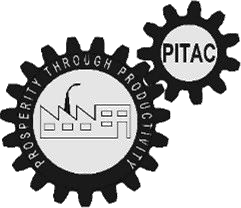


**PAKISTAN INDUSTRIAL TECHNICAL ASSISTANCE**

**CENTRE**

***Government of Pakistan Ministry of Industries and Production***

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**YEAR BOOK**

(2023 – 2024)

*Government of Pakistan*

*Ministry of Industries and Production*

**Pakistan Industrial Technical Assistance Centre (PITAC)**

*234-Ferozepur Road, Lahore-54600 Tel:(042) 99230649,99230702*

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# PAKISTAN INDUSTRIAL TECHNICAL ASSISTANCE CENTRE (PITAC), LAHORE-

1. **PREAMBLE**

“Pakistan Industrial Technical Assistance Centre (PITAC)” was formed in 1962 with merger of IRDC (1952) and IPC (1958) as an Autonomous Body under administrative control of Ministry of Industries, Government of Pakistan vide National Assembly’s Resolution # C&P-9(11)/62 dated 26th May, 1962 and registered under Societies Registration Act, 1860. It was again notified as an Autonomous Body and included in Schedule-II to the Rules of Business, 1973.

PITAC is a **Non-Profit/Non-Commercial** Services Oriented Organization. It contributes in the growth of National Economy through Design & Development of Precision Production Tooling & Products (Prototypes), Processes, Development of Technical workforce for the industry and Entrepreneurship Development.

The Headquarter of PITAC is located at Lahore and its Regional Centre(s) are at Karachi, Peshawar, Quetta, Mirpur (AJK) and Gilgit Baltistan.

# GEOGRAPHICAL COVERAGE

The Headquarter of PITAC is situated at Lahore and its Regional Centre(s) are at Karachi (Sindh), Peshawar (KPK), Quetta (Balochistan), Mirpur (AJK) and Gilgit Baltistan.

# ORGANIZATIONAL STRUCTURE OF PITAC

The Operational Structure of PITAC is as follows: -

|  |  |
| --- | --- |
| 1 | Ministry of Industries and Production, Government of Pakistan |
| 2 | Governing Body |
| 3 | Executive Committee |
| 4 | PITAC |

1. **VISION**: "To be at the forefront of Pakistan's industrial advancement by delivering cutting-edge technological support, advanced manufacturing skills, and managerial expertise to the industrial sector and the general public to catalyze the nation's industrial development and fuel economic growth through exceptional technical assistance and innovative solutions”.
2. **MISSION**; “To upgrade, advise, disseminate, and extend technical assistance & skill development in technical and managerial fields to the industries, industrial organizations, and general public throughout the Country”..
3. **AIMS & OBJECTIVES/FUNCTIONS OF PITAC**

The aims and objectives are as under:

1. To train and upgrade the skills of industrial personnel in technical and managerial fields.
2. To disseminate modern technical know-how among industrial personnel through seminars, group discussions, demonstrations, publications, film shows, etc.
3. To extend advisory services to industrial organizations and industries;
4. In conjunctions with the training program the Centre will continue to introduce through demonstration modern manufacturing techniques and production methods, while at the same time producing newly designed tools and products (proto-types) which contribute to the advancement of Pakistan’s Industrial Development.
5. The Technical Education to produce Technologist for the industry.
6. Entrepreneurship Training and Development to facilitate the youth to develop their skills and expertise to start- up/nurture own small business as self-sufficient successful Entrepreneurs.
7. **LINES OF BUSINESS/TASKS UNDERTAKING BY PITAC**
   1. Skill Development Activities - Short Training Courses
   2. Produce Technologist for industries: - Formal Technical Education to teach Diploma in Associate Engineering (DAE) of
      * **Mechanical Technology**
      * **Electrical Technology**
      * **Computer Information Technology**
   3. Technical Assistance & Backup Support to Industries, through

Design & Development of Products, Production Tooling “By using advanced technologies i.e. Rapid Prototyping, CAD/CAM, CNC Machining etc.

* 1. Entrepreneurship Training and Development Services

# PITAC COLLEGE OF TECHNOLOGY (PCT)

PITAC College of Technology (PCT) provides Technical Education i.e. Diplomas of Associate Engineering (DAE) to the students to produce technologist for the Industry & development of Technical Entrepreneurs in the disciplines of Mechanical, Electrical & Computer Information Technology.

# CURRENT ACTIVITIES OF PITAC

Short-Term Programs

* Technical and Managerial Training Programs (6- 12 Weeks)
* Workshops / Seminars / Symposiums
* Customized Training Programs
* PSDF and NAVTTC Funded Technical programs
* Internship Training Programs (OJT) (2 to 3 months) for Professional Students) Long-Term Programs
* DAE Programs in following Technologies (03 Years)
  1. Mechanical
  2. Electrical
  3. Computer Information Technology (CIT)

**Cutting Edge Facility introduced by PITAC**

* 3D Printer Facility
* 3D Wood Router Facility
* Injection Molds (Designing & Manufacturing)
* Solid-works (Software for Designing Purposes)
* Jig Grinding Facility
* CMM Facility
* CNC Induction Hardening Facility
* PLC Facility (For Trainings)

**Prototypes developed by PITAC**

* Induction Hardening fixture for POF
* Gyroscope for NDC
* Customized fixtures for Al-Ghazi Tractors to improve Quality of their products
* Customized fixtures for Millat Tractors to improve Quality of their products
* Injection Molds and Cutting Dies for Honda Motorcycles

**Skill Development Activities**

**I- Technical / Managerial Training**

**PERFORMANCE OF TRAINING DIVISIONJULY 2023 TO JUNE 2024**

**\*\*\*\*\*\*\*\*\*\***

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No.** | **Outcomes** | **Selected Performance Indicators** | **Achievements July-June, 2024**  **(PITAC HQ and RCs)** |
| **1** | **Provision of Technical and Managerial Training Services, Technical Education and Entrepreneurship Trainings to Public and Private Sector Organizations, Industries, Industrial Personnel and Individuals** | No. of Courses conducted in Technical and Managerial Training Fields | **210** |
| **2** | No. of Trainees Trained in Technical and Managerial Training Fields | **2,303** |
| **3** | No. of Workshop / Seminars / Symposiums organized in Technical and  Managerial Training Fields | **35** |
| **4** | No. of Participants participated in Workshop / Seminars / Symposiums of  Technical and Managerial Training Fields | **1,203** |
| **5** | Internship Training Program (For University/College Students) | **32** |
|  | Total No of Courses in Technical, Managerial Fields, Technical Education  Trainings & Workshops | | ***245*** |
|  | Total No of Trainees Trained in Technical, Managerial Fields, Technical  Education Trainings & Workshops | | ***3,538*** |

* ***245*** Nos. of Skill Development Training Courses / Workshop / Seminars / Symposiums conducted in different fields in PITAC HQ and its Regional Centres.
* ***3,538*** Skilled manpower trained/produced in PITAC HQ and its Regional Centres.
* PITAC HQ Lahore has successfully conducted regular courses as following:
  + **IELTS**
  + **R.A.C**
  + **I.P.C.S**
  + **PLC (Basics)**
  + **CNC Lathe**
  + **Tig Welding**
  + **3D CAD CAM**
    - **Basic Welding**
  + **Basic Welding**
  + **Auto CAD Civil**
  + **Spoken English**
  + **Pattern Making**
  + **Mold Designing**
  + **Inspection & M/T**
* **Graphic Designing**
* **Engineering Drafting**
* **Industrial Electrician**
* **CNC Machine Center**
* **Auto CAD Mechanical**
* **Machine Shop Practice**
* **CNC Machining Centre**
* **Computer Foundation**  **Safety & Health Officer**  **CNC Machining Centre**
* PITAC HQ Lahore has successfully conducted a workshop as following:
  + **Spoken English – 8th July, 2023**
  + **Khud Per Yaqeen - 13th July, 2023**
  + **Urgency to Emergency - 19th July, 2023**
  + **Conflict Resolution & Advanced Communication – 21st July, 2023**
  + **Inspirational Leadership and Professional Ethics - 26th July, 2023**
  + **Freelancing & Online Earning – 27th July, 2023**
  + **Nutrition & Wellness – 31st July, 2023**
  + **Spoken English – 17th December, 2023**
  + **Introduction on FIDIC – 07th January, 2024.**
  + **Innovative for Higher Productivity & Quality (**In collaboration with NPO Lahore, MoIP**) – 31st January, 2024.**
* 26 students from the following institutes/universities have successfully completed the internship at PITAC HQ Lahore in July to March (F.Y. 2023-24):
  + **PIEAS, Islamabad.**
  + **Rachna College of Engineering, Gujranwala.**
  + **University of Management & Technology, Lahore.**
  + **Women University Lahore.**
  + **Garrison University, Lahore.**
  + **Government Polytechnic Institute Karak.**
  + **Government College of Technology, Nowshera.**
  + **Vocational Training Institute, Green Town Lahore.**

**The following visits/activities has been done in PITAC HQ Lahore:**

* Visited **Sazgar Industries** for formally introduce PITAC, trainings and services.
* Conducted informative session in **Lahore Chamber of Commerce & Industry (LCCI)** on PITAC services, trainings & educational role.
* Meeting with HOD of **Avionics & Repairing UMT** on collaboration of academic & industry to prepare entrepreneurs, trained human resource for services in industries of Pakistan.
* Meeting with **Mr. Faizan ul Haq Mirza, coordinator of SIMAP Industry** from Sialkot on future road map for training of women to be inducted in surgical industry of Sialkot.
* PITAC HQ Lahore has worked on in-house training with **Packages Limited** and **EcoPack Limited**. Packages Limited demanded in-house training in the domain of Welding, Fabrication & Quality and EcoPack Limited on HSE Courses.
* **PITAC HQ Lahore** initiated efforts for initiation an MOU with **Hoonermund Foundation, Lahore**, to financially assist underprivileged trainees and youth that belongs to household below poverty level with their Training Course Fee. The target is to equip pupil belongs to a group of young adults who did not pursue academic education and are wasting their time in jobs with no prospects or a career or just wandering around as nuisance to the society. Further, the goal is to produce a high-quality skilled artisan who would adhere to the moral and social values. Upto June 2024, 45 **Trainees** who enrolled in different courses, were referred to Hoonermund Foundation and provided with Fee Waiver.
* PITAC HQ Lahore has in coordinated with Honda Cars Lahore for provision of in-house training in the domain of Welding, Fabrication & Quality and Health, Safety and Environment Training Courses.
* PITAC HQ Lahore has been drafted the Memorandum of Understanding (MoU) to be signed with PITB to establish Job Placement Cell for PITAC’s passed out trainees of short courses and DAE students (Electrical, Mechanical and CIT) of PITAC PCT College of Technology. It will help passed out trainees to define their career goals and equips themselves with the skills and information necessary for successfully getting a job. PCT is devoted to excellence in teaching, learning and developing leaders in the field of Electrical, Mechanical and CIT.
* 27 visiting faculty members have signed Memorandums of Understanding (MoUs) with to expanding the range of courses offered by PITAC. With these new faculty members on board, the training division can diversify its offerings and provide a broader range of managerial and technical training programs. The next crucial step is to work on initializing the training courses. This likely involves developing detailed course outlines, creating training materials, setting up schedules, and ensuring all logistical aspects are in place for a smooth training process.
* The renewal process for the "**PSDA Registration**" for 3 years DAE programs and several short courses has been completed & PSDA has issued the renewal certificate valid upto June 2024. This essential procedure ensures the continuation and accreditation of the educational programs, maintaining their quality and relevance. Training Division has worked to complete the renewal to benefit aspiring learners and professionals alike.
* PITAC HQ Lahore recently conducted a comprehensive one-day in-house training program at EcoPack Limited, Haripur, focusing on Health, Safety, and Environment (HSE) practices for their 20 employees. This initiative aimed to enable employees with essential knowledge and skills, contributing to a safer and more sustainable work environment.
* 40 students from Mechanical Engineering department from Rachna College of Engineering & Technology, Gujranwala, embarked on an enlightening industrial awareness visit to Pakistan Industrial Technical Assistance Centre (PITAC). They explored various departments, such as the Machine Shop, Plastic Mold Department, OSH Lab, and Welding Shop, gaining valuable insights and practical knowledge to enhance their education and career prospects.
* PITAC Training Division Team has prepared a comprehensive list of customized training programs for industrial personnel including executives, managers, supervisors, working professionals and public. These programs cover a wide range of essential techno-managerial skills and industry-specific knowledge. Furthermore, Annual Trainings Plan (ATP) has also been shared with Marketing Division to circulate the plans to public sector, industries, corporate sector and to assist their team to execute a strategic, targeted marketing campaign and promote these valuable training opportunities.
* PITAC HQ Lahore Conducted **04 Batches** of Skill Verification Program (SVP) **TAKAMOL PROGRAM** in collaboration of NAVTTC for Skill Assessment of technical personnel’s (going to Saudi Arabia for work) in several technical trades in the following technical trades/domains:
* Building Electrician – **06 Batches - 23 Candidates**
* Welding – **06 Batches - 42 Candidates**
* Team PITAC Training Division initiated a strategic outreach by sending 200+ targeted emails to both industries and individuals. This email campaign was aimed to create awareness and generate interest for the training programs primavera professional P6 and project appraisal & project development cycles. These programs have served as vital tools for professionals who seeking to enhance their project management skills. The initiative was a collaborative effort to bolster the marketing department's efforts in promoting these valuable training opportunities.
* PITAC HQ Lahore organized a transformative session on title ‘’Awareness on Financial Literacy’’ in collaboration with the State Bank of Pakistan (SBP) which developed financial literacy. This event, attended by **50 participants**, served as a platform to provide informative training session, equipping individuals with essential knowledge and skills in financial management. The collaborative effort between PITAC and SBP emphasized a commitment to empowering the community by enhancing financial literacy. Through this session, participants gained valuable insights, enabling them to make informed decisions and navigate the complexities of personal finance.
* PITAC HQ Lahore organized a successful one-day free workshop on ‘’Project Management Approaches’’. The event garnered an enthusiastic response, with positive word of mouth spreading rapidly. The workshop's impact resonated well, prompting numerous students to express interest in a more extensive course on project management approaches. In response to the overwhelming demand, the training division at PITAC HQ Lahore is actively planning to conduct a comprehensive project management course in the coming month. This proactive step reflects the institution's commitment to meeting the educational needs and aspirations of the students while leveraging the expertise of experienced trainers like Ashraf Anjum.
* The Training Division is working on the collaboration with the National Vocational and Technical Training Commission (NAVTTC) for Recognition of Prior Learning (RPL) assessments. These assessments will be conducted at the Pakistan Industrial Technical Assistance Centre (PITAC) Headquarters in Lahore. The focus of the collaboration is on three key trades: Building Electrician, Welding, and Machinist. This initiative aims to recognize and validate the skills and competencies of individuals in these trades, providing them with formal recognition and certification. The PITAC HQ in Lahore will serve as a central hub for conducting these

assessments, contributing to the enhancement of vocational training and workforce development in the region.

The current issues and challenges are as following:

1. Logistic issues
2. Refreshment services unavailable for training programs.
3. Availability of internal instructors and labs for PSDF courses due to PCT collage schedule.

IV. Management courses are to be initiated will need lecture halls which are limited two nos. only.

1. New initiatives are following:
   1. Management training programs.
   2. Initiating programs under PSDF trainings.
   3. Industrial liason/linkages for providing training services.
   4. Collaboration with OEC for valuable role in earning remittance.
   5. Increase services under SVP (Skill Verification Program) TAKAMUL adding two more programs.

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1. **Technical Education**

**Technical Education –3 years D.A.E program in Mechanical, Electrical & Computer Information Technology**

i. Detail of Targets and achievement during 1st July, 2023 – 30th June, 2024 is as under:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr**  **. N**  **o.** | **Activity** | **Indicators** | | | **Performance/ Target completed for the duration (July 2023 to June, 2024)** | | | |
| 1 | Technical Education Program | DAE Mechanical Technology 1st year (Enrolment  + Technical Education) | 100  students | **Achievements** | | | | |
| Admission Process initiated  +  Registration in PBTE | | Theory & Practical Education  +  Degrees Verification | Theory + Practical Educatio n Sendup Exams | Admission processed/confirme d as under Mechanical **100**.  Electrical **50**  CIT **50.**  +  Theory & Practical Classes are  continued since 4th September, 2023  +  Degree verification is under process |
| DAE Electrical Technology 1st year (Enrolment  + Technical  Education) | 50  students |
| DAE Computer Information Technology 1st year (Enrolment  + Technical Education) | 50  students |
| DAE Mechanical Technology 2nd year (Technical Education +  Examinations) | 76  students | Theory & Practical Classes | | Theory & Practical Classes  +  Second Annual Examination of PBTE | Sendup Exam | 2nd Year & 3rd Year (Mechanical, Electrical, CIT) Classes started from 15th August, 2023  +  Practical Exam of 1st Annual for 2nd Year conducted from 4th July 2023 to 12th July 2023)  +  Conducted PBTE 2nd  Annual Exam 2023 of Practical & Theory commenced from 04th November and |
| DAE Electrical Technology 2nd year (Technical Education +  Examinations) | 38  students |
| DAE Computer Information Technology 2nd year (Technical Education +  Examinations) | 47  students |
| DAE Mechanical Technology 3rd year (Technical Education +  Examinations) | 73  students |
| DAE Electrical  Technology 3rd | 38  students |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | year (Technical Education +  Examinations) |  |  |  |  | 14th December respectively. |
| DAE CIT  Technology 3rd year (Technical Education + Examinations) | 22  students | Sendup Exam |
| 2 | Expansion of PITAC  College of Technology (PCT). | Preparation for expansion of PCT to start new technologies | | Initiation process of Labs Development and Equipment Procurement  +  Applying for NOC from PSDA | | | Requests has been Initiated for development of Computer Labs and Purchasing of Computers, However Lab development and procurement processes are  pending |
| 3 | HR  Management for PCT | Hiring of qualified, skillful staff for effective and needful imparting of technical education and skills to students | | | | | * Hiring on Approved Post for PCT has not been advertised yet. However, Making/Re newal of MOUs done with Visiting Faculty member as temporary arrangeme   nt |

* 1. **Promotion / Completion of DAE of Students**

After announcement of result of PBTE for 1st annual examination of 2023 following numbers of students were promoted / passout:

**Mechanical Technology**

**76** from 1st year to 2nd Year

**73** from 2nd year to 3rd year

**67** from 3rd year appeared in final exam for qualifying awarding the diploma of DAE from PBTE

**Electrical Technology**

**38** from 1st year to 2nd Year

**38** from 2nd year to 3rd year

**32** from 3rd year appeared in final exam for qualifying awarding the diploma of DAE from PBTE

**Computer Information Technology 47** from 1st year to 2nd Year **22** from 2nd year to 3rd year

* 1. **New Admission & Registration**
     + Preparation of Prospectus for Session 2023-24 and finalize the prospectus for printing.
     + Start admission campaign in July for the session 2023-2026. Two Numbers of Staff designated

/deputed in information office (Miss Robina and Mr. Imran Ali) with the approval of Director General.

Consequently we were succeeded in achieving the goals of Admission till end of December 2023 as follow:-

* **Mechanical Technology 100 Students**
* **Electrical Technology 50 Students**
* **Computer Information Technology (CIT) 50 Students**
  + - Admission processed/confirmed of above students
    - Upload Data on PBTE Portal for Registration for session 2023-26
    - Submission of Registration Forms of 1st year for Session 2023-26 to PBTE on dated 26-12-2023.
  1. **Management of PCT Matters**
     + Conducted weekly meetings for Operational Management and betterment of PCT.
     + Conducted meetings with subject Instructors and HODs concerned.
     + Hiring of new visiting faculty for Electrical and CIT Technology.
     + Approval for renewal of MOUs of visiting faculty for Mechanical, Electrical and CIT from competent authority.
     + Approval to Add AC charges in PCT student’s fee for summer session.
     + Prepare the Schedule / Timetable for all classes (1st , 2nd , 3rd) year.
     + Orientation Ceremony of new Students of Mechanical, Electrical, CIT. on 04th September,2023
     + Blood Camp Organized by Noor Thalassemia Foundation at PCT on dated 03-10-2023
     + Submit the case of Metric Scholarship to Director General on dated 23rd October, 2023 for approval.
     + Submit the case to Director General of approval for grant of merit scholarship (fee concession to the position holder students in their sessions on dated November, 10th 2023.
     + Submit the case to Director General of Approval for concession on need base (25% on tuition fee for academic year 2023-24 on dated November 10th, 2023.
     + Submit the case to Director General for urgent resolution of faculty shortage issue at PCT on dated November 15th, 2023.
  2. **Examination**
     + Practical Exam of 1st Annual for 2nd Year conducted from 4th July 2023 to 12th July 2023)
     + Practical marks of 2nd year 1st annual examination2023 data uploaded on PBTE portal and submitted the hard copies to PBTE 19th July, 2023.
     + Conducted PBTE 2nd Annual Exam 2023 of Practical & Theory commenced from 04th November and 14th December respectively.
     + Sendup examination of 1st year, 2nd year and3rd for all Technologies condensed from 29th January 2024.
     + Practical Exam of 1st Annual for 2nd & 3rd Year conducted from 23rd April 2024 to 10th May 2024.
     + Practical Exam of 1st Annual for Year 1st Year conducted from 27th June 2024 to 20th July 2024.
  3. **Accreditation with PSDA & Extension in Affiliation with PBTE**
     + Application for NOC/Accreditation from PSDA was submitted and in result of inception visit held on 02-10-2023 Certificate was issued from PSDA to continue DAE in Mechanical, Electrical and Computer information Technologies for Academic Year 2023-24.
     + After issuance of NOC from PSDA, application was submitted to PBTE for extension in Affiliation on dated 03-10-2023, further inspection team visit to PCT 07-11-2023 and affiliation extension letter was issued on 21-11-2023.
  4. **Visits of DAE Students:**
     + Field visit of DAE students arranged in various industries for 2nd year and 3rd year classes.

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1. **TECHNOLOGICAL BACKUP SUPPORT, TECHNICAL ASSISTANCE AND ADVISORY SERVICES TO INDUSTRIES / SMEs: -**

**Technical Assistance and Advisory Services.**

The workshops and sections of PITAC at HQ i.e. Calibration & Quality Control Lab, Engineering Design Department, Heat Treatment Shop, Foundry & Pattern Shop, Civil Maintenance Shop, Machine / Tool Shop, CNC Shop, CMM Machine, CAD/CAM Labs, PLC Lab, Solar Technician Lab, Conventional Machines Training Shop, Industrial Engineering Department, Plastic Mold Department offer technical services to the Industry and training services in the following areas at minimum cost:

* + Computer-Integrated Plastic Mold Making
  + Computer Aided Designing (CAD)
  + Computer Aided Machining (CAM)
  + 3D Modeling / Reverse Engineering
  + 3D Plastic Printing
  + Designing and Manufacturing of Production Tooling Equipment like Jigs, Fixtures, Dies, Gauges etc.
  + Designing and Manufacturing of Plastic Injection Molds, Blow Molds, Compression Molds etc.
  + Precise Machining Techniques and Machinery i.e. CNC Machining Centre, CNC Turning Centre, CNC EDM Sinker, CNC EDM Wire cut, CNC Wood Router, CNC Grinding, Jig Grinding, Jig Boring, Precise Surface Grinding, etc.
  + Injection Molding Machines
  + Advanced Inspection Techniques i.e. Co-ordinate Measuring Machine
  + Programmable Logic Controller Lab
  + Heat Treatment
  + Foundry and Pattern-making
  + Preventive Maintenance and Calibration Lab
  + Superfinishing Techniques i.e. Lapping, Honing, and Precision Surface Grinding, etc.
* SMEs and Industry benefit from PITAC through its Technological Backup Support & Advisory Services. The various jobs done by PITAC are not from the commercial point of view but to help develop local industries and solve their manufacturing problems.
* The details of Technical Backup Support, Technical Assistance, and Advisory Services to Industries / SMES (July 2023 to June 2024) are as under.

|  |  |  |  |
| --- | --- | --- | --- |
| **No of initiativ es** | **Activities** | **Planned Target** | **Target Achieved** |
| **2.1** | **KPIs** | **2023-24** | **2023-24** |
| 2.1.1 | **Computer Aided Designing (CAD)** of Engineering Products, Precision Parts, Prototypes & Production Tooling (Incl. Dies, Molds, Jigs, Fixtures, Precision Inspection Gauges, etc.) – In Nos. | 121 | **198** |
| 2.1.2 | **Computer Aided Machining (CAM)** of Engineering Products, Precision Parts, Prototypes & Production Tooling (Incl. Dies, Molds, Jigs, Fixtures, Precision Inspection Gauges, etc.) – In Nos. | 125 | **51** |
| 2.1.3 | **Reverse Engineering** of Engineering Products, Precision Parts, Prototypes & Production Tooling (Incl. Dies, Molds, Jigs, Fixtures, Precision Inspection Gauges, etc.) – In Nos. | 35 | **35** |
| 2.1.4 | **Conventional Machining** of Engineering Products, Precision Parts, Prototypes & Production Tooling (Incl. Dies, Molds, Jigs, Fixtures, Precision Inspection Gauges, etc.) – In Nos. | 590 | **342** |
| 2.1.5 | **Inspection Services** of Engineering Products, Precision Parts, Prototypes & Production Tooling (Incl. Dies, Molds, Jigs, Fixtures, Precision Inspection Gauges, etc.) – In Nos. | 250 | **199** |
| 2.1.6 | **Heat Treatment** of Engineering Products, Precision Parts, Prototypes & Production Tooling (Incl. Dies, Molds, Jigs, Fixtures, Precision Inspection Gauges, etc.) – In Nos. | 180 | **101** |
| 2.1.7 | **Super Finishing (Lapping & Polishing)** of Engineering Products, Precision Parts, Prototypes & Production Tooling (Incl. Dies, Molds, Jigs, Fixtures, Precision Inspection Gauges etc.) – In Nos. | 45 | **410** |
| 2.1.8 | **Tool Room Machining (TRM)** of Engineering Products, Precision Parts, Prototypes & Production Tooling (Incl. Dies, Molds, Jigs, Fixtures, Precision Inspection Gauges, etc.) – In Nos. | 180 | **422** |
| 2.1.9 | **Refrigeration & Airconditioning Services -** In Nos**.** | 28 | **30** |
| 2.1.10 | **Development of Engineering parts** through various methods i.e. press working, casting, molding, welding, etc. - In Nos. | 320 | **313** |
| 2.1.11 | **No. of Advisory Services** extended to Industries to solve their technical issues regarding product, quality, and process- In Nos. | 25 | **25** |
|  | **Total** | 1899 | **2126** |

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**C) Entrepreneurship Training & Development Services**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| S# | Collaboration | | Training Title | | No of  workshop | Cities | | Participation | |
| 1 | Engro Chemicals | | Plumbing and Pipe Technician | | 6 | Lahore | | 80 | |
| Multan | | 53 | |
| Peshawar | | 36 | |
| Karachi | | 95 | |
| Hyderabad | | 40 | |
| Quetta | | 81 | |
| Carpentry | | 2 | Lahore,karachi | | 49 | |
| Fabrication | | 1 | karachi | | 25 | |
| Sub Total 1. | | | | | | | | **459** | |
| 2 | Minhas Pipes | | Plumbing and Pipe Technician | | 8 | Rawalpindi | | 58 | |
| Jhang | | 50 | |
| Lahore | | 50 | |
| Sargodha | | 50 | |
| Rasul | | 45 | |
| Poona AJK | | 50 | |
| Rawalpindi | | 45 | |
| Multan | | 45 | |
| Sub Total 2. | | | | | **393** | |
| **3** | Lahore Chamber of commerce &  Industries | Industrial Services | | Lahore | | | 1 | | 40 |
| **4** | Mr.Waheed Dhako | Chinese language | | Lahore | | | 1 | | 50 |
| **5** | Dynasol Energy | Solar Energy | | Lahore | | | 1 | | 47 |
| TOTAL | | | | | | | 20 | | 989 |

|  |  |  |
| --- | --- | --- |
| Sr | Total Sessions | Trainees |
| 1 | 20 | 989 |

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