

GOVT. OF INDIA  
NSIC TECHNICAL SERVICES CENTRE

CPSE, MINISTRY OF MSME



# INDUSTRIAL VOCATIONAL ON-JOB TRAINING

**FOUR WEEKS DURATION**

**Mode of Training: Hybrid**

**Eligibility: Ongoing / passed-out  
engineering / science graduate trainees**

Department	Course Name	Course Modules
<b>MECHANICAL</b>	3D Printing	Modeling in Autocad Software   Programing in Cura Software   Printing in 3D Printer
	CNC	CNC Programing : Simulation, Transferring the program to CNC, Practical Job Work
	Mechatronics	Identification of Specialty Hardware: Modelling robotic arm, Lifting and Gripping Application   Associated Electrical drives   Mechatronics interfaces   Embedded Software programming   Controlling and Actuating Technique
	Material Testing (Mechanical)	Stress-Strain analysis of the conductor   NDT Testing, Hardness test
<b>ELECTRICAL</b>	Solar Rooftop Design & Installation	Design in Solarius Software : Feasibility Study & Mounting methodology   Installation & Commissioning
	PLC / SCADA	Industrial Field Instrumentation   PLC & PID Controllers   SCADA / HMI System Development   Distributed Control System (DCS)
	Material Testing (Electrical)	Substation & Transmission Line equipment & their test requirements (Insulator/ Isolator/ Instrument Transformer/ CB/ Conductors etc.)   High Voltage and Impulse, Temperature Rise, Heating Cycle, DC Resistance, Measurement of uncertainty

**ADMISSION GOING ON**

NSIC Technical Services Centre, Balitikuri, Japanigate, Howrah 711 113 | Contact: 033-2979-8606,  
Mobile: 9433048241, 8777828421, 8134994984 | Website: <https://nsic.co.in/NTSC/NTSC-Howrah>

GOVT. OF INDIA  
NSIC TECHNICAL SERVICES CENTRE

CPSE, MINISTRY OF MSME



# INDUSTRIAL VOCATIONAL ON-JOB TRAINING

**FOUR WEEKS DURATION**

**Mode of Training: Hybrid**

**Eligibility: Ongoing / passed-out  
engineering / science graduate trainees**

Department	Course Name	Course Modules
<b>ELECTRICAL</b>	Motor Transformer Winding	Transformer winding with properties of insulating materials used   saving in copper in using Auto transformer when compared to two winding transformer   Turns ratio, practical winding in motors and transformers
	Industrial/Domestic Wiring	Conduit Bending   Overcurrent Protection   Conductors & Disconnects   Wire Pulling & Conduit sizing   Control Wiring   Wiring for Control Systems   Wiring for Electrical Pneumatic Control   Computing Electrical Load, Final Activities
	MIPOWER	Power System Network Editor   Database Manager   Programmable Block   Line & Cable Parameters   Ground Grid Design   Long-time Load Forecasting
<b>ELECTRONICS ECE / EIE SCIENCE GRADUATE</b>	IoT	IoT Hardware concepts   Communication Protocol   MQTT, Things Speak, Cloud Platform
	Robotics Modelling in MATLAB	Identification of Specialty Hardware Modelling   Robotic Arm Lifting and Gripping Application   Associated Electrical drives   Mechatronics interfaces   Embedded Software programming   Controlling and Actuating Technique
	Embedded Systems	Board designing   RTOS concepts   Embedded C programming   Various protocols
	VLSI Design and Verification	ASIC/FPGA designing concepts   RTL coding : Synthesis, Verification Environment   UVM concepts

**ADMISSION GOING ON**

NSIC Technical Services Centre, Balitikuri, Japanigate, Howrah 711 113 | Contact: 033-2979-8606,  
Mobile: 9433048241, 8777828421, 8134994984 | Website: <https://nsic.co.in/NTSC/NTSC-Howrah>

# INDUSTRIAL VOCATIONAL ON-JOB TRAINING

**FOUR WEEKS DURATION**

**Mode of Training: Hybrid**

**Eligibility: Ongoing / passed-out  
engineering / science graduate trainees**

Department	Course Name	Course Modules
<b>ELECTRONICS</b>	Microcontroller Programming and Data Acquisition System	Microcontroller architecture   Embedded C programming & debugging   Designing Concepts & test procedure   Data Acquisition through SW
	Machine learning in MATLAB	Machine Learning Overview   Machine Learning with MATLAB : Unsupervised Learning Clustering & Supervised Learning, Classification, Regression
<b>CSE / IT SCIENCE GRADUATE</b>	PHP	PHP Basics Introduction   Environment Setup, Syntax Overview   Clear concepts to embed PHP into html tag   Variable and Operator Types   Constants, Decision-making, Loop Types, Arrays, Strings   Web Concepts of GET & POST   File Inclusion, Files & I/O, Functions, Cookies & Sessions, Sending Emails, File Uploading, Regular Expression, Error Handling   AJAX Database MySQL, CRUD Queries   Advanced Wordpress
	Advance Web Design	Html5   Css3   Javascript advanced   Wordpress, Bootstrap, Parallax Scrolling   Responsive web design   Photoshop React Js, Angular js
	Python	Functions and files, Data collection and processing, OOPs concepts and projects
	Cyber-security	Linux & Networking Basics   Virtualization, Information Security Fundamentals, Threats, Vulnerabilities   Web Server & Security   Network Security- Firewall, IDS, IAM, Prevention & Protection Cryptography, PKI, Penetration Testing   Cloud Concepts, Cloud providers with demo
	AR/VR	Unity   Vuforia Engine   A frame   C#   Project Work

**ADMISSION GOING ON**

GOVT. OF INDIA  
NSIC TECHNICAL SERVICES CENTRE  
CPSE, MINISTRY OF MSME



# INDUSTRIAL VOCATIONAL ON-JOB TRAINING

**FOUR WEEKS DURATION**

**Mode of Training: Hybrid**

**Eligibility: Ongoing / passed-out  
engineering / science graduate trainees**

Department	Course Name	Course Modules
CIVIL	Surveying using DGPS and Hand GPS	Principles of DGPS, Practical Session, Calculations using SW, Collected data and Analysis
	Autocad Design	Learn Application to Real Civil Engineering Projects   AutoCAD working Environment   Working with files and extensions   Creating objects Editing Objects   Modifying Objects   Text and Annotations   Setting and customizing   Drawing organization   All about layouts and Viewports manipulations   Creating reusable objects   Sharing files and Importing files



**ADMISSION GOING ON**

NSIC Technical Services Centre, Balitikuri, Japanigate, Howrah 711 113 | Contact: 033-2979-8606,  
Mobile: 9433048241, 8777828421, 8134994984 | Website: <https://nsic.co.in/NTSC/NTSC-Howrah>

GOVT. OF INDIA  
NSIC TECHNICAL SERVICES CENTRE

CPSE, MINISTRY OF MSME



# INDUSTRIAL VOCATIONAL ON-JOB TRAINING

**TWO WEEKS DURATION**

**Mode of Training: Hybrid**

**Eligibility: Ongoing / passed-out  
engineering / science graduate trainees**

Department	Course Name	Course Modules
<b>SKILL BASED COURSES</b>	Course on Computer Concepts (CCC)	Introduction to computer   Introduction to GUI Based Operating System   Elements of Word Processing, Spreadsheets, Computer communication and Internet   WWW and web browsers   Communication and Collaboration   Making small presentations
	Welding Technology	TIG, MIG, SPOT, Plasma Cutting, Welding position technique, Edge Preparation
	Domestic Wiring	Basic Tools & Safety, Electrical Wires, Electric Accessories & Meters, Protective Devices, Common Electrical Accessories, Electric Switches & Energy Meters, Complete House-wiring layout, Domestic Appliances
	Electronics Appliances Repairing	Consumer Electronics Product Equipment operating skills, repairing skills, Component handling skills, Sumer Electronics Product Software Skills, Troubleshooting skills
	Surveying Technique	Basic Surveying, Theodolite and Tachometric Surveying, Basic Levelling, Total Station Surveying   Global Positioning System, Modern Surveying using DGPS

**ADMISSION GOING ON**

NSIC Technical Services Centre, Balitikuri, Japanigate, Howrah 711 113 | Contact: 033-2979-8606,  
Mobile: 9433048241, 8777828421, 8134994984 | Website: <https://nsic.co.in/NTSC/NTSC-Howrah>

GOVT. OF INDIA  
NSIC TECHNICAL SERVICES CENTRE

CPSE, MINISTRY OF MSME



# INDUSTRIAL VOCATIONAL ON-JOB TRAINING

**TWO WEEKS DURATION**

**Mode of Training: Hybrid**

**Eligibility: Ongoing / passed-out  
engineering / science graduate trainees**

Department	Course Name	Course Modules
<b>SKILL BASED COURSES</b>	Entrepreneurship Development Programme	Imparting entrepreneurship training   Helping trainees in preparing project report or profiles   Identification of plant and machinery and equipments   Help in sourcing of plant and machineries or equipments   Establish linkages with Govt. Institutions & Banks   Help in getting the plant & machineries or equipments   Sealing for Granules Automatic Form Fill & Sealing for Liquids   Paper Plate Making, Leaf Plate Making   Pet Bottle Stretch Blow Moulding   C-Brick Making   Paper Napkin Making   Toilet Paper Roll Making   Automatic Socks Knitting   Wax Candle Making   Candle making   Soya Milk Making   Ice Cream Cone Making   Noodle Making   Popcorn Making   Potato Chips Making   Wool Knitting   Elastic Tape Making   Embroidery Work, Tailoring Work   Bag Making   Sanitary Pad making
	Aptitude and Employability Skill Development Programme	Verbal and non-verbal skills, Communication skills, Time Management skills, Analytical skills, Techniques to solve problems in time

**ADMISSION GOING ON**

NSIC Technical Services Centre, Balitikuri, Japanigate, Howrah 711 113 | Contact: 033-2979-8606,  
Mobile: 9433048241, 8777828421, 8134994984 | Website: <https://nsic.co.in/NTSC/NTSC-Howrah>