Technocrats Institute of Technology, Bhopal (M. P.)

INSTITUTIONAL DEVELOPMENT PLAN

(2024-2029)

Preface

An Engineering institution like any other organization requires high level goals with long range planning and strategies to accomplish the Vision and Mission, which it dreams of. The development plan is a continuous process with a specific focus on accomplishing short-term, mid-term and long-term goals in this highly competitive world.Institute Development Plan (IDP) analyses current environment expected future scenarios and envisages the direction towards which the institution should move to achieve its set goals and objectives.

The first part of IDP addresses vision, mission and working on bringing out a good quality policy along with core values. These are achieved through many deliberations with all the stake holders (management, leadership, HODs, faculty, staff, industry, students and parents). Scientific scanning of internal and external environment is done through SWOC analysis. After scanning the environment, institutional goals were set up and strategies to achieve them are arrived at for the institution.

Based on Institutional Vision & Mission, the goals are drawn by holding brain storming sessions with HODs and Professors. Institutional strategic goals and strategies are formed with action plans.The process of implementation is worked out and circulated to all the departments. Financial constraints and fund availability is one of important parameters of IDP. Internal Revenue Generation has been given due importance. IDP evaluation and committees to monitor the effectiveness has been clearly spelt out. The final out comes are discussed and approved by the Governors Body (GB).

As a good practice, inputs are drawn from stake holders through active participation and collective inputs. The IDP will stream line the processes and progress of the institution, itwill also ensure that TIT becomes a torch bearer among technical education institutions inthe central India by 2029.

Process of evolving the Institutional Development Plan

The Chairperson, Secretary and the members of the Governing Body have felt the need of preparing aninstitute development plan for the institution in a formal written document format.

As a part of the IDP, institution strategic goals formed the main theme for arriving at strategies, sub strategies and road to accomplish them. Each Strategy was deliberated and sub-

strategies were arrived towards the implementation plan. Implementation plan worked out all details such as budget, resources needed and leaders responsible to implement with time lines. Departments play a pivotal for the institution; hence each department worked out on their vision, mission and short, mid &long term goals. The implementation plan for the departments also reflected all details such as budget, resources needed as well as leader responsible with time lines. HODs form the core team for implementing departmental goals under the guidance of Director.

IDP emphasizes on evaluation measures, monitoring team along with deviation steps if any over a period of time. The evaluative components for each stake holder are clearly spelt out along with periodicity of performance evaluation reviews.

The final draft document was discussed with BOG and after its detailed review, the suggestions were in corporated toward sits effective implementation.This comprehensive plan forms the guiding plan for the years 2024-2029.

Vision of the Institution

The new millennium is witnessing unprecedented challenges and opportunities in higher education, arising from the effect of changing economic policy of liberalization and globalization. Knowledge is increasingly recognized as the main force behind economic growth and development in the context of global economy, coupled with information and communication revolution leading to significant change in the global socio-political environment across the world. Technical Education plays a vital role in human resource development of the country by creating skilled manpower, enhancing industrial productivity and improving the quality of life of its people.

In tune with the strategic information scanned from other stake- holders in the society, TIT has set its vision as: "To impart quality education in various field of engineering, technology and management and to develop the institute in to a centre of academic excellence." Engineering education is progressing through many revolutions. Considering availability of on- line educational platforms, educational reforms are inevitable. All stake holders of institute, students, faculty and staff, alumni, industry, institute will come together for institute building and self-development by accomplishing its mission statement stated as follows:

Mission of Institute:

To mould the students into competent technocrats to become professionally skilled, intellectually adept and socially responsible to contribute to the society through quality teaching and providing conducive learning environment.

The Institute development plan (IDP) has been formulated for overall development of institute in line with vision and mission of the institute.

Leadership in quality technical education to-day has many characteristics that are needed which perhaps were not necessary ten, or fifteen years ago. Technology's impact on how students learn and how teachers teach has had educational leadership think about more innovative ways in which to prepare, deliver, and assess curriculum. It is necessary now to empower our teachers and to lead in a way that reflects unconditional positive regard through relationships and displaying that they are in the fore-front of change and are key agents of change. It is equally as imperative stay abreast of current and future trends in business and industry and to encourage technical educators to stay current in their professional and trade areas as well as in pedagogy and research.

Quality Policy

Achieving Excellence in Technical Education, Research and Consulting through an Outcome Based Curriculum focusing on Continuous Improvement and Innovation by Benchmarking against the Global Best Practices.

Core Values

Professionalism, Commitment, Integrity, Team Work, Innovation

Brief Profile

Technocrats Institute of Technology (TIT) is situated in Bhopal (M. P.). It was established in the year 2000 by Chandravadani Mahila Shiksha Samiti. This institute is approved by AICTE, New Delhi, Govt. of M. P. and affiliated with state government technological university, RGPV, Bhopal. TIT now offers 10 Undergraduate Programs, 09 Post-Graduate Programs (M.Tech., MCA & MBA). It runs the under graduate courses in engineering (annual intake of 1260) as well as the post graduate courses in engineering (annual intake of 180), computer application (annual intake of 60) and management (annual intake of 180). It is managed by a group of highly distinguished technocrats and professionals, with a vision to

impart quality education to the budding professionals in central India. Institute is well known for its quality placements. To add to its glory, five UG courses (CSE, EC, EX, CE& ME) of the Institute are currently accredited with NBA. It was listed in NIRF in the year 2021.The existing Programs are as below:

Bachelor Programs in Engineering (B. Tech.)

1. Civil Engineering
2. Computer Science and Engineering
3. Computer Science and Engineering (AI)
4. Computer Science and Engineering (AIML)
5. Computer Science and Engineering (AIDS)
6. Computer Science and Engineering (DS)
7. Electrical and Electronics Engineering
8. Electronics and Communication Engineering
9. Information Technology
10. Mechanical Engineering

Post-Graduate Programs (M. Tech./MBA/MCA)

1) M. Tech. (Digital Communications)
2) M.Tech. (Micro Electronics and VLSI Design)
3) M.Tech.(Power Systems)
4) M.Tech. (Power Electronics)
5) M.Tech. (Computer Science & Engineering)
6) M. Tech. (HPTE)
7) Master of Computer Applications
8) Master of Business Administration (Operations Management) &

   Master of Business Administration (Business Analytics)

Stake Holders' Expectations

Management

- Established Brand
- TIT ranking with in top 100 NIRF in India
- Sustainability
- Good Governance
- Autonomy Status
- Social Responsibility

Leadership Team

- Competent Faculty
- Internal Revenue growth for sustainability
- Industry oriented/continuing education programmes
- Benchmarking through Accreditation of programs and institution
- Creation of Centres of excellence

Faculty & Staff

- Good academic & working ambience
- Career growth, Research facilities & incentives
- Academic in dependence with accountability
- Transparency and uniform processes

Students

- Good academic & research ambience
- Support for co-curricular & Extracurricular activities
- State of the art infrastructure
- Experiential learning & Opportunity for talent exposure
- International learning at affordable cost
- Quality Placement, career guidance and entrepreneurial opportunities

Parents

- Branding
- Quality teaching-learning
- Disciplined students
- Good placements

Industry

- Industry ready professionals with proper attitude
- Strong Industry-Institution inter action
- Collaborative research, consultancy
- Brand and accreditations of the institute

Society & Others

- Graduates with Moral Ethical and Responsible Citizenship
- Social service activities by the institution
- Skill development for needy
- Resource centre for other institutions
- Consultancy and Continuing education Programs

SWOC Analysis

Strengths

- Committed Management

- 25yearsofstanding

- Brand Name and most preferred institution

- Talented students

- Excellent Infrastructure

- Quality & Competent Faculty

- Retention of employees

- Excellent internships & placements

- Well-developed campus

Weaknesses

- Limited no. of faculties with excellent research and development profile.

- Limited student participation in reputed national/international competitions.

- Skilled technical staff shortage

Opportunities

- Attaining autonomy status

- Strengthening collaboration with industry in research, consultancy, training & internships.

- Global initiatives through foreign university tie-ups.

- Enhanced community engagement

Challenges

- Entry of foreign universities

- Multiple compliance requirements and timelines affecting teaching & research

- Possible financial crunch

- Retention and recruitment of quality faculty

Strategic Goals

TIT leadership Team after brain storming the vision, mission, quality policy, core values, environmental factors and SWOC analysis arrived at the step to establish high level goals (HLG) which are also called Institution Strategic Goals (ISG)

1. Good Governance
2. Achieve Autonomous Status
3. Leadership Development
4. Industry-Institute relationships
5. Research, Development & Innovation
6. Quality assurance systems
7. Entrepreneurship development
8. Alumni engagement and interaction
9. Community Service and Extension
10. Global Initiatives

Development Plan Implementation and Monitoring

IDP once approved by Governing Body the next immediate step is its implementation in true spirit. Strategy when being implemented, the progress shall be measured from time to time through the IQAC. SMART (specific, Measurable, Attainable, Realistic and Time bound) concept is made use of while arriving at implementation plans. All the measures of success are clearly spelt out in the implementation document and Head of the institution along with leadership team is the custodian for implementation and its success.

Implementation Plan at Institution Level

Good Governance &Administration	Chairperson
Finance Management	Hon'ble Treasurer
Institution Statutory Compliance	Director and Coordinators
Branding /Expansion	Leadership team & Public Relation steam
Autonomy Status	Special Committee
Talent Management	Chairperson and Director
Infrastructure	Chairperson, Director, HODs &team
Teaching- Learning	Director, HODs, Faculty and Staff
Research	Professor I/c (PG studies)
Student affairs	Professor I/c
Student admissions	Professor I/c
Departmental activities	HODsandFaculty
Placement & Training	Professor I/c

Measurable during Implementation

Good Governance	GB selection, appointment, functioning, good governance initiatives, Management commitment, Vision-Mission reviews, Number of meetings conducted, decisions made, Committees appointment, performance, Polices implementation, grievance procedures, Educational ERP implementation.etc.
Talent Management	Recruitment, Selection of faculty, staff, salary, attrition rate benefits as per UGC/AICTE norms, Track Faculty and staff performance.
Student Intake Quality	JEE ranking, Students profile, XII marks score

Student Academic Performance	Pass percentage, number of distinctions & first classes, Graduate attribute attainment levels and alumni feedback.
Placement	Number of offers made through placement department, average salaries offered, Companies visiting the campus, Number of graduates pursuing higher education, number of students becoming eligible for higher education through GRE/GATE/CAT/GMAT...etc, Public sector and other Government jobs, percentage of graduates becoming Entrepreneurs.
Curriculum	Curriculum review & design, Industry partnerships, Faculty training on new areas, Introduction of new courses, new courses/electives offered in emerging areas.
Alumni	Alumni data base, number of interactions, support for internships, placements, projects, scholarships, consultancy and contribution towards infrastructure development.
Research and Consultancy	Publications in national/international journals and conference proceedings, Patents filed, conferences & workshops organised, New MOUs signed with academic and industrial organizations, Centres of competence established.
Physical Infrastructure	Number of buildings, classrooms added, removal of obsolescence, equipment added, annual budget allocated & utilized.
Social Responsibility	Number of villages adopted, vocational trainings provided, social projects undertaken and skill development programs for marginal section of the society.
Extra Curricular Activities	Number of student participants, number of tournaments won, number of sports and Techno-cultural events organized, Regional, National &International Recognitions received, competitions participated.
Sources of Funding	Students – Tuition Fees, Government reimbursements, Government grants, Industry Sponsorships, Funding raised through sponsored Projects, Consultancy /Testing Services, International grants, Alumni Contribution, Philanthropy-Donors, Trust Fund income

The committee will be formed for review from time to time. The following leadership team will monitor the time to time implementation scheme against the measurable and do prepare detailed MIS for BOG review.

- **Chairman, GB**
- **Director, Principal, HODs**
- **Professors, Faculty & Staff**
- **Student representatives**
- **Industry representatives**
- **Parent nominees**
- **Accreditation/Inspection bodies**

The Institute development plan (IDP) has been formulated for overall development of institute in line with vision and mission of the institute. Five years institutional development plan has been prepared through brain storming sessions. The proposed IDP will be implemented in a systematic manner over the next five years by mainly focusing on the following six components.

Academic Excellence

Scholastic Development and Research & Development

Faculty Development

Student Development and Placement/ Entrepreneurial Competence

Facility Development

Administrative Reforms

Strengths of the institute

- NBA accredited **05 UG** courses

- Granted Autonomy status by UGC and the RGPV Bhopal (**Affiliating University**).

- Listed as the **TCS Priority Institute**.

- KPIT Lab (**for automotive projects development**).

- Qualified faculty studied in premier institutes like IITs and NITs

- Meritorious student intake from different states.

- Dedicated faculty and staff with good team spirit

- Transparency in governance

- Concerted efforts for faculty development

- Use of IT tools for promoting technology enabled learning (TEL)

- Scope for industry–academia collaborations through research, internship and projects etc.

- Close interaction with field through testing, consultancy and research

- Active alumni net working for campus, industry projects, placement etc.

- Well placed alumni in government and reputed private organizations

- Involvement of students and faculty in large number of social activities

- Emphasis on sustainability initiatives

Challenges

- High quality research infrastructure and recruitment of skilled faculty with research aptitude.

Short term goals

- Accreditation of all the UG programs.

- Undertake institutional reforms and effective governance

- Modernize existing laboratories and teaching-learning infrastructure

- Establish an Incubation center

- Promotethespiritofentrepreneurship,industryandenvironmentalawareness

- Enhance liaison with industry through collaborative activities

- Promote R&D activities useful to society and industry

- Long term goals

- Joint industry-academia collaborations for research activities

- Attain over all autonomy status

- Construction of additional academic infrastructure.

- Construction of auditorium with 1500capacity

- All goals /plans are student centric. Student support systems will be enhanced with following mission

- Provideconduciveenvironmentforacademicexcellenceinengineeringeducation.

- Enhanceresearchanddevelopmentalongwithpromotiontosponsoredprojectsand industrial consultancy.

- Foster development of students by creating awareness for need of society, sustainable development and human values.

- IDP explores the experience and strength developed for past 25 years to achieve the goals. In particular, the strategic plan proposes to improve the infrastructure of the institute, research facilities, machines, equipment, software, computing facility, faculty training and collaborations with industry facilities for students etc. The IDP is prepared for the duration 2024-2029.A summary of the proposed activities with the proposed timelines, budgetary provisions are given below:

Institutional Development Plan (2024-2029)

Five Year Institutional Developmental Plan:

S. No.	Activity	2024 - 2025	2025 - 2026	2026 - 2027	2027 - 2028	2028 - 2029
1	Removal of Obsolete equipment, Repair and maintenance of existing not working					
2	Increase in intake of UG Program					
3	Starting of New PG Program			Civil-1 Electronics-1	CSE-1 Electrical & Electronics-1	
4	Establishment of Research Centre/Laboratory/Incubation Centre/Training Centre		Drone Pilot Training, Deep Learning Lab		IT-1	Civil-1 CSE-1
5	Centre of Excellence		Mobility	Mechanical-1		CSE (Allied)-1

Year wise budget required for Five year IDP (In lakhs)

Activity	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	Total
Infrastructure Built-Up	521.8	5	7.5	7.75	9	777.15
Softwares/Lab. Equipment/Lab Consumables/Maintenance & Spares	503.3	300	325	330	335	1784.4
R&D	9.2	3.5	4.5	5	6	22.5
Training of faculty/staff, MoU, Industrial Interaction/Travel	46.7	22	25	27.5	30	137.17
Miscellaneous and other expenses	549.6	774.2	780	790	800	3955.2
Total	1630.6	1104.7	1142	1160.25	1180	6676.42