



This tool room has been established by department of industries, Government of Jharkhand with the assistance of ministry of MSME Government of India under supervision of MECON and registered under society registration Act 1860. The center is having separate training & production wings equipped with the state of Art Technology procured from global market including CAD/CAM/CAE and sophisticated CNC Machines, ultra-modern class room with latest teaching aids, hostel facilities for boys & girls.

The Centre is also conducting A.I.C.T.E approved Diploma in Tool & Die Making course which is equivalent to Mechanical Engineering. Apart from training activities the Centre is also acting as a hub for various small, medium, large-scale industries for providing consultancy including design and manufacturing precision components, molds, press tool & die casting dies. This institute is actively involved in use of advance technology in the field of manufacturing as well as for imparting training.

## TRAINING CALENDAR

### Why skill development courses are the need of the hour?

- These courses are bridge courses which fill the gap between technological industry & technical institutes.
- These courses make you INDUSTRY READY
- INDUSTRY READY is a person who knows how to apply his knowledge in the interviews and possess the necessary skills required in the industries.
- The course offered by our institute prepare you to be capable of coming INDUSTRY READY and increases your employability in the industries.



## JHARKHAND GOVERNMENT TOOL ROOM, DUMKA

Formerly Known as Government Tool Room & training Centre  
(An ISO 9001:2015 Certified Society of Department of Industries, Govt. of Jharkhand)  
At.- Jardaha, P.S.- Taljhari, Via - Ghormara, Dist.- Deoghar, PIN-814120  
E-mail : [trg.gtrtcdumka@gmail.com](mailto:trg.gtrtcdumka@gmail.com) | Website : [www.gtrtcdumka.com](http://www.gtrtcdumka.com)



**Enquiry No: - 9473223699 & 9199240260**

# DIPLOMA COURSE

<b>Name of the course</b>	: Diploma in Tool & Die Making (DTDM) (Approved by AICTE, New Delhi) (Equivalent to Mechanical Engineering)
<b>Duration</b>	: 3 Years Classroom Training Program (Divided into 6 Semester) & 1 year industrial training in reputed company (Company provide monthly stipend during training period)
<b>Intake</b>	: 78
<b>Eligibility</b>	: 10 Pass & Candidate must be resident of Jharkhand.
<b>Mode of Selection</b>	: Jharkhand Combined Examination Competitive Board (Polytechnic Entrance Competitive Examination)

## Training Methodology

- ✓ Desktop tutor with simulation
- ✓ Class Room Lecture and Demonstration using latest technology.
- ✓ Teaching Aids and hands on experience on various machines.
- ✓ Training imparted in flexible hours.
- ✓ On job training in production section.

## Benefits of the course

Diploma in Tool & Die making is a unique course which is not generally available at regular polytechnic college. It is designed in such way as to make the student directly employable without further training as soon as he or she completes the course. The training comprises not only theory but also practical work allowing the students to learn hands on.

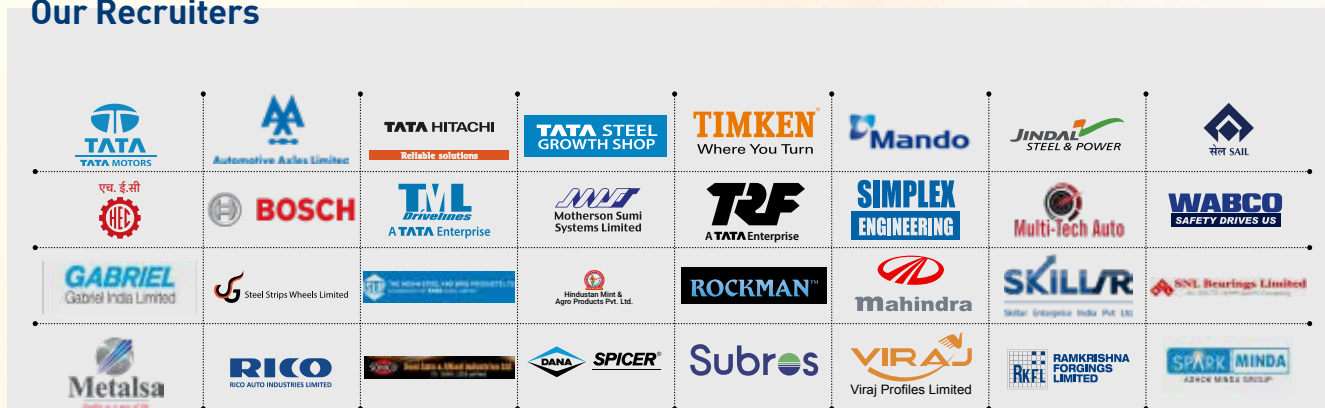
A tool & die maker is highly skilled machinist. They produce tools, dies and parts of machines used to manufacture a variety of products. Tool & die makers have a broad knowledge of machining operation. In addition, they have an aptitude for mathematics, read blueprints, and do precise handwork. Most of tool & die maker use computer aided design to produce tools and dies. Tool & die makers are trained in both writing computer numerically controlled programs and operating computer numerically controlled machines, and may perform either or both task.

## Opportunities

Tool & die making is the best platform to give big shot to your career. A wide range of job opportunities are available in the related sector of Tool Design, Mechanical Design, Mechanical Engineering, Manufacturing Engineering, Automobile etc for a tool & die makers. Dumka tool room have nice placement track record for Tool & Die Makers in best MNC's.

Government sector also recruit Diploma in Tool and Die Making Complete candidate for different post, for example Indian railway.

## Our Recruiters



**For More Information about DTDM Course Contact : 9279837628/ 9939580100**



## Free of Cost Course Organized by the Organization

**Name of the Course** : CNC Operator / Machining Technician / Welder  
**Scheme** : PMKVY (CSSM)  
**Sector** : Automotive  
**Type** : Residential  
**Duration** : 3 Month  
**Eligibility** : Matric Pass, Candidate must be resident of Jharkhand & must be eligible for enrolment of scheme

**Name of the Program** : One Year Machinist  
**Eligibility** : 10 Pass,  
**Age** : 18-35, & Candidate must be resident of Jharkhand.  
**Category** : Gen/OBC/ST/SC/PVTG & Minority.  
**Duration** : 1 Year  
**Type** : Residential

Sponsored Program for different Departments of Government of India and Government of Jharkhand Conducted by institute.

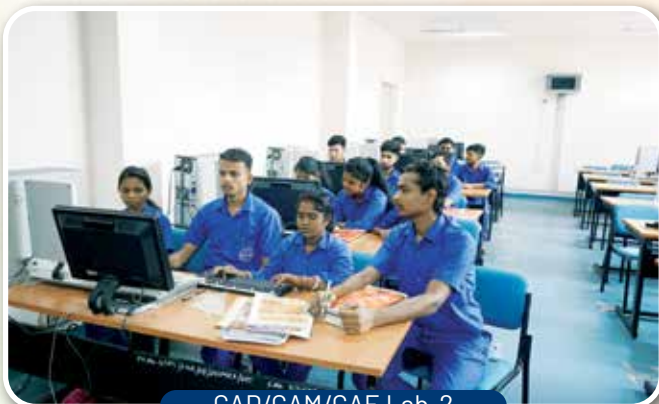
**Name of the course** : CNC Operator Turning and Milling /Machining Technician L3/Welding Technician L3/Turner/Tailoring  
**Eligibility** : 10 Pass, Age – 18-35, & Candidate must be resident of Jharkhand.  
**Category** : Gen/OBC/ST/SC/PVTG & Minority.  
**Type** : Residential



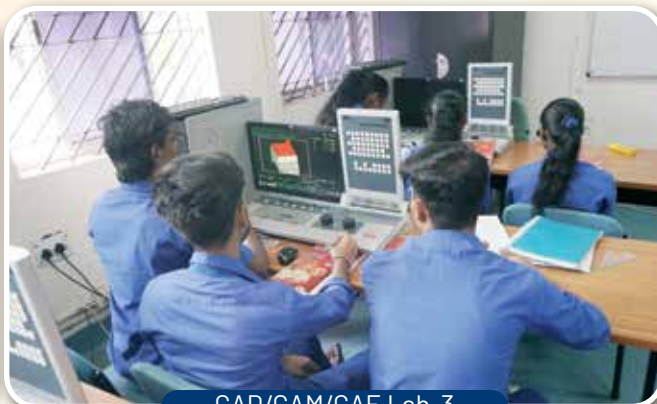
JGTR Faculty



CAD/CAM/CAE Lab-1



CAD/CAM/CAE Lab-2



CAD/CAM/CAE Lab-3

# Training Calendar

S. No	Course Name	Course Content	Eligibility	Course Fee	Duration
1.	POST DIPLOMA IN CAD/CAM	Auto CAD, CATIA V6, Creo-5.0, Delcam, Engineering Drawing, CNC Turing (FANUC), CNC Milling (FANUC), Press Tool Theory & Design, Jig & Fixture Theory & Design Personality Development.	Diploma / B.E / B.Tech in Mechanical or Equivalent	20000	6 Month
2.	In-Plant Training	Overview of Tool Room, conventional machines, Non-conventional machine ( CNC Lathe, CNC Milling, EDM, CNC CMM etc), Different production & Quality control technique, etc	Pursuing or Completed B.E. / B-Tech, Diploma in Mechanical or Equivalent	1000	1 Month
3.	Advance Industrial Training With Project ON CNC	Hands on Practice on Conventional machines, CNC Lathe, CNC Milling, EDM, CNC CMM etc, Project work on CNC, Different production & Quality control technique, Safety Precaution, etc	Pursuing or Completed B.E. / B-Tech, Diploma in Mechanical or Equivalent	4000	2 Month
4.	AUTO CAD (Mechanical/Civil/ Electrical)	2-D DRAFTING, 3-D DRAFTING, MODELING etc	B.E. / B-Tech, Diploma in related branch, DTDM / ITI / CIPET / NTTF / CITD / TRTC	3000	3 Week
5.	CATIA V6	Introduction to CATIA, Mechanical Design, Assembly, Drawing, Sheet Metal, Core & Cavity Mould Tool Design, NC Manufacturing, Prismatic Machining, DMU Kinematics.	B.E. / B-Tech in Prod / Mech / Automobile / Tool Engg. / Diploma / Polymer / DTDM / CIPET / NTTF / CITD / TRTC	4500	1 Month
6.	Creo Parametric	Solid & Surface Modeling Assembly, Drafting, Sheet metal Design, Core/Cavity/Pro/Mfg, etc	B.E. / B-Tech in Prod / Mech / Automobile / Tool Engg. / Diploma / Polymer / DTDM / CIPET / NTTF / CITD / TRTC	4500	1 Month
7.	ANSYS	Introduction to FEA& Ansys, Basic Solid Modeling, Advance Solid Modeling, Finite element modeling (FEM-I), Finite element modeling(FEM-II), Solution & Postprocessor, Static Structural Analysis, Advance Structural Analysis, Thermal Analysis, Generating the Report of Analysis.	Diploma / B.E / B.Tech in Mechanical or Equivalent	6000	1 Month
8.	CNC Turning (FANUC)	G-Code, M-Code, Profile Programming, Canned cycles (Drilling, Boring, Threading) Sub Programming (Programming Practice & Operation)	B.E. / B-Tech in Prod / Mech / Automobile / Tool Engg. / Diploma / Polymer / DTDM / ITI / CIPET / NTTF / CITD / TRTC	3000	3 Week
9.	CNC Milling (FANUC)	Path Function, Contour Prog., Mirror, Scaling, Cycles (Peck Drilling, Pocket Milling, Slot Milling) Parametric Prog, (Programming, Practice & Operation)	B.E. / B-Tech in Prod / Mech / Automobile / Tool Engg. / Diploma / Polymer / DTDM / ITI / CIPET / NTTF / CITD / TRTC	3000	3 Week
10.	Metal Cutting Through Conventional Machine	Operation & hands on practice Fitting Lathe Turning, Drilling, Milling Machine, Surface & Pedestal Grinding, Assembly, Inspection	B.E. / B-Tech in Prod / Mech / Automobile / Tool Engg. / Diploma / Polymer / DTDM / ITI / CIPET / NTTF / CITD / TRTC	4000	1 Month
11.	Inspection & Quality Control (Using CMM)	Measuring Instrument & their uses, SQC, Introduction of CMM etc	B.E. / B-Tech in Prod / Mech / Automobile / Tool Engg. / Diploma / Polymer / DTDM / ITI / CIPET / NTTF / CITD / TRTC	4000	1 Month

S. No	Course Name	Course Content	Eligibility	Course Fee	Duration
12.	EDM & Wire cut EDM	Programming, Operation & hand on practice	B.E. / B-Tech in Prod / Mech / Automobile / Tool Engg. / Diploma / Polymer / DTDM / ITI / CIPET / NTTF / CITD / TRTC	4000	1 Month
13.	CNC Programming & Operation	Operation on Conventional Machine, CNC Turning (FANUC), CNC Milling (FANUC), Auto CAD & Practices on CNC Machine	B.E. / B-Tech in Prod / Mech / Automobile / Tool Engg. / Diploma / Polymer / DTDM / ITI / CIPET / NTTF / CITD / TRTC	10000	6 Month
14.	Theory & Design of Plastic Mould	Basic concept & Latest technique in Designing & mfg of mould core cavity, Mould Base, Injection Moulding Machine, Assembly Inspection etc	B.E. / B-Tech in Prod / Mech / Automobile / Tool Engg. / Diploma / Polymer / DTDM / ITI / CIPET / NTTF / CITD / TRTC	5000	1 Month
15.	Plant & Machine Maintenance	Overview of Tool Room, Hands on practice on conventional machine, Maintenance of lathe milling, Grinding, Drilling. Maintenance of CNC Machine, Computer, UPS, Battery, Generator, etc	B.E. / B-Tech in Prod / Mech / Automobile / Tool Engg. / Diploma / Polymer / DTDM / ITI / CIPET / NTTF / CITD / TRTC	8000	6 Month
16.	Certificate course in computer hardware (A+)	Computer Generation, trouble shooting of Hard drive display Device, Connection Method etc	10+2 / ITI / B.Tech	2500	1 Month
17.	Certificate Course in Networking (N+)	Network concept & technology, Network type, LAN, WAN, MAN, CAN, PAN, etc	10+2 / ITI / B.Tech	2500	1 Month
18.	Diploma in Computer Hardware & Networking	Computer Fundamental & MS DOS, MS- OFFICE, Disk Partition, Bios Setup, Installation of OS, Hardware & Networking, Trouble Shooting, Software Installation, PC Trouble Shooting & Printer & its Types, PC assembly/System Management etc.	Diploma / ITI / Graduate / 10+2 Pass	8000	6 Month
19.	Basic Accountancy Tally & MS Office	Basic of Accounting, Application of Tally, MS Office etc	10+2 Pass	4000	2 Month
20.	Basic Computer & Internet	Fundamental of Computer, MS-Word, MS-Power Point, MS-Excel, Internet	Non Matric / Matric	300	1 Month
21.	Basic Computer Maintenance and Networking	Working Principal and Maintenance of Computer Hardware Components, Basic Concept of Networking	Non Matric / Matric	350	2 Week
22.	Advanced Basic Computer	Fundamental of Computer, Computer organization and Architecture, Operating System, MS Office, Internet, and Network Basics.	Non Matric, Matric, 12th, Graduation	500	2 Month
23.	Computer Typing	English and Hindi Typing.	Non Matric , Matric, 12th, Graduation	500	2 Month
24.	Diploma in Computer Application	Basics Computer Skills, Basic computer concepts MS office Applications, Internet and its usage, operating system, Basic Networking concepts, and Multimedia.	Non Matric , Matric, 12th, Graduation ,	3000	6 Month
25.	Spray Painting Operator	Introduction of spray painting, Introduction of air compressor, Function of spray painting guns, Working and safety precaution, Definition of paint, Classification and uses, Practice Job.	Non Matric , Matric, 12th, Graduation ,	4500	3 Month
26.	C- Programming	Introduction, Variables & Data type, Console I/O Operations, Operators & Expression, Control flow statement, Function, Arrays, Pointers, Strings, Unions and File Handling.	Non Matric , Matric, 12th, Graduation , Diploma, B.Tech	2000	3 Month



S. No	Course Name	Course Content	Eligibility	Course Fee	Duration
27.	Tailor (Sewing Machine Operator)	Handling the stitching activities using by hand or machine, contribute to stitching operations to achieving the quality of the products,	5th Pass, Non Matric , Matric, 12th, Graduation	2000	2 Month
28.	C++	Introduction, Structure, Function, Class & Object, Pointers, Constructors and Destructors, Inheritance, Polymorphism, Stack, Queue and Linked List.	Non Matric , Matric, 12th, Graduation , Diploma, B.Tech	2000	2 Month
29.	HTML	Introduction of different Web Technologies, HTML – Elements, Attributes, Headings, Paragraphs, Formatting, Fonts, Styles, Links, Images, Tables, Lists, Forms, Frames, Colors, Urls, Media Tags, Scripts, Layout, Head, Meta etc.	Non Matric, Matric, 12th, Graduation, Diploma, B.Tech.	1000	1 Month
30.	Certificate Course in Mobile Phone Repairing	Basics of mobile phone, SMD devices, PGA & BGA IC, Hardware & Software of Mobile, UFS downloading & interfacing with other devices etc.	Non-Matric / Matric	3000	2 Month
31.	Certificate Course on Plumbing	Fundamentals, Internal & External Water supply System, Sanitary, Drainage system, Pipe Joint etc	Non- Matric / Matric	2000	1 Month
32.	Basic Course on Welding	Fundamental of welding Arc Welding, Gas cutting & welding, TIG, MIG, SPOT Soldering & Brazing, Safety, Practices etc.	Non- Matric / Matric	6000	3 Month
33.	Certificate Course on Electric Wiring	Basics of Electrical & Electronics, Measurement Technique, Electrical Circuits, Electrical Drawing, Electrical Application & Wiring Practice etc	Non-Matric / Matric	2000	1 Month
34.	Certificate Course on Draftsmanship using AUTO CAD	Introduction of conventional Machines, Metrology, Engineering Drawing, AUTOCAD	Draftsman / Matric	5000	3 Month
35.	Certificate Course on Electrician	Introduction of Electricity, Electrical symbol & Tools, Conductors, Insulator, & Soldering, Wire, Cable, Electrical accessories, DC Theory, Capacitor, Polyphase, Transformer	Matric	12000	6 Month
36.	Welding Technology	Theory & Practical on arc welding, Gas welding, TIG, MIG & Cutting, Concept on welding Electrode, Safety.	Matric	12000	6 Month
37.	Certificate Course on Fitter	Basic Fitter Theory, Bench vice, File measuring instrument, marking instrument, cutting instrument, engineering drawing, workshop calculation and science	Matric	12000	6 Month
38.	Inspection & Quality Control	Metrology, Linear measurement, Angular measurement, measuring & Checking instrument, gauge, Dial indicator, inspection report preparation, Introduction of using CMM	Matric	12000	6 Month
39.	Programming & Operation of CNC Lathe	Theory & Practical on Conventional Lathe, Engg. Dwg. Metrology, Workshop Technology, Workshop calculation, Theory & Practical on CNC Lathe.	Matric	12000	6 Month
40.	Certificate Course in Turner	Workshop Technology, Metrology, Engineering Drawing, Workshop Calculation & Science, English, etc.	Matric	24000	1 year
41	Offset Printing & Book Binding Technician with entrepreneurship & marketing assistance	Paper Technology, Various Printing Process with their application, Digital Printing Digital imaging, Branding of company, Typography, Design principle and its element, colour scheme and models, Various design software Knowledge. Publication planning, Post press techniques, Industrial Relationship, Binding, and finishing, etc.	10th pass	9,000/-	3 Month

S. No	Course Name	Course Content	Eligibility	Course Fee	Duration
42	Training on Tissue Paper Napkin making with entrepreneurship & marketing assistance	Paper Technology Introduction, Objectives, Expectations & Instructions. Napkin Enterprise- Opportunities, Challenges & Requirements, Overview of the Paper Napkin Enterprise, Sales & Marketing, Communication & Team Effectiveness Production Practice, Design principle and its element, Industrial Relationship, Personality Development Professional ethics, & cost calculations, Costing and, Estimation, etc.	10th pass	9,000/-	3 Month
43	Operation of Socks knitting machine with entrepreneurship & marketing assistance	Introduction of sock knitting m/c Socks industry overview Knowledge of thread and its type Start and shut down process of the machine Operating system of m/c Arrangement of thread according to design, Design and colour selection system makeup elastic transfer leg heel, heel up and heel down food ring toe, toe up and toe down Stitching of socks and cutting extra material m/c safety and self-safety.	10th pass	9,000/-	3 Month
44	Operation of PET Blow & Injection Moulding machine with Entrepreneurship & Marketing Assistance	PET Industry Overview Container Design and Development Preform Design Introduction to Hot Filling and Heat set Processing, Design and Performance Barrier Container Technology Material Handling and Drying Injection Moulding PET Preforms Injection Moulding Function Blow Mould Processing Blow cycle time Blow Moulding Machine Practical Cooling process mould Preform Heating PET Recycling activities Troubleshooting of PET <b>Moulding machine</b> Injection moulding machine. Introduction of injection moulding machine Moulding operating - manually, semi-auto, auto system Terminology. <b>Marketing strategy of product.</b>	10th pass	9,000/-	3 Month
45	Tailoring and Fashion Designing	Basic of Tailoring cutting and Design How to take basic measurements Basic Machine Stitches Pattern Making (WESTERN) Pattern Making (INDIAN)	5th Pass	3000/-	3 Month



Milling Section



Lathe Section



Fitting Section



Tailoring Lab



## About the Course

To upgrade the skill of technical personnel in the industry, we have launched multifarious short-term courses both regular and tailor made in CNC, CAD/CAM/CAE, and Maintenance etc. the Course we offer are job oriented and as per the current requirements in the industries. We are equipped with the latest technologies such as world class CNC machines procured from abroad and designed software's which are currently being used by most of the leading manufacturers of automobile and consumable industries. We also import vocational training programs specifically designed to help students utilize their summer, winter & any other type of vacation by enriching their skill and knowledge. Infrastructure and consultancy are also provided to the students interested in doing their final year project work in manufacturing and design. The course and designed to train the technocrats to become supervisor/ shop in charge, Design Engineer in industries.

## Infrastructure at A Glance

- |   |  |
|---|--|
| ➤ Modern Tool Room With latest CNC Machine.   | ➤ Fabrication shop with latest configured TIG, MIG & Spot-welding machine. |
| ➤ Training Centre with more than 60 conventional machines, 13 CNC machines and more than 100 latest configured Computers. | ➤ 30 Tailoring Machine   |
| ➤ 3 CAD/CAM Labs  | ➤ Compost Making Machine   |
| ➤ Design and Development by using Modern CAD/CAM system.  | ➤ Book Binding & Offset Printing Machine                                   |
| ➤ Area covered 8 acres  | ➤ Wire Nail Machine  |
| ➤ Muffle furnace Heat Treatment Plant.  | ➤ Socks Knitting Machine   |
| ➤ Parts Painting Booth  | ➤ Computerized Embroidery Machine  |
| ➤ Hostel facility for boys and girls separated.   | ➤ PET Bottle Making Machine  |
| ➤ Eco Friendly environment.   | ➤ Paper Napkin Making Machine  |
|   | ➤ Paper Plate Making Machine etc.  |

## How to Apply

Send application form/resume along with self attested copies of your certificates to principal along with DD of Rs. 1000/- (Part of course fee) drawn in favour of Govt. Tool Room & Training Centre., Dumka payable at Dumka.

## Faculties

Professionally qualified, experienced and overseas trained full-time faculties are engaged in teaching theory and practical.

## Certificate

After course completion certificate will be issued to the participants.



CNC Section



Production Section



Mobile Phone Repairing Lab



## JHARKHAND GOVERNMENT TOOL ROOM, DUMKA

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(An ISO 9001:2015 Certified Society of Department of Industries, Govt. of Jharkhand)

At + Post – Jardaha, Via – Ghormara, Dist – Dumka, PIN - 814120, Jharkhand

Website : [www.gtrtcumka.com](http://www.gtrtcumka.com), E-Mail : [trg.gtrtcumka@gmail.com](mailto:trg.gtrtcumka@gmail.com)

Contact No -9199240260, 9473223699

