सूक्ष्म, लघु और मध्यम उद्यम
MICRO, SMALL & MEDIUM ENTERPRISES
MSME - TOOL ROOM HYDERABAD

MSME TOOL ROOM, HYDERABAD

CENTRAL INSTITUTE OF TOOL DESIGN

(A Govt. of India Society, Ministry of MSME)

(An ISO 9001 : 2000 Institution)

INTERNATIONAL TRAINING PROGRAMMES 2010 - 2011

CITD - THE INSTITUTE FOR ENHANCEMENT OF TECHNOLOGY

All the courses printed in the brochure are sponsored by Ministry of External Affairs under ITEC/SCAAP and Ministry of Finance under TCS of Colombo Plan

About CITD

The Central Institute of Tool Design is a premier Institute in Asia to provide specialized training courses in Tool Engineering. The Institute was established in the year 1968 by the Government of India with the assistance of UNDP and ILO as an executing Agency. The objective of the Institute is to meet the requirements of the Industries in the field of Tool Design and Manufacture and to train the technical personnel in these fields. The Institute has strong links with industries to impart practical knowledge by way of undertaking tooling assignments.

The Institute has a well equipped Tool Room with sophisticated CNC machines like CNC EDM (Charmilles Roboform 54), CNC Wirecut EDM (AGIE Cut Classic –III & Electronica), 4-Axis & 5-Axis High Speed Machining centers, Kellenberg CNC Cylindrical Grinding Machine and 3D Coordinate Measuring Machine with Laser Scanning and Digitization facilities. The Institute is equipped with latest version of EMCO MEIR Table Top CNC Turning and Milling machines with closed loop systems to impart training in CNC Programming, The Calibration Laboratory is set up in CITD with Universal Horizontal metro scope ULM OPAL 600 Carl Zeiss Technology, Germany and Slip Gauge Measuring Unit 826 with Millerton 1240, Mahr Germany ,to Calibrate limit Gauges, Micrometers, Dial indicators, etc.

The Automation Centre is equipped with various simulator training kits like Advanced Pneumatics Trainer, Advanced Electro Pneumatics Trainer with PID Control, Advanced Hydraulics Trainer, Advanced Electro Hydraulic Trainer, closed loop Hydraulics Trainer with PID Controls, PLC Trainers with Allen Bradley, Siemens S95U, S200 & S300 controllers with STEP5, STEP7 MICROWIN, STEP7 LITE Softwares, WINCC SCADA Systems, Sensors Technology Trainer, Fluidic Muscle Press Station, Modular Production Systems with Testing, Processing, Handling and Sorting Stations, Cut Section models of various Elements, Transparent working models of Hydraulics element etc.

The CAD/CAM Centre is equipped with latest hardware of more than 300 work stations like Compaq, IBM, DELL & HP Systems and softwares like Auto CAD, MDT, Ideas NX11, Pro – E wildfire, Catia V5, UG, Ansys, Nastran, Hypermesh, MasterCam, DelCam, Soild work etc.

The VLSI and Embedded System laboratory is equipped with Modelsim Software, FPGA Training kits, CADENCE Tools with 42 models both for Analog & Digital design, TANNER Tools, Micro Controllers like 8051, AVR, Rabbit Processors, KEIL Software, VX-Works RTOS etc.

The Institute has a special Library with vast collection of technical books in Tool Engineering, Automation, VLSI & Embedded System fields and subscribes to various International Journals like CIRP Annals, American Machinist, Journal of Engineering Materials & Technology (ASME), Precision Engineering (JAPAN) and Precision Tool Maker etc., The Documentation centre collects and organizes information and data useful for the technological advancement in Tool Engineering. For the dissemination of information, the centre publishes a computerized current awareness abstracting bulletin and provides technical enquiry service.

The Institute also extends its services to the developing countries by imparting knowledge and necessary skills to their personnel in the field of Tool Design, CAD/CAM and Low Cost Automation Techniques, VLSI & Embedded Systems.

The Institute conducts various long term and short term programmes.

LONG TERM PROGRAMMES

1 M.E. (Mechanical – CAD/CAM) of two years duration, in Collaboration with Osmania University, Hyderabad.

2 M.E. (Tool Design) of two years duration, in collaboration with Osmania University, Hyderabad.

3 M.Tech. (Mechatronics) of two years duration, in collaboration with JNTUH, Hyderabad.

4 Post Graduate Course in Tool, Die & Mould Design of 1 ½ years duration (Recognised by the Govt. of India as an advanced Post Graduate qualification for recruitment to superior posts).

5 Post Graduate Diploma in CAD / CAM for Tool Engineering (PGDCTE) of one year duration.

6 Post Graduate Diploma in Mechatronics (PGDM) of one year duration.

7 Post Diploma in Tool Design of one year duration, recognized by AICTE, New Delhi.

8 Diploma in Tool, Die & Mould Making of four years duration, recognized by AICTE, New Delhi.

9 Advanced Tool Makers course (ATM) of two years duration. Advanced CNC Machinist course (ACMC) of one year duration.

The trainees who had gone out of the portals of the Institute are playing key role as Tool Engineers in various establishments in the country and abroad.

SHORT TERM PROGRAMMES

1 Master Certificate in CAD /CAM (M-CAD/CAM) of Six months duration.

2 Master Certificate in Computer Aided Tool Engineering (MCTE) of Six months duration.

3 Post Graduate Diploma in VLSI & Embedded Systems of Six months duration.

The Institute offers the following Training Programmes for International Participation during 2010-11

1 Design of Cutting Tools

21st June 2010 to 27th August, 2010

2 3-D Modeling using Unigraphics Software

21st June 2010 to 27th August, 2010

3 Very Large Scale Integration (VLSI)Design

21st Jun 2010 to 27th August, 2010

4 Design of Die Casting & Plastic Processing Tools

30th August 2010 to 5th November, 2010

5 3D Modeling and Surfacing using CATIA V5 Software

30th August 2010 to 5th November, 2010

6 Programmable Logic Controllers for advanced Automation

30th August 2010 to 5th November, 2010

7 Designing of Jigs & Fixtures

8th November 2010 to 14th January, 2011

8 3–D Modeling Using Solid Works Software

8th November 2010 to 14th January, 2011

9 Sensors Technology for Automation

8th November 2010 to 14th January, 2011

10 Design of Sheet Metal Forming Tools

17th January 2011 to 25th March, 2011

11 Analysis using Ansys and Hyper mesh Software

17th January 2011 to 25th March, 2011

12 Mechatronics & its Applications

17th January 2011 to 25th March, 2011

1. DESIGN OF CUTTING TOOLS

21st June 2010 to 27th August, 2010

Duration: 10 Weeks

Intake Capacity : 20

Fee :

a) Rs. 26,000/- per participant for fellowships under ITEC/SCAAP and Rs. 25,500/- for participants under TCS fellowships.

b) US $2,500 per participant for other agencies

Admission Requirements:

Degree or Diploma in Mechanical Engineering or its equivalent with experience in the relevant field.

Synopsis:

The Course is aimed for production engineers for updating their skills in the area of Cutting Tools.

Course Contents:

- Tool Materials for Cutting tools.
- Tool Geometry single – point & multi – point Cutting tools.
- Mechanics of chip Formation.
- Merchants Models for Cutting efficiency.
- Different types of Tool failures and their remedies for different kinds of tools.
- Design of single point cutting tools.
- Design of Circular form Tools
- Design of multipoint Cutting tools Milling Cutters.
- Design of drills.
- Design of reamers .
- Design of Taps.
- Design of Gear Cutting Tools.
- Design of Broaching Tools (Internal)
- Design of External Broaching Tools.
- General nomenclature of single point tools as per ANSI & ISO designations.
- General View of Grinding Wheels.

2. 3D – MODELING USING UNGRAPHICS SOFTRWARE

21st June 2010 to 27th August, 2010

Duration: 10 Weeks

Intake Capacity : 20

Fee:

a) Rs. 26,000/- per participant for fellowships under ITEC/SCAAP and Rs. 25,500/- for participants under TCS fellowships.

b) US $ 2,500 per participant for other agencies

Admission Requirements:

Degree or Diploma in Mechanical Engineering or its equivalent with experience in the relevant field.

Synopsis:

The Course is aimed for Design / Production engineers for updating their skills in the area of 3D Modeling & Manufacturing.

Course Contents:

- Unigraphics interface, basic curves, sketch tools, sketching techniques, Constraint creations, editing techniques, sketcher settings.
- Form feature: Master/non – master representation, sketch based features, predefined sketch based features, datum planes, UDF creations, standard primitives, part families.
- Taper creation, fillets (edge, soft, face blends), chamfer, instances, (pattern & mirror) types free form features (surface & adv. part modeling); creation of curves in different methods, ruled surface, variational surface (thru curves, thru curve mesh) & surface editing (bridge, enlarge, offset), converting surfaces to solids technique.
- Introduction to UG Assembly, introduction to top down, bottom up assembly, assembly constraints, repositioning comp., substitute comp., & creation of assembly array.
- Introduction to drafting, drawing with/without templates, formats, placing views, placing dimensions, tolerances, notes, etc., drafting tools sheets, Table creation etc.,
- Introduction to UG manufacturing, machining environment, setting m/c coordinates systems, shop documentations, types of milling operations, generating NC sequences like cavity milling, planar mill, etc., simulation of cutter locations, gauge checks, generating CL files (cutter location file), editing CL files, converting the created CL files in specified controller.
- NC, CNC programming and machining - overview of CNC m/c – G Codes – M Codes – work datum points – tool data – 2D Geometry – Canned cycles – subroutines – multi – tool programming – overview 0f 3D geometry – practices on CNC m/c.
- Case study, review and discussion.

3. VERY LARGE SCALE INTEGRATION (VLSI) DESIGN

21st June 2010 to 27th August, 2010

Duration: 10 Weeks

Intake Capacity : 20

Fee :

a) Rs. 26,000/- per participant for fellowships under ITEC/SCAAP and Rs. 25,500/- per participant and TCS fellowship

b) US $ 2,500 per participant for other agencies

Admission Requirements:

Degree in Electrical/Electroinics/Instrumentation Engineering or its equivalent with experience in the relevant field.

Synopsis:

The Course is aimed to decrease the size of electronic device by Very Large Scale Integration (VLSI).

Course Contents:

- Overview of electronics.
- Active and Passive devices, Circuit simplification laws, BJT operation and its application, MOSFET Operation and its application.
- Introduction to Digital electronics
- Number Systems, Logic Gates, Boolean algebra. K- Maps, Combinational circuits, sequential circuits, FSM, Hazards.
- Verilog Language & Incisive Simulator.
- Top to Bottom design and Bottom to Top design, Lexical Conventions, Levels of abstraction, Gate level modeling, data flow modeling, Behavioral Modeling , switch level modeling, UDP's Task and Function, RTL Modeling, Delays in Abstraction levels, Verilog Synthesis and Verification by using Incisive Simulator.
- VHDL Language & Xilinx & Modelsim.
- Levels of Abstraction, Gate level modeling, data flow modeling, Behavioral Modeling, Procedure and function, Delays in Abstraction levels, VHDL Synthesis and Verification by using Xilinx & Modelsim.
- CMOS Digital circuits & Spectra simulator – 13 days.
- Operation of CMOS Devices, Different types of Topologies in CMOS digital circuits, Graph theory in CMOS digital circuits, Delays of different CMOS digital circuits by using Spectra simulator.

4. DESIGN OF DIE CASTING & PLASTIC PROCESSING TOOLS

30th August, 2010 to 5th November, 2010

Duration: 10 Weeks

Intake Capacity : 20

Fee :

a) Rs. 26,000/- per participant for fellowships under ITEC/SCAAP and Rs. 25,500/- for participants under TCS fellowships.

b) US $ 2,500 per participant for other agencies

Admission Requirements :

Degree or Diploma in Mechanical Engineering or its equivalent with experience in the relevant field

Synopsis :

The Theory and design practice presents a systematic approach in the development of various moulds for plastics and die casting dies.

Course Contents :

- Introduction to Plastics – Development of Plastic.
- Type of Plastic – viz. Thermo & Thermo setting Mould Terminology.
- Various Methods of process – MOULD Terminology.
- STD Mould bases – Application.
- Design approach of INJ. Moulds.
- Multi Daylight Moulds. Moulds for External and Internal undercuts, Threaded Moulding etc.
- Material Selection and Heat treatment.
- Design principle of Thermo – sets and process variables.
- HOT RUNNER MOULDS – Application
- Faults and Remedies
- Comparison of various Casting Process – Technical & Economical aspects – Pressure Die Casting.
- Terminology applicable to various processes.
- Machines and Die elements. Types of Dies.
- Design approach for Die Casting Dies.
- Material Selection and heat treatment.
- Trimming Dies, various Die Casting alloys.
- Design Exercises on Dies & Moulds.
- Application of software for Dies & Moulds viz. PRO – MOULD or CATIA or SOLIDWORKS.

5. 3D MODELING & SURFACING USING CATIA V5 SOFTWARE

30th August, 2010 to 5th November, 2010

Duration: 10 Weeks

Intake Capacity : 20

Fee :

a) Rs. 26,000/- per participant for fellowships under ITEC/SCAAP and Rs. 25,500/- for participants under TCS fellowships.

b) US $ 2,500 per participant for other agencies

Admission Requirements :

- Degree or Diploma in Mechanical Engineering or its equivalent with experience in relevant field.

Synopsis :

The Course is aimed for Design engineers for updating their skills in the area of 3D Modeling & Surfacing of various products.

Course Contents :

- Introduction to Catia, View tool bar, mouse functions,
- Sketch tool : Profile tools tool bar operations toolbar, Constraints, etc.,
- Part modeling
- Sketch based features: pad, pocket, Shaft, groove, hole, fillets etc.
- Reference elements(point, line, plane)
- Advanced Part modeling: Rib, Slot, Multi section solid, Remove Multi section solid. Boolean operations etc..
- Wire frame and Surfaces modeling: Creation of Wire frames.
- Creation of Surfaces advanced Surface modeling Sweep, multi section surface etc..
- Assembly
- Top Down Assembly, Bottom Up Assembly Concepts
- Drafting : Creation of views, dimensioning, annotations, etc.
- Case study, over view and discussion.

6. PROGRAMMABLE LOGIC CONTROLLERS FOR ADVANCED AUTOMATION

30th August, 2010 to 5th November, 2010

Duration: 10 Weeks

Intake Capacity : 20

Fee :

a) Rs. 26,000/- per participant for fellowships under ITEC/SCAAP and Rs. 25,500/- for participants under TCS fellowships.

b) US $ 2,500 per participant for other agencies

Admission Requirements :

Degree or Diploma in Engineering in any discipline.

Synopsis :

The Course is aimed for Programming in PLC For controlling Automation systems.

Course Contents :

- Advantage of a PLC compared to conventional controls such as electrical, electro-pneumatic or electro by hydraulic controls
- Function of the System components of PLC
- Commissioning a PLC – Criteria for the use of mechanical, optical, capacitive and inductive proximity sensors.
- Circuit development -Circuit diagram design – Communication between the Personal computers and PLCs. Programming in Ladder Diagram, Function Chart and Statement List.
- Development of sequence and logic control systems. Defining appropriate control systems for a given control task. Modification of programmes by inserting or deleting control commands.
- Programming of counter functions– programming of Timer functions. Display and modification of the status of the fictional components and error messages in the PLC test systems.
- Design and development of logic and sequence controls in combination with display and output elements.

7. DESIGN OF JIGS & FIXTURES

8th November, 2010 to 14th January, 2011

Duration: 10 Weeks

Intake Capacity : 20

Fee :

a) Rs. 26,000/- per participant for fellowships under ITEC/SCAAP and Rs. 25,500/- for participants under TCS fellowships.

b) US $ 2,500 per participant for other agencies

Admission Requirements :

Degree or Diploma in Mechanical Engineering or its equivalent with experience in the relevant files of Tool Design.

Synopsis :

The Theory and Design practice presents a systematic approach in the development of various Jigs & Fixtures.

At the end of the course, the participants will be confident enough to under take the design of Jigs & Fixtures independently.

Course Contents :

- Pre-Design Analysis for designing of Jigs & Fixtures.
- Cost Analysis for requirements of design and manufacture of Jig and Fixture for Production of work pieces in batch & large mass production process.
- Principles of location.
- Concentric location viz. external and internal pin location, V – Block location etc.
- Error analysis of location of work pieces etc and minimizing these things.
- Design of clamping elements and their system usage etc.
- Guiding elements of cutting tools in design of Jigs and Fixtures.
- Analysis for Combination of location and Clamping & supporting by various methods like Centralizers and equalizers etc.,
- Design of various types of Jigs and Fixtures for different types of matching process.
- Design analysis for welding and inspection and assembly Fixtures.
- Manufacturing methods of Jigs and Fixtures.

8. 3D-MODELING USING SOLID WORKS SOFTWARE

8th November 2010 to 14th January, 2011

Duration: 10 Weeks

Intake Capacity : 20

Fee :

a) Rs. 26,000/- per participant for fellowships under ITEC/SCAAP and Rs. 25,500/- for participants under TCS fellowships.

b) US $ 2,500 per participant for other agencies

Admission Requirements:

Degree or Diploma in Mechanical Engineering or its equivalent with experience in the relevant field.

Synopsis :

The Course is aimed for Design engineers for updating their skills in the area of 3D Modeling of various products.

Course Contents :

- Introduction to solid works. Introduction to sketcher. Sketch entities: line, rectangle, circles, etc. Sketch tools: Fillet, chamfer, offset, pattern, dimensions etc.
- Part modeling extruded boss, extruded cut, revolved boss, revolved boss, revolved cut, Fillet, chamfer, Hole, Draft, rib, shell, combine, split, move/copy.
- Reference geometry, Curves, View and display commands. Appearance, options etc.
- Advanced Part modeling: Sweep boss, Sweep cut, loft boss, loft cut, Dome, deform, indent, flex, wrap
- Surface modeling: extrude, revolve, sweep, loft, planner, Fillet, offset, extend, trim.
- ASSEMLY: Top Down Assembly, Bottom Up Assembly Concepts.
- Drafting : Creation of views, dimensioning , annotation's etc.,
- Case study over view and discussion

9. SENSORS TECHNOLOGY FOR AUTOMATION

8th November, 2010 to 14th January, 2011

Duration: 10 Weeks

Intake Capacity : 20

Fee :

A) Rs. 26,000/- per participant for fellowships under ITEC/SCAAP and Rs. 25,500/- for participants under TCS fellowships.

B) US $ 2,500 per participant for other agencies

Admission Requirements :

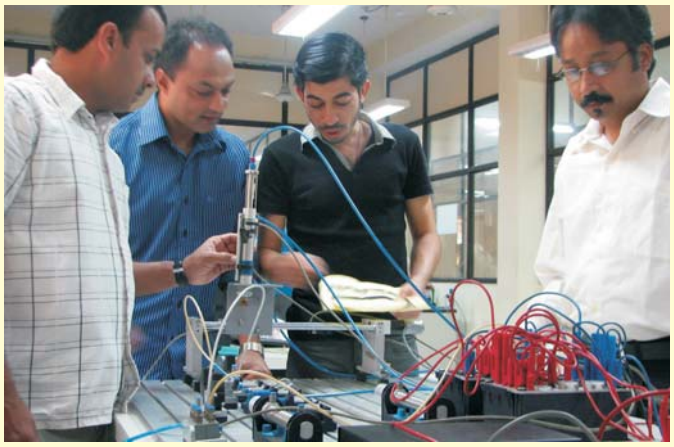
Degree or Diploma in Engineering in any discipline.

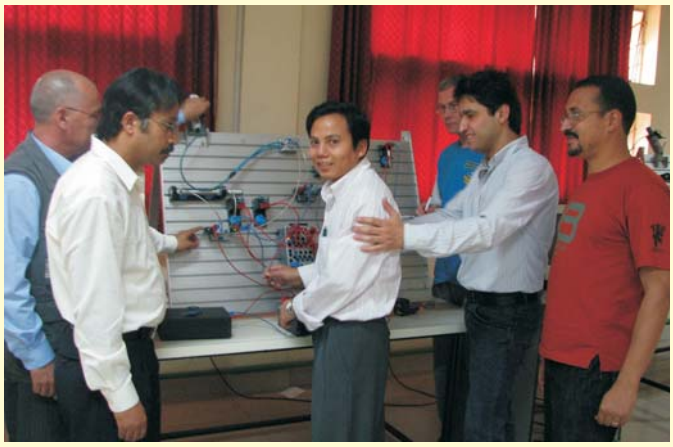
Synopsis :

The Course is aimed for giving exposure to various sensors in Automation systems.

Course Contents :

- Mode of operation, Sensor properties for proximity sensors – Electrical connections Electrical circuit diagram
- Sensing range-Actuating, Materials – Applications – Selection of sensors - Sensors adjustment, Limitation in applications.
- Mode of operation of distance & displacement sensors – Application of Inductive, optical & ultrasonic sensors for non contact distant measurement.
- Active & Passive sensors, control of spindle drives with a geared motor & displacement sensor.
- Measuring Techniques – Measures value recording – Recording the sensor characteristic, Influence of Interference.
- Mode of Operation properties & characteristics of force & pressure sensors.
- Measuring strain & force with a strain gauge, Mode of operation of an Industrial force sensor – Pneumatic & Electrical connection of pressure sensors, Measuring techniques.





10. DESIGN OF SHEET METAL FORMING TOOLS

17th January 2011 to 25th March, 2011

Duration: 10 Weeks

Intake Capacity : 20

Fee :

a) Rs. 26,000/- per participant for fellowships under ITEC/SCAAP and Rs. 25,500/- for participants under TCS fellowships.

b) US $ 2,500 per participant for other agencies

Admission Requirements :

Degree or Diploma in Mechanical Engineering with experience in the relevant field of Tool Design.

Synopsis :

The Theory and Design Practice presents a systematic approach in the development of various Press – Tool for Sheet metal industry.

Course Contents :

- Theory of Shearing, Force Analysis, Economic Strip layouts.
- Various Press – Tool Operations.
- Design Criteria of Shearing Dies. Viz.
- Design approach of Bending, Forming Dies
- Design Criteria of Draw - dies
- Selection of Presses – Application – Types of Presses
- Use of Standard DIE – SETS and Elements.
- Design Concepts of Special Blanking Tools.
- Modern Trends in metal forming .
- Faults and Remedies.
- Design Exercises – Case Studies
- Application of Software for Press- Tool, PRO SHEET Metal/Solidworks,etc.

11. ANALYSIS USING ANYSYS AND HYPERMESH SOFTWARE

17th January, 2011 to 25th March, 2011

Duration: 10 Weeks

Intake Capacity : 20

Fee :

a) Rs. 26,000/- per participant for fellowships under ITEC/SCAAP and Rs. 25,500/- for participants under TCS fellowships.

b) US $ 2,500 per participant for other agencies

Admission Requirements :

Degree or Diploma in Mechanical Engineering or its equivalent with experience in the relevant field.

Synopsis :

The Course is aimed for Design engineers for updating their skills in the area of 3D Modeling of various products.

Course Contents :

- Introduction to FEA & FEM theory, Overview of ANSYS and its applications Structural analysis, bar and beam, Plane stress, Plane strain and asymmetric Shells and Solids.
- Dynamic vibration analysis Modal, Harmonic, Transient, Spectrum analysis: Thermal, analysis, with Steady state and Transient.
- Working on Geometry, Overview of Hyper mesh and its advantages, Importing the geometry Creating the simple geometry, Geometry cleanup and editing. Collector concepts. Surface meshing: Auto Meshing, Ruled, spline, drag and spin meshing, Splitting and editing the elements. Element cleanup, Quality check of 2D mesh.
- Solid meshing Solid map, Linear Solid, Solid mesh, Tetra mesh, Quality check for 3D elements Preparing decks for various solvers: Exporting the FE Modes By Using the optistruct solver to solve Structural Problems.

12. MECHATRONICS & ITS APPLICATIONS

17th January 2011 to 25th March, 2011

Duration: 10 Weeks

Intake Capacity : 20

Fee :

a) Rs. 26,000/- per participant for fellowships under ITEC/SCAAP and Rs. 25,500/- for participants under TCS fellowships.

b) US $ 2,500 per participant for other agencies

Admission Requirements :

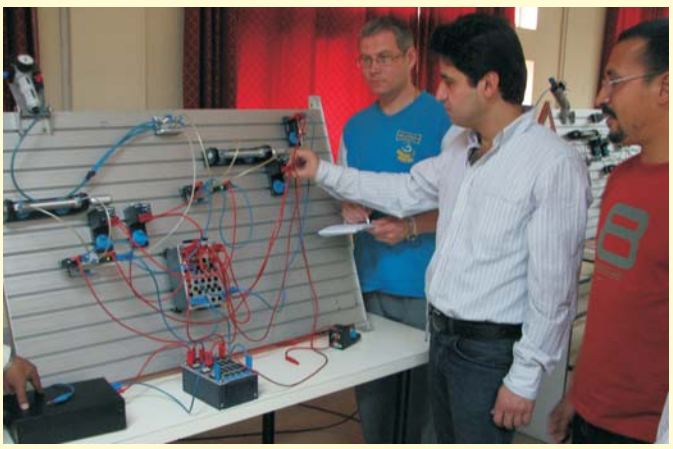
Degree in Electrical/Electronics/ Instrumentation Engineering its equivalent with experience in the relevant field.

Synopsis :

The Course is aimed for upgrading the skills in development of Automation systems.

Course Contents :

- Applied Industrial Pneumatics, Compressors & Air line installation, Various types of actuators, Control Elements, Basic and advanced circuits, Fluidics, Electro Pneumatics, Modular Elements.
- Applied industrial Hydraulics, Control valves, Accessories, Pumps, Circuits, Electro Hydraulics, Proportional Hydraulics, Servo Hydraulics, PID Controls.
- Mechanical Engineering, Materials, Heat Treatment & Machining Process.
- Applied Electrical & Electronic Controls including microprocessors & Programmable logic controllers.
- Mechanization, Exposure on NC & CNC and CAD/CAM, Robotics and their applications for automation, Flexible manufacturing systems
- Practical demonstration in the laboratories.



FELLOWSHIP AND STIPENDS

CITD by itself does not found for participation in any of the international training programmes. However, fellowships are usually made available by a number of agencies such as :

Government of India through :

- Technical Co-operation Scheme of Colombo (TCS)
- Special Common Wealth African Assistance Programme (SCAAP)
- India Technical and Economic Co-operation (ITEC)
- Aid to Srilnaka

International Organizations

- Common wealth Fund for Technical Co-operation (CFTC)
- Common Wealth Industrial Training & Experience Programme (CITEP)
- United Nations Industrial Development Organization (UNIDO)
- International Labour Organization (ILO)
- World Bank(IBRD)
- Other agencies assisting developing countries in industrial development.

Allowances payable direct to Scholars

Funding agencies / sponsoring organizations may adopt their own level of awards currently in vogue in respect of

- International air travel
- Subsistence allowance
- Accommodation
- Study tour outside Hyderabad (within India)
- Book allowance
- Medical care
- Contingencies such as unavoidable overstay, rerouting of international air travel etc,. to an adequate extent. Embarkation fee on departure from India. These cost indications are applicable to fellowship awards from funding agencies other than the Government of India.

For details of fellowship awards from the Government of India through the schemes of TCS of Colombo plan, SCAAP / ITEC and other bilateral and regional arrangements, the High Commissions / Embassies of India at location may be contacted.

Participants are advised to carry adequate cash to cover contingencies such as enforced halts, rerouting of air travel, long distance telephone bills, emergencies during study visits within India etc. Fellowships by their nature may not cover such contingencies.

REMITTANCE CITD

Tuition fee and travel cost of study tour are to be paid to the Institute by the funding agency / sponsoring organization (other than Government of India) in free foreign exchange through a bank draft in favour of the Principal Director, CITD, Balanagar, Hyderabad, A.P, India. Living allowances, accommodation and other allowances may be paid direct to the participants in the form of traveler cheques or uncrossed bank draft, since opening of bank account by a foreigner in India needs special permission.

WHOM TO CONTACT

Intending applicants or other organizations may contact the High Commission / Embassy of India accredited to the country for details regarding fellowship awards available through the Government of India. For fellowship awards from CFTC, CFTC headquarters at London (Common Wealth Secretariat, Common Wealth Fund for Technical Co-operation, Malborough House, Pall Mall, London SWIY THX, England) may be contacted. For fellowship offered by other international agencies, regional offices of these organizations in the respective countries may be contacted.

NOMINATIONS

The entire process of making nominations, arranging fellowships etc., may be carried out in such a way that the CITD is in receipt of confirmed nominations backed up by funding agencies preferably a month prior to the commencement of the courses. Course brochures may be obtained by candidates or sponsoring agencies from the Institute. Candidates sponsored and supported financially by their own organizations/ Governments may mail their nominations in original directly to CITD. Others seeking fellowships offered by the Government of India or other funding agencies may forward copies of nomination to the institute for information. All correspondence in respect of nominations may addressed to :

The Principal Director,

MSME TOOL ROOM, HYDERABAD

CENTRAL INSTITUTE OF TOOL DESIGN

Balanagar, Hyderabad – 500 037 (A.P), India

Phone: 0091-40-23772747 / 2748 /1959 /6156

Fax No: 0091-40-23772658

HYDERABAD – SURROUNDINGS

Hyderabad, the capital of Andhra Pradesh is the fifth biggest city in India. It is at the center of peninsular India, approximately equidistant from Bombay and Chennai. It is easily accessible by Air from all the Metropolitan Cities of India. The world's biggest monolithic statue of Lord Budha, Salarjung Museum, Charminar, Medieval Mosques, Birla Marble Temple and Science Museum are famous tourist attractions of Hyderabad, The world's biggest Masonary Dam situated at Nagarjuna Sagar the world Famous Buddhist temples and caves situated at Ajanta and Ellora are easily Accessible by Road / Train from Hyderabad.

STATEMENT SHOWING BREAK-UP OF FORGEIN PARTICIPANTS TRAINED AT CITD FROM 1974 TO 2010

Sl. No.	Country	No. Of Participants Trained
1.	Afghanistan	24
2.	Armenia	3
3.	Bangladesh	86
4.	Bangkok	1
5.	Bahrain	2
6.	Belarus	1
7.	Bhutan	17
8.	Botswana	13
9.	Bulgaria	1
10.	Cambodia	6
11.	Costarica	1
12.	Cuba	9
13.	Dominic Republic	3
14.	Ecuador	1
15.	Ethiopia	60
16.	Egypt	16
17.	Georgia	1
18.	Germany	1
19.	Ghana	65
20.	Guatemala	4
21.	Guyana	7
22.	Honduras	1
23.	Hungary	1
24.	Indonesia	20
25.	Iran	9
26.	Iraq	79
27.	Ivory Coast	3
28.	Jamaica	1
29.	Kazakhstan	5
30.	Kenya	33
31.	Kyrgyzstan	1
32.	Laos	2
33.	Liberia	15
34.	Libya	17
35.	Lithuania	1
36.	Lesotho	1
37.	Malawi	4
38.	Malaysia	34
39.	Maldives	2
40.	Mauritius	11
41.	Mexico	2
42.	Mongolia	2
43.	Mozambique	2
44.	Myanmar	107
45.	Nigeria	69
46.	Nepal	4
47.	Oman	7
48.	Panama	9
49.	Peru	3
50.	Philippines	38
51.	Palestine	6
52.	Republic of Benin	3
53.	Romania	3
54.	Russia	1
55.	Senegal	5
56.	Seychelles	2
57.	Seirra Leone	5
58.	Srilanka	109
59.	Sudan	60
60.	Suriname	2
61.	Syria	64
62.	Tajkistan	2
63.	Tanzania	6
64.	Thailand	9
65.	Trinidad	8
66.	Tunisia	2
67.	Turkey	6
68.	Turkmenistan	1
69.	Uganda	19
70.	Uzbekistan	9
71.	Vietnam	19
72.	Yemen (PDR)	17
73.	Zambia	12
74.	Zimbabwe	1

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MICRO, SMALL & MEDIUM ENTERPRISES
MSME - TOOL ROOM HYDERABAD

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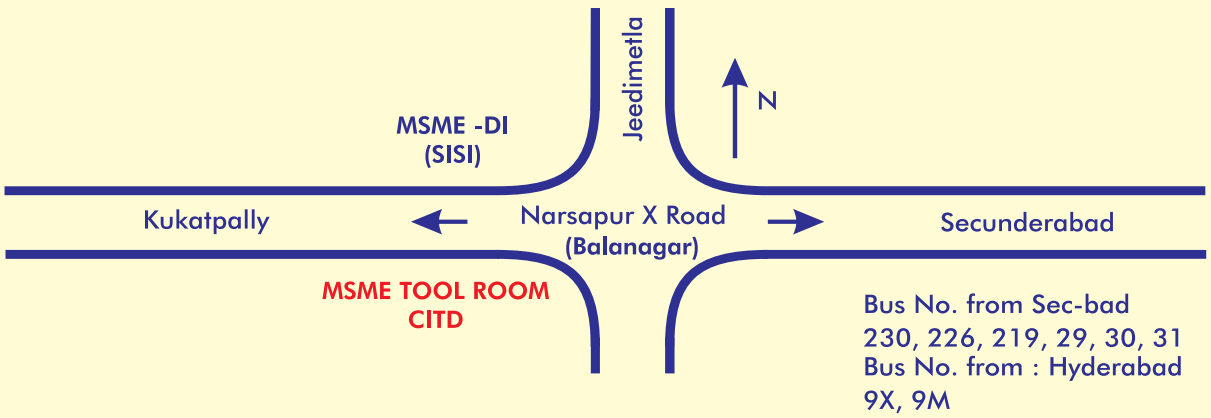
How to reach CITD :

Route Map



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