Long Term Courses

(Admission through Entrance Exam)
Career Oriented Courses (SSC)

Name Of The Course	**Advance Diploma in Tool & Die Making (ADTDM)**	
Objectives	To Design & Manufacture intricate tools like Press Tools, Plastic Moulds, Jigs, Fixtures & Gauges etc. with exposure modern Die Design & Die Manufacturing technology independently	
Duration	04 Years	
Intake	120	
Course Fees	Rs.1,92,000/-	
Eligibility	10th Std. with 60% marks in aggregate (50% for reserved category candidates)	
Age	15 – 19 years as on 1st July (3 years relaxation for SC/ST candidates)	
Course Content	**FIRST SEMESTER :** Communication Skills Applied Mathematics Applied Physics Applied Chemistry Engineering Drawing Applied Mechanics Workshop Practice – Bench Work Fitting, Turning, Milling & Drilling Workshop Technology - Bench Work Fitting, Turning, Milling & Drilling Engineering Metrology	**SECOND SEMESTER :** Communication Skills Applied Mathematics Applied Physics Chemistry of Engineering Materials Engineering Drawing Applied Mechanics Workshop Practice – Bench Work Fitting, Turning, Milling & Grinding Workshop Technology – Bench Work Fitting, Turning, Milling & Grinding Engineering Metrology
	THIRD SEMESTER : Applied Mathematics Strength of Materials Advance Machine Tool Technology Computer Applications Tool & Die Making Practice – Jigs/ Fixtures/ Gauges / Press Tools / Moulds / Die Casting Dies Elements Tool Design – Jigs, Fixtures, Gauges, Press Tools, Moulds, Cutting Tools Material Technology	**FOURTH SEMESTER :** Tool Room Machine Maintenance CNC Technology CNC Programming CAD (AutoCAD) Tool & Die Making Practice – Jigs/ Fixtures/ Gauges / Press Tools / Moulds / Die Casting Dies Elements Tool Design – Jigs, Fixtures, Gauges, Press Tools, Moulds Material Technology
	FIFTH SEMESTER : Electrical Technology CNC Machining (Lathe, Milling, WEDM & EDM) CAD (MDT) Tool & Die Manufacturing Production Orders Tool Design –Moulds, Die Casting Dies, Forgings Dies Heat Treatment	**SIXTH SEMESTER :** Entrepreneurship Development Industrial Management Applied Electronics CNC Machining (Lathe, Milling, WEDM & EDM) Engineering Metrology Hydraulics & Pneumatics Computer Applications Production, Planning, Estimation & Costing Industrial Engineering Tool & Die Manufacturing Production Orders
	SEVENTH SEMESTER : Project Work – Design & Manufacturing - Tools & Dies	**EIGHTH SEMESTER :** Project Work – Design & Manufacturing - Tools & Dies

<table>
<tr><td>Name Of The Course</td><td colspan="2">Diploma in Mechatronics (DIM)</td></tr>
<tr><td>Objectives</td><td colspan="2">To acquaint the trainee with required knowledge in the field of Mechatronics for the application of Industrial automation & other areas of industrial application</td></tr>
<tr><td>Duration</td><td colspan="2">03 Years</td></tr>
<tr><td>Intake</td><td colspan="2">120</td></tr>
<tr><td>Course Fees</td><td colspan="2">Rs.1,44,000/-</td></tr>
<tr><td>Eligibility</td><td colspan="2">10th Std. with 60% marks in aggregate
(50% for reserved category candidates)</td></tr>
<tr><td>Age</td><td colspan="2">15 – 19 years as on 1st July
(3 years relaxation for SC/ ST candidates)</td></tr>
<tr><td rowspan="3">Course Content
(Curriculum under development & approval)</td><td>FIRST SEMESTER :
Communication Skills
Applied Mathematics
Applied Physics
Chemistry of Engineering Materials
Engineering Drawing
Elements of Electrical Engineering
Engineering Metrology
Engineering Mechanics
Workshop Technology
Workshop Practice</td><td>SECOND SEMESTER :
Communication Skills
Applied Mathematics
Applied Physics
Chemistry of Engineering Materials
Engineering Drawing
Basics of Electronics Engineering
Engineering Metrology
Engineering Mechanics
Workshop Technology
Workshop Practice</td></tr>
<tr><td>THIRD SEMESTER :
Strength of Materials
Electrical Machines
Computer Applications
Electronics Devices & Circuits
Digital Electronics
Electronics Workshop
Materials Science
Applied Mathematics
Manufacturing Technology
Network Theory</td><td>FOURTH SEMESTER :
Theory of Machines
Electrical Machines
Computer Applications
Power Electronics
CNC Technology
Linear Integrated Circuits
Industrial Management
Electronics Workshop
Programmable Logic Controller
Microprocessor & Microcontroller</td></tr>
<tr><td>FIFTH SEMESTER :
SCADA
Hydraulics & Pneumatics
CNC Programming & Machining
Embedded Systems
Robotics
Electronic Circuit Design
Control Devices</td><td>SIXTH SEMESTER :
Mechatronics Technology
Mechanical, Electrical & Electronics Maintenance
Live Projects</td></tr>
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Name Of The Course	**Certificate Course in Machinist (Tool Room) (CCMTR)**	
Objectives	To produce different parts of Press Tools, Plastic Moulds, Jigs, Fixtures & Gauges etc. on conventional machine tools independently with exposure to CNC Technology	
Duration	02 Years	
Intake	40	
Course Fees	Rs. 80,000/-	
Eligibility	10th Std. with 60% marks in aggregate (50% for reserved category candidates)	
Age	15 – 19 years as on 1st July (3 years relaxation for SC/ST candidates)	
Course Content	**FIRST SEMESTER :** Communication Skills Applied Mathematics Applied Physics Engineering Drawing Workshop Practice – Bench Work Fitting, Turning, Milling & Drilling Workshop Technology - Bench Work Fitting, Turning, Milling & Drilling Engineering Metrology	**SECOND SEMESTER :** Communication Skills Applied Mathematics Engineering Drawing Applied Mechanics Workshop Practice – Bench Work Assembly & Fitting, Turning, Milling & Grinding Workshop Technology - Bench Work Assembly & Fitting, Turning, Milling & Grinding Engineering Metrology
	THIRD SEMESTER : Engineering Drawing Strength of Materials Advance Machine Tool Technology CNC Technology CNC Programming CNC Machining (Lathe & Milling) Tool & Die Parts Manufacturing – Jigs/ Fixtures/ Gauges / Press Tools / Moulds / Die Casting Dies Elements Material Technology	**FOURTH SEMESTER :** Sociology Entrepreneurship Development Tool Room Machine Maintenance CNC Programming CNC Machining (WEDM & EDM) Engineering Metrology Hydraulics & Pneumatics Tool & Die Parts Manufacturing – Jigs/ Fixtures/ Gauges / Press Tools / Moulds / Die Casting Dies Elements Material Technology Heat Treatment Fundamentals of Tool Engineering

Long Term Course Admission Schedule

ADTDM	**August of First Year to July of Last Year**
DIM	**August of First Year to July of Last Year**
CCMTR	**August of First Year to July of Last Year**

Institute reserves right to incorporate changes in course contents, course duration, Intake Capacity, No. of batches & course fees without prior notice.