

MINISTRY OF MICRO, SMALL & MEDIUM ENTERIPRISES, GOVERNEMENT OF INDIA MSME - TECHNOLOGY CENTRE, MU

INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS ISO: 9001-2015 | NABL ISO:IEC 17025:2017





# PROSPECTUS

AICTE Approved and **MSBTE Equivalent Diploma Course** 





**Diploma in Robotics & Mechatronics** 

**Diploma in Tool & Die Making** 

**Diploma in 3D Animation & Graphics** 



IDEMI, Eastern Express Highway, Opp. Everard Nagar bus stop, Chunabhatti, Sion, Mumbai - 400 022, Tel.: 022 - 2405 0301 / 2 / 3 / 4 Fax: 022 - 2405 0016 ~ E-mail: training@idemi.org ~ Website: www.idemi.org



## **INTRODUCTION**



**IDEMI** was established in September 1969 with joint efforts of UNIDO / UNDP, Vienna and Ministry of Industry, Govt. of India. It is a Govt. of India Society under the Ministry of Micro, Small & Medium Enterprises for Service-to-industry organizations.

**IDEMI** is providing services in the following areas:

- 1. Training for Skill Development & Capacity Building of Man Power in various subjects
- 2. Calibration of Electrical, Electronic, Pressure, temperature, Flow, Mass, Volume & Dimension Measuring Instruments.
- 3. Electrical & Environmental Testing of Domestic Appliances & Electrical/Electronic products.
- 4. EMI / EMC Testing on Electronic gadgets & various testing for CE Marking
- 5. Field Services in Calibration & Testing
- 6. Design & Development of Prototype Instruments.
- 7. Tool Design & Documentation.
- 8. Manufacturing of Tools, Jigs & Fixtures, Critical Components, Precision jobs.
- 9. Batch Production services
- 10. Consultancy services for Laboratory accreditation as per ISO/IEC 17025
- 11. Consultancy services for QMS certification as per ISO 9001.

# Training for Skill Development & Capacity Building of Man Power

**IDEMI** Training Division has been devoted to Technical Manpower Development particularly from "Industrial sector" & "Information Technology Sector". Skill Development Training is a continuous education & is required by every Practicing Professional and Student for improving his/her competency to meet the greater demands & challenges of Industry.

**IDEMI** is not only giving the class-room training but it is also supported with various Laboratories for complete hands on experience through practical & demonstrations. IDEMI is having State of Art Laboratories in Calibration, Industrial Automation, Embedded Technology, CAD / CAM & Animation.

In tool room IDEMI is also equipped with high precision Tool Room Machines like CNC Milling, CNC Lathe, CNC EDM, CNC Wirecut apart from Conventional Lathe Milling Machine.

Dimensional Metrology of IDEMI is equipped with precision measuring equipment & CNC CMM.

IDEMI faculty members are well qualified & having immense practical experiences, profound insights, broad perspectives and ready to part tips, tricks and techniques gained during their lifetime to the attending participants. We always ensure that every participant carry back home lot of clarity & confidence on the subject through Theory, Practical, Demonstrations, Role Play, Live Project etc. This enhances the work performance of participant & there by fulfilling our objective of Skill Development.

**IDEMI's** "Skill-Development Training Programmes" has builtin potential to generate Employment or a possibility to start working independently as a Self Entrepreneur.

IDEMI is also conducting the Capacity Building Training Programme for Principals, Faculty members & Senior officers with main focus on Behavior Science through several Soft Skills like Inter Personnel Skills, HR Management, Communication & Presentation skills, Leadership, Decision making, Team Building, Stress & Conflict Management etc.

**IDEMI** is also conducting various Sponsored Training Programmes for various states of India.



## **GENERAL RULES & REGULATIONS FOR TRAINEES**



- 1. IDEMI reserves the right to reject any application without assigning any reason. Incomplete applications are liable to be rejected.
- 2. Medium of instruction is English only.
- 3. Registration fee is non-refundable, in case any candidate cancels his/her admission for any reason.
- 4. One application form is applicable for one course only. If the candidate wish to apply a second course s/he will have to collect another application form.
- 5. Admission to the course will be given only on deposition of first semester fee by DD & on submission of relevant documents Or Online Payment.
- 6. Registration fee will be converted as security deposit after confirmation of admission along with payment of requisite fee by the trainee and shall be refunded on successfully completion of the course/cancellation of admission after payment of requisite fee for first semester.
- $7.\,Course\,fee\,once\,paid\,will\,not\,be\,refunded\,under\,any\,circumstances.$
- 8. Registration/course fee is non-transferable.
- 9. Course fee for the higher/next semester has to be paid within one week from the starting date of semester and all the candidates belonging to SC/ST category have to fill in fresh application form within one week from the starting date of each semester. Late fee will be charged as a fine from due date as applicable.
- $10. \ Insurance$  and other charges as specified for the course to be paid by the trainee in addition to the course fee as applicable.
- 11. Security deposit shall be forfeited, in case of loss of original receipt of the security deposit.
- 12. All the trainees will ensure discipline within the campus.
- 13. Trainees shall be required to wear uniform and shoes as prescribed by the institute and posses I-Card compulsory during training.
- 14. Mobile Phone, Pen Drive, CD/DVD or any other related items are not permitted inside IDEMI premises.
- 15. Regular attendance will have to be maintained by the trainee as per course schedule  $\&\,85\,\%$  attendance is compulsory in all subjects individually.

- 16. Trainees will abide by the examination rules and regulations displayed on Notice Board of IDEMI and as amended from time to time.
- 17. Leave without information/permission will not be entertained.
- 18. Trainees going on leave or home during vacation should inform the Course Coordinator compulsorily.
- 19. All the internal assessments, assignments, evaluations will have to be attended/completed from time to time as per course schedule only.
- 20. No trainee shall organize/conduct any meeting within the campus.
- 21. The machines/equipments/furniture must be handled carefully. No act of damage to IDEMI property shall be carried out by the trainee. Any loss or damage to property, fine as charged to be paid by the trainee.
- 22. Trainees have to ensure the proper utilization of IDEMI property including water and electricity usage.
- 23. Smoking and chewing tobacco, possessing or drinking alcoholic beverages in any form is strictly prohibited within IDEMI premises.
- 24. Ragging is strictly prohibited in the premises.
- 25. Writing any comment/remark/name on doors, walls, toilet, notice board is strictly prohibited.
- 26. Study material shall be provided on extra cost as applicable.
- 27. Working hours are 6 hrs/day (excluding lunch) in different shifts/timing as prescribed by the institute.
- 28. Violations of above & any other rules, regulations, disciplines and conduct etc. are liable for disciplinary action.
- 29. The parents of the selected candidates are required to execute a bond of Rs. 20,000/- (Rupees twenty thousand only) stating that their ward will continue the course for full duration.

## **GENERAL INFORMATION**

Working Hours: 6 hours per day (excluding lunch), As per Academic Calender

<u>Attendance</u>: It is compulsory to attain 85% attendance for appearing semester and final exam in all the training courses.

Original Certificate: Original certificates of school leaving certificate and mark sheet of 10th standard (caste certificate for reserved candidates) are to be deposited with IDEMI by the selected candidates at the time of admission, which will be returned after completion of the course only.

**Institute Security Deposit:** Institute security deposit is to be paid towards the caution money against the tools & instruments, etc. whichever will be issued to the trainees. This amount is refundable at the time of leaving after completion of course and on production of no dues from the concerned sections.

<u>Uniform & Safety Shoes</u>: Trainees shall be required to wear uniform/apron & shoes as prescribed by the institute on his/her own cost.

<u>Fees</u>: Total tuition fees and caution money to be paid fully at the time of admission process.

#### **HOLIDAYS AND LEAVE**

**Holidays:** There are maximum of 12 holidays fixed by the management during each calendar year.

<u>Vacation</u>: There are maximum of 15 days vacation after completion of each semester. The period of vacation will be declared at the end of each semester (there will be a variation on the duration of vacation).

**DISCIPLINE AND PERFORMANCE:** The trainee is bound by the rules and regulations of IDEMI as laid down by the management from time to time. The trainee is required to strictly abide by the rules of IDEMI failing which disciplinary action may be taken against them. The trainee and his/her guardian will have to give an undertaking to this effect.

Whenever it is found necessary, IDEMI will take strict disciplinary action as stipulated in the rules of the IDEMI. This may amount to a warning, suspension or termination as the case warrants. In case of unsatisfactory progress of a trainee, the management will fix a period of probation and give notice in writing to the trainee and the guardian. In case no improvement is evident within the specific period, the traineeship will be terminated.



# **DIPLOMA IN 3D ANIMATION & GRAPHICS**



## **COURSE DETAILS**

## **Course Highlight:**

- o Industry-relevant curriculum.
- o Includes concept-based modules such as Animation Design & Visualization, Anatomy Study/Drawing & Painting, Perspectives, Study of Light & Shade, Concepts of 2D Digital Animation, Concepts of Storyboarding, Concept of 3D Animation Graphics & VFX. Application of Principles of Animation. Practical application of tools & software.

#### The course leads to job opportunities in:

- o Animation & film production studios
- o Television channel & production houses
- o Advertising and Print Media
- o E-learning/Interactive companies
- Medical animation studios
- o Animation Colleges & Institutes
- Digital Marketing

- Virtual Reality & Augmented Reality
- o Graphics Designing (Internet Advertising)
- o Fashion Designing & Interior Designing
- o Development of Computer/Mobile Games
- o Architecture and Landscape
- o IT Industry
- UI/UX Design And Web Development



o Develop Art drawing, creative & technical skills in 2D/3D Animation, Graphics & Web, Compositing & Editing, Film-Making with a focus on character animation & VFX. Train for a career in TV/ Films/development of computer/mobile games/digital simulations/educational e-learning, motion graphics, Digital Marketing & UI/Ux Design advertising commercial, engineering & Virtual reality in decence, fashion designing industry with the 3D Animation & Graphics program

**Duration** 

o 3 years (Total 6 semesters)

Intake

o 30 nos./Batch(Institute reserves the right to vary intake)

**Pattern** 

o Semester

**Eligibility** 

- o Preferably 10<sup>th</sup> Standard pass But the Eligibility in based on the upcoming Notification / Guideline AICTE / MSBTE
- o Age limit: 15 to 18 years (3 years relaxation for SC/ST Candidates)

**Admission** 

- **Selection Process** Written test, Creative Aptitute Test and Personal Interview
  - o 1 batch/year based on the merit list in the Common Entrance examination & interview conducted academic year
  - Reservation of seat as per Central Govt. norms.
- **Affiliation**
- Autonomous, Recognized by AICTE,

## **Brief Course Contents:**

- Perspective, Light & Shadow and Colour Theory
- English Literature & Communication Skills
- Virtual Reality & Augemnt Reality
- Drawing, Painting & Sketching
- Scripting with Film Language
- Storyboarding / Character Design
- Pre-production / Post Production
- Digital Design/ Concept Art
- Stop Motion
- 2D & 3D Character Development
- BG Modeling/Layout and Surfacing
- Texturing & Look Development

- Rigging & Character Set-up
- Character Animation
- Particle Dynamics
- Digital Painting / Matte Painting
- 3D Character Design & Modeling
- Lighting & Rendering
- Graphic Designing
- Concept of Webpage Designing
- Editing & Compositing
- Visual Effects/Motion Graphics
- Acting & Voicing for Animation





## **Software Covers:**

Adobe Photoshop, Adobe Illustrator, Adobe InDesign, Adobe Soundbooth, Animat, Adobe Sound Forge, Autodesk Maya, Autodesk 3Ds Max, Pixologic Z-Brush, Adobe Premier Pro, Toon Boom Studio, Toon Boom Storyboard, Corel Draw, Final Cut Pro, Monkey Jam, Adobe After Effects.



# **DIPLOMA IN ROBOTICS & MECHATRONICS**



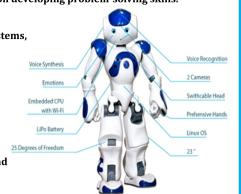
## **COURSE DETAILS**

## **Course Highlight:**

- Provide a sound broad-based foundation in Mechatronics and Robotics technologies with an emphasis on developing problem-solving skills.
- Design ,specify ,plan, organize and implement a Mechatronics system
- Manage and work effectively with a team of domain specialist in the core technologies of Mechanical systems,
- Power systems, Control Systems, embedded systems and Automation Systems.
- Integrate and test multi-disciplinary Mechatronics projects

#### The course leads to job opportunities in:

- o Designing and creation of innovative mechatronics products
- o Designing smart products and automated system with an integrated use of electronics, mechanical and computer technology.
- o In wide spectrum of industries as diverse as electronics, manufacturing, food processing, Pharmaceutical, and chemical and aviation where trained mechatronics professional are high in demand
- o In companies where planning of mechatronics and robotics related projects, project management as well as technical sales and marketing.



#### **Course Objectives:**

Mechatronics & Robotics is rapidly evolving field with growing applications in all engineering branches. It is four disciplines engineering field with concurrent methodology. This course has been framed in such a way that it will fulfill all the requirements of industries for perfect Mechatronics & Robotics system design engineer.

#### **Duration:**

- 3 years (Total 6 semesters)
- Intake:
- 30 nos./batch(Institute reserves the right t o vary intake)

#### Pattern:

Semester

### **Eligibility:**

- Preferably 10<sup>th</sup> Standard pass But the Eligibility in based on the upcoming Notification / Guideline AICTE / MSBTE
- Age limit: 15 to 18 years (3years relaxation for SC/ST Candidates)

#### **Selection Process**

· Aptitude Test and Personal interview

#### **Admission:**

**Affiliation** 

- 1 batch / year based on the merit list in the Common Entrance Examination & interview conducted in July every year.
- Reservation of seats as per Central Govt. norms.

# • Autonomous, Recognized by AICTE

## **Brief Course Contents:**

- Business English and Communication Skills
- Applied Physics
- Modern Engineering Materials
- Engineering Mathematics
- Manufacturing Technology
- Engineering Drawing and CAD
- Applied Mechanics
- Theory of Machines
- Strength of Materials
- Digital Electronics
- Electrical and Electronics Measurement Systems Industrial Organization and Management

- Electrical Machines
- Introduction of Industrial Automation
- Instrumentation and Control Systems
- Hydraulics and Pneumatics
- Mechatronics
- Industrial Electronics
- Robotics Technology
- PLC and SCADA
- Project and Seminar
- CAD/CAM and FMS

## **Teaching Scheme for the course:**

This course is divided into 6 semesters and each semester will be of 5-6 months duration. There will be the semester exam at the end of each semester and students must clear the exam as per the passing criterion set of the institution. Final Award of diploma is given only after completing all the semesters and fulfilling Industrial Training requirements.



# DIPLOMA IN TOOL AND DIE MAKING



## **COURSE DETAILS**

## **Course Highlight:**

Mechanical - Knowledge of machines, measuring instruments and tools, jigs, fixtures, press tools, moulds, die casting dies, including their designs, manufacturing, uses, repair and maintenance.

Design - Knowledge of Design techniques, tools and principles involved in production of precision technical plans, blueprints, drawings, and models. Knowledge of CAD-CAM CAE software

Mathematics — Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications

**Engineering and Technology** — Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.

Production and Processing — Knowledge of raw materials, production processes, quality control, costs, and other techniques for maximizing the effective manufacture and distribution of goods.

#### The course leads to job opportunities in:

- Product Design & Development in automobile, aeronautical, medical, electrical industry
- Tool Design & Development in various field
- Design &, development & training of mechanical software
- Product Design with help of Reverse Engineering

- Companies where manufacturing of tool & dies
- Project management as well as technical sales & marketing
- Job inspection in quality control field
- High tech production (CNC, FMS) units

### **Objectives**

**Duration** 

Intake

**Pattern** 

Ratio of Theory & Practice • 30:70

Semester

**Eligibility** 

**Selection Process** Admission

Affiliation

• To Design & Manufacturing intricate tools like press tools, Plastic Moulds, Jigs, Fixtures & Gauges etc. with exposure modern Die Design & Die Manufacturing interdependently.

- 3 years (Total 6 semesters)
- 30 nos./Batch(Institute reserves the right to vary intake)
- Preferably 10<sup>th</sup> Standard pass But the Eligibility in based on the upcoming Notification / Guideline AICTE / MSBTE
- Age limit: 15 to 18 years(3 years relaxation for SC/ST Candidates)
- Aptitude Test / Personal Interview
- 1 batch/year based on the merit list in the Common Entrance examination& interview conducted in July every year.
- Reservation of seats as per Central Govt. norms.

## Autonomous, Recognized by AICTE

## **Brief Course Contents:**

- Communication Skills
- Entrepreneurship Development
- Industrial Management
- Applied Mathematics
- Applied Physics
- Applied Chemistry
- Engineering Drawing
- Applied Mechanics
- Strength of Materials
- Electrical/ Electronics Engineering Engineering Metrology
- Workshop Practice

- Workshop Technology
- Advance Machine Tool Technology
- Tool Room Machine Maintenance
- CNC Technology
- CNC Programming
- CAD (AutoCAD)
- CAD (Solid Works)
- CNC Machining (Lathe, Milling, WEDM & EDM)
- Hydraulics & Pneumatics
- Computer Applications

- Industrial Engineering
- Tool & Die Making Practice Jigs, Fixtures, Gauges.
- Press Tools, Moulds, Die Casting Dies & SPM
- Tool Design Jigs, Fixtures, Gauges, Press Tools,
- Die Casting Dies, Forging Dies Cutting Tools
- Material Technology
- Heat treatment
- Tool & Die Manufacturing (Prod. Orders)
- Live Projects Tool Design / Tool Manufacturing /CAD - CAM



Auto CAD, Pro-E, Master CAM





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ISO: 9001 - 2015, ISO: IEC 17025-2005 Certified Organization



## **For Registration Contact:**

Training Department, IDEMI Mumbai

Tel. (022) 2405 0301 / 02 / 03 / 04 Ext. No. 238, 213 E-mail: training@idemi.org, Website: www.idemi.org