TRAINING INFRASTRUCTURE

TO BRIDGE THE GAP BETWEEN INDUSTRIAL NEEDS FOR TRAINED, SKILLED & INNOVATIVE MANPOWER THE TRAINING CENTER OF IGTR-AURANGABAD IS ONE OF THE MOST SOPHISTICATED SETUP FOR IMPARTING TRAINING IN TOOL & DIE, CNC AND CAD/CAM TECHNOLOGY. THE TRAINING IS IMPARTED THROUGH SCIENTIFICALLY DEVELOPED CURRICULUM WITH THE APPLICATION OF LATEST AUDIO VISUAL TRAINING EQUIPMENT. THE EMPHASIS IS ON MAINTAINING OF SCIENTIFIC BLEND OF THEORY AND PRACTICE TO EQUIP THE TRAINEE FOR APPLYING ACQUIRED KNOWLEDGE.

IGTR TRAINING INFRASTRUCTURE HAS:

- ## CNC MACHINES

MODERN & PRECISION MACHINES WITH LATEST TECHNOLOGICAL APPLICATION IS A TRUE ASSEST FOR A TRAINNE TO EXPERINCE WITH THE TECHNOLOGY & TRAINEE CAN AQUIRE HIGHER DEGREE OF PRACTICAL KNOWLEDGE THROUGH

- CNC MACHINING CENTRE
- CNC MILLING
- CNC LATHE
- CNC WEDM
- CNC EDM
- ZNC EDM

- ## CONVENTIONAL MACHINES

AQUIRING BASIC MACHINING SKILL FOR A BEGINER CAN BE ACHIEVED WITH BETTER EQUIPPED THE BASIC MACHINE EQUIPMENT & RELVANT SPECIAL ATTACHMENTS FOR ALL AROUND SKILL DEVELOPMET & IS DONE THROUGH

- LATHE
- MILLING
- SURFACE GRINDING
- CYLINDRICAL GRINDING
- TOOL & CUTTER GRINDING
- SINGLE LIP CUTTER GRINDER
- COLUMN DRILLING
- PENTOGRAPH ENGRAVING
- EDM
- PRESS TOOL / INJECTION MOULDING PRESS

- ## CAD CAM CAE / CNC CELL

LATEST CONFIGUARATION WORK STATIONS SUPPORTED WITH LATEST P- 4 PC'S IS AN PART OF THE CAD CAM CAE CELL INFRASTRUCTURE & AIM IS TO

- FOCUS ON CAD / CAM / CAE / CNC RELATED SERVICES FOR ENGINEERING INDUSTRY
- TO BRIDGE THE GAP BETWEEN INDUSTRIAL NEEDS & ASPIRING ENGINEERING PROFESSIONALS TECHNICAL SKILL IN THE AREA OF CAD / CAM / CAE / CNC

CAD / CAM / CAE / CNC CELL UNDERTAKE

- PRODUCT CENCEPTULIZATION / PRODUCT DEVELOPMENT
- SOLID & SURFACE MODELLING
- TOOL PATH GENERATION
- TOOLPATH OPTIMIZATION
- REVERSE ENGINEERING

LOW COST AUTOMATION

- **LATEST TECHNOLOGY, WORKSTATIONS AND TRAINING KITS FOR SKILL DEVELOPMENT RELATED TO INDUSTRIAL AUTOMATION AND ROBOTICS IN THE FOLLOWING AREA**
  - PLC
  - SCADA
  - ELECTRICAL CAD
  - EMBEDDED SYSTEM
  - VLSI
  - EPLAN
  - MATLAB
  - DRIVES
  - MODULAR PRODUCTION SYSTEM
  - PROCESS AUTOMATION
  - AUTOTRONICS
  - SAMSUNG

CAD CAM CAE / CNC MACHINING LABS

- CAD LABS – 05
- CAM LABS – 02
- CAE LAB – 02
- CIVIL ENGINEEING SOFTWARE LAB - 03
- CNC MACHINING LAB – 05
- CNC PROGRAMING LAB – 02
- CNC SIMULATOR LAB - 02
- COMPUTER HARDWARE MAINTENANCE LAB – 01
- ADVANCE NETWORKING LAB – 02
- INTERNET LAB – 01
- METROLOGY LAB – 01
- PLC & SCADA LAB- 02
- MECHATRONICS LAB-01
- MATLABLAB – 01
- ELECTRICAL CAD- 01
- EPLAN LAB -01
- PRODUCT AUTOMATION LAB- 01
- PROCESS AUTOMATION LAB- 01
- AUTOTRONICS LAB- 01
- ELECTRICAL DRIVES LAB – 01
- EMBEDDED LAB – 01
- VLSI LAB – 01
- HYDRAULICS & PNEUMATICS LAB – 01
- SAMSUNG- 01

HIGH END CAD CAM CAE SOFTWARES

PRODUCT CONCEPTUALIZATION, PRODUCT DEVELOPMENT, REVERSE ENGINEERING IS DONE WITH LATEST & UPDATED VERSION OF SOFTWARES LIKE

- ## CAD
  - UNIGRAPHICS – NX19
  - CREOPARAMETRIC 3. 0/4.0
  - CATIA – V6
  - SOLIDWORKS - 2018
  - INVENTOR - 9
  - MDT - 6
  - AUTOCAD – 2020/21/22
  - ELECTRICAL CAD- 2020

- **CAM**
  - UNIGRAPHICS – NX19
  - MASTERCAM – X9
  - DELCAM – 2017
- **CAE**
  - ANSYS – 19.0
  - HYPERWORKS - 2020
  - MOLDEX 3D - 2021
  - NASTRAN
  - MOLD FLOW – MPA - 4.0
  - COSMOS
  - PRO PLASTIC ADVISOR

- **CIVIL ENGINEERING**
  - AUTOCAD – 2020/21/22
  - 3DS MAX - 2020/21/22
  - REVIT ARCHITECTURE – 2020/21/22
  - AUTOLEVEL
  - STAAD PRO -V8i
  - GPS
  - TOTAL STATION

- **CNC PROGRAMMING & MACHINING**
  - MTS

- **AUTOMATION**
  - TIA- V13/V14
  - WINCC COMFORT
  - MICROWIND-3.8
  - MATLAB-R2015b
  - EPLAN ELECTRC P8
  - CROSSWARE
  - FLUIDSIM
  - SIEMENS SINAMICS

- **SAMSUNG**
  - RACHA
  - AUDIO VIDEO
  - HHP

- **CLASS ROOMS**

CLASS ROOMS ARE ACCOUSTICALLY DESIGNED & ARE EQUIPPED WITH MODERN AUDIO VISUAL EQUIPMENTS

- **DESIGN HALL**

MODERN DAY TOOL DESIGN CAN DONE WITH FULL FLEDGED GERMAN & INDIAN DESIGN EQUIPMENTS EUIPPED DESIGN LAB WITH 120 DESIGN STATIONS

- ## METROLOGY LAB

WELL EQUIPPED WITH RELEVANT MEASURING INSTRUMENTS, DEMOSTRATION KITS, PRACTICAL WORK PIECES & AUDIO VISUAL EQUIPMENTS

- ## INTERNET LAB

CONNECTED WITH THE PROPER HARDWARE & SOFTWARE FACILITY BEING PROVIDED FOR INFORMATION SHARING, KNOWLEDGE AQUIREMNT FOR THE BENEFIT OF THE STUDENT COMMUNITY.

- ## HYDRAULICS & PNEUMATICS LAB

DESIGNED FOR THE MODERN DAY INDUSTRIAL REQUIREMNTS FOR THE AUTOMATION APLLICATION TWAIN STATION LAB WITH