exposure on these machines	- do -

17	ST 15	CNC Programming & Machining	Every Month	03 weeks	2.00PM-6.00PM	Rs. 12,390/-	Programming and working operations of CNC Turning, CNC Milling, CNC Wire Cut and practical exposure on these machines	Pursuing Degree, Diploma, ITI, Mech. Trades or experienced persons working in line
18	ST 16	Manufacturing Automation	Every Month	02 Months	2.00 PM-6.00 PM	Rs. 12,390/-	Basics of Hydraulics, Pneumatics, Selection of Hydraulics & Pneumatics for Automation, Robotics, F M S & its applications	- do -
19	ST 17	Integrated CNC Milling and Turning Programming & Simulation	Every Month	02 weeks	2.00PM-6.00PM	Rs. 20,060/-	Introduction to CNC Machines and operations. Concept of Programming and its various controls, Programming and Simulation of CNC M/cs, Post processing from CAD/CAM Software.	Pursuing Degree, Diploma, ITI in Mech.Trades
<b>SKILL DEVELOPMENT COURSES</b>								
20	MT 01	Machinist	Aug, 2018 & Feb, 2019	Six Months	3.00PM-08.30PM	Rs. 37,170/-	Engg Drg. Measurement, Workshop Technology. Workshop Practice, Practical on Lathe Machine, Milling Machine & Grinding Machine.	10 <sup>th</sup> Pass
21	ST 18	Turner	April, July, Oct 2018 & Jan 2019	Three Months	3.00PM-08.30PM	Rs. 18,880/-	Engg Drg. Measurement, Workshop Technology, Workshop Practice, Practical on Lathe Machine.	10 <sup>th</sup> Pass
22	ST 19	Fitter	April, July, Oct 2018 & Jan 2019	Three Months	3.00PM-08.30PM	Rs. 18,880/-	Engg Drg, Measurement, Workshop Technology, Fitting Shop Practice.	10 <sup>th</sup> Pass
23	ST 20	Computer Hardware & Networking	Every Month	Two Months	2.00PM-6.00PM	Rs. 6,254/-	Computer Hardware, Assembly of Computer, Installation of Operating Software & Application Software, LAN & its components.	10 <sup>th</sup> Pass
24	ST 21	Welder (Basic)	Every Month	01 month	2.00PM-6.00PM	Rs. 6,254/-	Types of Welding e.g. Arc Welding & Gas Welding, Selection of Electrodes, Gas Cutting, Safety Precautions & Welding Practice.	8 <sup>th</sup> Pass
25	ST 22	Programming Logic Control (PLC)	Every Month	One Month	8.00AM-12.00PM 5.00PM-9.00PM	Rs. 12,390/-	Basics of Electrical, PLC Details, I/O Configuration, Memory Mapping, Programmes & Ladder diagrams, Communication & fault finding, PLC applications, Basics of Hydraulics & Pneumatics, Applications of Hydraulics & Pneumatics in Automation.	Pursuing Degree/Diploma in Mech., Electrical, Production, Electronics & Comm. Engg.
26	ST 23	Measurement & Reverse Engineering	Every Month	One Month	8.00AM-12.00PM 5.00PM-9.00PM	Rs. 12,390/-	Introduction to scanning concept, types of scanning, scanning process, aligning scanned shots, merging data, creation of ply file, STL file, introduction to polyworks, IMINSPECT & IMEDIT, aligning the PLY file object, importing the CAD data, comparison of CAD data with scanned, creation of CAD data from the scanned data.	Pursuing Degree/Diploma in Mech. Trades
27	ST 24	Coordinate Measuring Machine	Every Month	One Month	8.00AM-12.00PM 5.00PM-9.00PM	Rs. 12,390/-	Basics of CMM, Probe Calibration, Measurement-Plane, Circle, Cone etc., C.D., P.C.D., Cone Diameter at particular height, Height at particular diameter, Atomic measurement of small holes, Absolute & relative movement, Report with nominal value, Scanning of circle, circle segment, Distance between two face and points, Parallelism, perpendicularity, position, symmetry etc, Macro function	Pursuing Degree/Diploma in Mech. Trades
28	ST 25	3-D Printing	Every Month	One week	9.30AM-12.30PM	Rs. 3,776/-	Introduction, Types of RP Technologies, Rapid Tooling, Vacuum Casting, Applications.	Pursuing Degree/Diploma, ITI, Mech.Trades

**SAMSUNG COLLABORATED COURSES**

29	ST 29	AC Installation	Every Month	02 weeks	9.00AM-1.00PM	Rs. 3,540/-	Introduction to basic Refrigeration Cycle, Tube Cutting, Tube Straightening, Flare making, brazing and installation.	10 <sup>th</sup> Pass
30	ST 30	AVIIDM (Installation and Demo of LED's)	Every Month	02 weeks	9.00AM-1.00PM 2.00PM-5.00PM	Rs. 3,540/-	Introduction, Basics, Installation Process, Remote Controller and key features, Software upgradation, Making connections & Segment comparison	10 <sup>th</sup> Pass

**NSQF Approved Courses**

Sr. No.	QP Code	Name of the course	Starting dates	Duration (Hours)	Timing	Course Fee (Tax Free)	Brief Contents	Eligibility	
31	MSME/PGDTD&CC/01	Post Graduate Diploma in Tool Design & CAD/CAM	Level 8	Jun-18	2340 Hrs. (18 Months) 3 Semesters	6 hr/day	Rs. 45,000/- per semester	CNC Programming and CNC Machining, Computer Aided Design (CAD-Auto CAD/Collab CAD and Solid Works), Computer Aided Manufacturing (Master CAM & Unigraphics CAM), Jigs, Fixtures and Gauges, Design of Press Tools, Design of Moulds, Design of Die Casting Dies, Advanced Metrology, Advanced-CAD-I (Unigraphics & CATIA), Manufacturing Process-Process Planning and Heat Treatment, Advanced-CAD-II (Pro-E), Computer Aided Engineering (Ansys), Rapid Prototyping and Reverse Engineering, Entrepreneurship, Engineering Research Methodology	Preferably Graduate (Mech. Engineering / Prod. Engineering or equivalent)
32	MSME/ADCNC/06	Advanced Diploma in CNC Programming Techniques and Practices	Level 6	Jun, 2018 Jan, 2019	900 Hrs. (6 Months)	6 hr/day	Rs. 60,000/-	Production Technology, Auto-CAD, Engineering Drawing, Metrology, CNC Programming, MasterCAM, Unigraphics, Project Work, Material Technology, Communication Skill	Preferably Diploma in Mech./ Prod. / Tool Design/ Mould Making/ Automobile
33	MSME/PDCC/ 13	Post Diploma In CAD/CAM	Level 6	Jun, 2018 Jan, 2019	1560 Hrs. (12 Months) 2 Semesters	6 hr/day	Rs. 45,000/- per semester	Engineering Drawing, CNC Part Programming, Computer Fundamentals and Auto CAD, Solidworks, Pro-Engineer, Finite Element Analysis (FEA), Reverse Engineering, Work NC, Master CAM, Unigraphics -NX, Entrepreneurship and Managerial Skills, CATIA, Basic Engineering Concept, Safety and Maintenance	Degree / Diploma in Mech./ Prod. / Tool & Die Making / Automobile or equivalent.
34	MSME/PDTDM/10	Post Diploma In Tool & Die Manufacturing	Level 6	Jun, 2018 Jan, 2019	1560 Hrs. (12 Months) 2 Semesters	6 hr/day	Rs. 45,000/- per semester	CNC Programming and CNC Machining, Computer Aided Design (CAD-Auto CAD/Collab CAD and Solid Works), Fundamental of Tool & Die Manufacturing, Engineering Metrology and Quality Assurance, Production Planning & Controls, Computer Aided Manufacturing. (Master CAM & Unigraphics CAM), Advance CAM (Del CAM – 3 Axis and 5 Axis), Engineering Materials and Heat Treatment, Total Quality Management, Metal Cutting and Tool Design, Entrepreneurship	Preferably Diploma (Mech. Engineering or equivalent)
35	MSME/CCEERM/47	Certificate Course In Electrical Equipment Repairing and Maintenance	Level 6	Jun, 2018 Jan, 2019	780 Hrs. (6 Months)	6 hr/day	Rs. 35,000/-	Basic Safety Regarding Use of Electricity, Fundamentals On Hand Tools, Basic Electrical And Electronics, Domestic And Industrial Wiring, Repairing of Home Appliance, Repairing of Washing Machines, Repairing of Air Conditioner, Refrigerator, Repairing of Water Purifier, Geyser, Repairing Winding And Maintenance of Motor And Pump, Soft Skill	Preferably Degree / Diploma in Electrical or equivalent engineering pass
36	MSME/ADMMA/44	Advanced Diploma In Machine Maintenance and Automation	Level 6	Jun, 2018 Jan, 2019	780 Hrs. (6 Months)	6 hr/day	Rs. 40,000/-	Machine Operation, Electrical Hardware Logic Control, Electrical Machines, Pneumatic And Hydraulics, Machine Maintenance, PLC, SCADA, HMI, TIA Portal, Communication, Auto Cad Electrical, Basic Electronics	Preferably Degree/ Diploma in Electrical/ Instrumentation or equivalent engineering pass

37	MSME/MCCCC/38	Master Certificate Course In CAD/CAM	Level 6	Jun, 2018 Jan, 2019	780 Hrs. (6 Months)	6 hr/day	Rs. 45,000/-	Computer Aided Design (CAD-Auto CAD and Solid works), Computer Aided Design & Computer Aided Manufacturing (Unigraphics CAD & Unigraphics CAM), Computer Aided Engineering (ANSYS), Advance Computer Aided Design (CREO Parametric and CATIA), CNC Programming and CNC Machining, Entrepreneurship, Course-work: Project	Preferably Degree/Diploma (Mech. Engineering or equivalent)
38	MSME/MCCCT/ 41	Master Certificate Course In CNC Technology	Level 6	Jun, 2018 Jan, 2019	780 Hrs. (6 Months)	6 hr/day	Rs. 45,000/-	Planning, sequenc of operations, Execution of Job, Arrangement of tools & accessories, Elements of tools with their Functions, Manufacturing Process & Process Plan, Tool & Die Manufacturing Plan, Mannual part programming, Execution of CNC Programme through CAM, Basic Health & Safety Practices, Total Quality Management, Communication & Entrepreneurship Skill, Problem solving, Project work on live jobs.	Preferably Diploma in (Mech. / Prod. / Automobile Engineering or equivalent)
39	MSME/MCCTD/ 42	Master Certificate Course In Tool Design	Level 6	Jun, 2018 Jan, 2019	780 Hrs.	6 hr/day for 6 months 3 hr/day for one year	Rs. 45,000/-	Computer Aided Design (CAD-Auto CAD and Solid works), Computer Aided Design & Computer Aided manufacturing (Unigraphics CAD & Unigraphics CAM), Design of Jigs & Fixtures, Design of Press Tools, Design of Moulds, Design of Die Casting Dies, Entrepreneurship, Course-work: Project	Preferably Degree / Diploma (Mech. Engineering or equivalent)
40	MSME/CCAM/07	Certificate Course in Advance Machining	Level 5	Jun, 2018 Jan, 2019	1920 Hrs. (12 Months) 2 Semesters	6 hr/day	Rs. 40,000/- per semester	Production Technology, Engineering Drawing, Metrology, Material Technology, Auto CAD, CNC Lathe, CNC Milling, Non-Conventional Machining, Inplant Training, Communication Skill	Preferably ITI fitter.
41	MSME/AV/66	LED, LCD, Plasma TV, Home Theater (Audio Video-AV)	Level 5	Every Month	03 months	9.00AM-1.00PM	Rs. 15,000/-	Basic concepts of electronics, introduction of LED, Plasma TV, Curve TV, their maintenance & installation. Repairing of home theatre system.	12 <sup>th</sup> /Pursuing ITI/Diploma/Degree in relevant trades
42	MSME/HHP/67	Tablets, Mobile Phone, Smart Phone etc. (Handheld Products-HHP)	Level 5	Every Month	03 months	9.00AM-1.00PM	Rs. 15,000/-	Basic concepts of electronics, repairing of android smart phones, tabs	12 <sup>th</sup> /Pursuing ITI/Diploma/Degree in relevant trades
43	MSME/RACHA/68	Split AC, (Room Air Conditioner-RAC), Refrigerator, Washing Machine, Microwave Oven, etc. (Home Appliances-HA) (RACHA)	Level 5	Every Month	04 months	9.00AM-1.00PM	Rs. 20,000/-	Review basic concepts repairing, trouble shooting installation of Split Room Air Conditioner (inverter & non-inverter) repairing, troubleshooting of refrigerator (invertor & non invertor) Repair, troubleshooting & maintenance of washing machine (front loaded, top loaded). Repair & maintenance of microwave oven	12 <sup>th</sup> /Pursuing ITI/Diploma/Degree in relevant trades
44	MSME / HT/ 23	Certificate Course in Heat Treatment	Level 4	Jun, 2018 Jan, 2019	3120 Hrs. (2 Years)	6 hr/day	Rs. 15,000/- per year	Engineering Drawing,Communication At Workplace, Safety Practices, Engineering Metals, Mechanical Properties & Spark Testing, Heat Treatment-I(Plain Carbon Steels), Heat Treatment-II(Low Carbon Steels), Heat Treatment-III(Alloy Steels), Heat Treatment Practice, 6 Months In-Plant Training(On-The-Job Training), 6 Months Internship	Preferably 10 <sup>th</sup> pass
45	MSME/CCTDM/29	Condensed Course In Tool and Die Making	Level 4	Jun, 2018 Jan, 2019	1560 Hrs. (12 Months) 2 Semesters	6 hr/day	Rs. 1,15,000/-	Production Technology, Auto CAD, Part Programming, Master CAM, Press Tool Design, CNC Technology, Engineering Drawing, Material Technology, Metrology, Press Tool Theory, Press Tool Design, Mould Manufacturing, Modern Manufacturing Technology, Jigs and Fixture , Mould Theory, Communicative English, Industrial Management, Inplant Training & Project Work	Preferably Matriculation (10 <sup>th</sup> ) pass

46	MSME/CCCT/55	Certificate Course in CNC Turning	Level 4	Jun, 2018 Jan, 2019	780 Hrs.	6 hr/day for 6 months 3 hr/day for one year	Rs. 45,000/-	Engineering Drawing, Engineering Metrology, Workshop Technology, Workshop Calculation, Quality Management System, Group Discussion and Personality Improvement, CNC Turning Programming & CNC Machining, Employability Skill, CNC Turning Programming - On Job Training	10 <sup>th</sup> passed or its equivalent. Minimum age 15 years
47	MSME/CCCM/54	Certificate Course in CNC Milling	Level 4	Jun, 2018 Jan, 2019	780 Hrs.	6 hr/day for 6 months 3 hr/day for one year	Rs. 45,000/-	Engineering Drawing, Engineering Metrology, Workshop Technology, Workshop Calculation, Quality Management System, Group Discussion and Personality Improvement, CNC Milling Programming & CNC Machining, Employability Skill, CNC Milling Programming - On Job Training	10 <sup>th</sup> passed or its equivalent. Minimum age 15 years
48	MSME/CCMO/21	Certificate Course In Machine Operations	Level 3	Jun, 2018 Jan, 2019	1560 hrs (12 Months) 2 Semesters	6 hr/day	Rs. 35,000/- per semester	Machine Shop Theory, Engineering Metrology, Engineering Drawing, Workshop Calculation and Science, Employability Skill, Practical Lab, Project	8th pass and Minimum Age 15 Years

*All the dates mentioned are tentative and candidates should confirm the dates and availability of seats well in advance.*

### Admission Procedure

**A-5, Phase-5, Focal Point Ludhiana-141010**

**Contact nos. are 0161-2670058-59, Ext. No. 251, 252.**

**Email id:** info@ctrludhiana.com, training@ctrludhiana.com **Website:** www.ctrludhiana.com

CTR Extension Centres:

1. CTR Extension Centre, Govt. Quality Marking Centre, Govt. ITI Complex, NH-4, Faridabad, Haryana-121003 M. No. 8901503789 E-mail: faridabad@ctrludhiana.com
2. CTR Extension Centre, Govt. I.T.I., Kunjpura Road, KARNAL - 132 001 (Haryana) M. No: 94163-03789 Email : nilokheri@ctrludhiana.com
3. CTR Extension Centre, G T Road, Nilokheri, Karnal, Haryana. M. No: 94163-03789 E-mail: nilokheri@ctrludhiana.com

### Admission Procedure

#### **Following attested documents required for admission**

1. Copy of 10th certificate.
2. Copy of Aadhar Card (Compulsory for admission).
3. One passport size photograph.
4. Caste Certificate, if applicable.
5. Copy of 12th certificate, if applicable.
6. Copy of pursuing Degree/Diploma/ ITI in Mechanical/Electronic/Electrical Engg. (if applicable)

#### **Only For NSQF Compliant Course.**

Copy of Passed Degree/Diploma/ ITI in Mechanical/Electronic/Electrical Engg. (if applicable)

**Note** 1. Tuition fee shall be exempted for SC/ST category for NSQF compliant courses only.

2. Check the particulars like Name, Father Name, Date of Birth and Address etc. carefully filled in application form before submitting.

If the particulars of a candidate not matched with each other on the enclosed documents such as Matric Certificate, Aadhar Card, SC certificate or any other certificates, then an affidavit required for this mismatch and enclosed with