MANAKULA VINAYAGAR
INSTITUTE OF TECHNOLOGY
Kalitheerthal kuppam, Puducherry   605 107

STRATEGIC
DEVELOPMENT PLAN
2022-2027

Acknowledgements

We place on record our deep appreciations and thanks to the Management, Governing Body members, Alumni, Parents, HODs, Faculty, Staff and students for their valuable inputs and active participation towards formulating the "Strategic Development Plan – 2022–27 ".

We profusely thank Industry Peers and our Employers for their valuable guidance and relentless persuasion towards developing "Strategic Development Plan".

Principal

Preface

An Engineering institution like any other organisation should have long range planning to set goals and strategies to achieve its Vision and Mission. Strategic planning is a continuous process with a specific focus on accomplishing short, mid and long term goals. Strategic Development Plan (SDP) analyses current environment expected future scenarios and gives the direction to the Institution for achieving its set goals and objectives.

The first part of SDP 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, Senior Faculty Team, HODs, faculty, staff, industry (Employers and Peers), students and parents). Scientific scanning of internal and external environment is done through SWOC analysis. After SWOC Analysis, institutional goals were set up and strategies to achieve themare arrived at for the institution.

Based on Institutional Vision & Mission, the goals are drawn by holding brainstorming sessions with HODs and Senior Faculty members. 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 SDP. Internal Revenue Generation has been given due importance. SDP evaluation and committees to monitor the effectiveness has been clearly spelt out. The final out comes are discussed and approved by the Governing Body (GB).

As a good practice, collective inputs are drawn from various stake holders through exclusive meetings and discussion. The SDP will stream line the processes and ensure progress of the institution. It would certainly strengthen MVIT to achieve recognitions, awards, accreditations, etc at regional and national level by the year 2022.

Strategic Development Process

The Management and the members of the Governing Body have felt the need of preparing a strategic development plan for the institution in a formal written document format. Meetings have been convened with stakeholders like Employers, Academic & Industry Peers, Faculty members, Parents and Students to deliberate in detail about the vision, mission, quality policy and core values for MVIT. The mandate was given to the Principal to develop strategic plan for the period from 2022-27 for the institution. The management & Senior Faculty team convened meetings and discussions to arrive on SWOC and stake holders expectations.

Institution strategic goals have been formed to arrive at strategies, sub strategies and action plans to accomplish them. Each Strategy was deliberated and sub-strategies were arrived towards evolving appropriate action plans. Institutional Action plans with implementation protocols have been worked out with details such as resources needed, budget and leaders responsible to implement with time lines.

Departments play a pivotal for the institution; hence each department evolve their vision, mission and short, mid & long term goals. This action plan would be submitted once in every Semester and is separately reviewed by the head of the institution. HODs form the core team for implementing departmental goals under the guidance of Principal.

Strategic Development Plan emphasises 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 Governing Body and after its detailed review, the suggestions were incorporated towards its effective implementation. This comprehensive plan for the period from 2022-27, enables departments to derive the action plans for various departmental activities to improve the overall performance of the departments, which in turn improve the reputation of the Institution.

Institute's Vision

"To be a globally reputed Technical Institution creating Competent leaders and Skillful innovators in Science, Technology and Management"

Institute's Missions

- *Providing a dynamic and creative learning environment for its students to acquire exemplary technical, analytical, professional skills.*

- *Imbibing a spirit of innovation and research among its students and faculty for solving critical problems.*

- *Promoting Innovation, Employability and entrepreneurship skills through industry academia collaboration.*

- *Serving the society through technical intervention and creating socially responsible Professionals.*

Profile of Manakula Vinayagar Institute of Technology

Manakula Vinayagar Institute of Technology, with its motto, Educate, Empower and Excel, has risen to meet the ever increasing need for consummate technologists who would usher in a better tomorrow that would free people from the clutches of old world ideas. MIT is a self-financing technical institute started in 2008 by Sri Manakula Vinayagar Educational Trust with the aim to make state-of-the-art technology to the rural society and to open up career opportunities for the underprivileged youth in and around the vicinity.

MVIT was started with just four Engineering Programs viz., EEE, ECE, CSE & IT and was located in the Integrated Campus amidst Medical College & Hospital, Nursing College, Polytechnic College, College of Education, owned by the SMVE Trust. Later Mechanical Engineering Program has been offered from 2012 onwards. With changing requirements and the needs of the Pondicherry (Union Territory) and its surrounding Regions of Tamil Nadu state, newer programs were added gradually and even PG programs in Two Branches of Technology viz., ECE & CSE were added. All the programs were approved by AICTE and affiliated to Pondicherry University. It provides an ambience of uncompromised innovation, excellence and quality. Its library houses over 20,000 books and 500 e-journals and magazines for the benefit of the students.

In order to bring in a focus on research, an application for starting research Centers has been made with Pondicherry University. Due to the dedication and perseverance of the Trustees, today the college has truly blossomed into a full-fledged academic institute, involved in all aspects of knowledge creation, comprehension and dissemination or advocacy. Recently MVIT has initiated preliminary protocols to associate itself with Trainlab Academy for starting Centers of Excellence to offer Courses with International Certifications from IBM, Microsoft, etc.

MVIT now offers 5 Undergraduate Programs, 3 Post-Graduate Programs (M.Tech & MBA) with a vision to deliver quality education, MVIT hosts around 1200 students in all branches of Engineering and Management Programs providing quality technical education with Professional and Employability Skills and to promote Entrepreneurial spirit to the learning community. The existing Programs are as below:

Bachelor Programs in Engineering (B.Tech.)
1) B.Tech. Electrical and Electronics Engineering
2) B.Tech. Electronics and Communication Engineering
3) B.Tech. Computer Science and Engineering
4) B.Tech. Mechanical Engineering
5) B.Tech. Information Technology
6) B.Tech. Computer Science and Engineering (IOT, BCT and Cyber Security)
7) B.Tech. Robotics and Automation
8) B.Tech. Artificial Intelligence and Machine Learning
9) B.Tech. Food Technology

Post-Graduate Programs (M.Tech / MBA)

1) M.Tech. Computer Science & Engineering
2) M.Tech. Electronics and Communication Engineering
3) Master of Business Administration

Stake Holders' Expectations

Management	• National Brand • Sustainable Administration • Good Governance • Autonomous Status with Good Reputation • Social Responsibility
Leadership Team	• MVIT to be Ranked one among the top 50 colleges in India • Faculty Members with Improved Competency and Multi-Tasking • Industry oriented /continuing education programmes • Bench marking through Accreditation of programs andinstitution • Creation of Centres of excellence
Faculty & Staff	• Good academic & working ambience • Career growth, Research facilities & incentives • Academic independence with accountability • Transparent and prescribed Code of Conduct
Students	• Good academic & research ambience • Support for co-curricular & Extracurricular activities • Learner Centered infrastructure • Improved Students Competency in varied Skill sets. • Quality Placement, career guidance and entrepreneurialopportunities
Parents	• Branding • Quality teaching- learning Experience to their Wards • Disciplined students • Good placements
Industry	• Industry ready professionals with proper attitude • Strong fundamentals and ability to exhibit among HumanResources • Strong Industry-Institution interaction • 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 Programs for needy and Unemployed • Resource centre for other institutions • Consultancy and Community Service Projects

SWOC Analysis

Strengths (S)

1. Well established brand name and ours is the most preferred institution in Pondicherry and surroundingregions.
2. Management is committed to maintain high standards and quality in education by providing Excellentinfrastructure and greenery campus with excellent ambience for learning.
3. Centers of Excellence with advanced software and tools for training the students on emerging technologies
4. Good R&D initiatives and support from management resulted in good number of publications and patents
5. The retention rate of the faculty is high and it is over 80% for minimum of 5 years.
6. Excellent placements, internships through industry-institute interactions.
7. Effective students mentoring system to bring out their talents and skills.

Weaknesses (W)

1. Lack of relevant curriculum revision in accordance with change in technology.
2. Limited Faculty exposure across Geographical (Regional) Boundaries to involve in Multi-dimensional development initiatives
3. Delayed implementation of policy decisions due to financial constraints and poor admission trends
4. Lack awareness about optimal use of resources
5. Less Consultancy work, funded research projects and international Collaborations.
6. Minimal student/ faculty diversity.
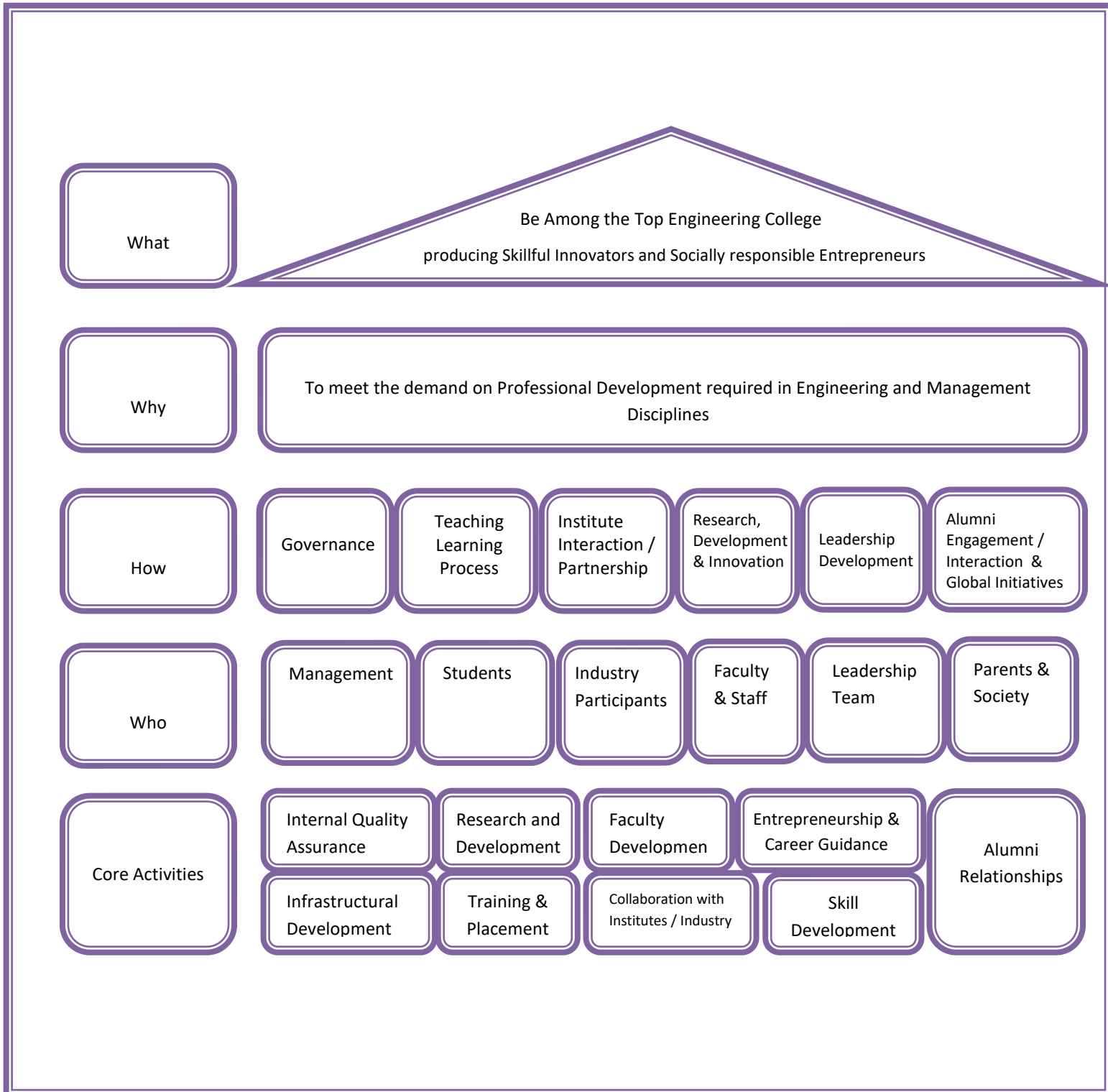7. Limited Skilled Supporting Staff

Opportunities (O)

1. Different ranking frameworks and its importance makes our institution focus on multiple domains of Higher Education, Research, Training, etc.
2. Practicing OBE has become mandatory to improve the quality in all aspects that induces institute to Offer programmes in frontier areas and it accelerates the faculty / Student's development through utilizing SWAYAM, NPTEL and AICTE Portals effectively.
3. Promoting start-ups and intellectual property rights, innovation culture among Faculty and Students encourage them to develop and submit Research / Project Proposals for funding.
4. Maximising the potential of Centers of Excellence in equipping Students with technical Competency.
5. Many Institutes / Companies have started to involve in Collaborative initiatives to evolve advanced learning Pedagogies and technical inventions.
6. Scope for enhancing the industry and alumni interaction for institutional growth.
7. Involving in extension activities under various schemes and extra-curricular activities (NSS / NCC) to develop the learning Community.

Challenges (C)

1. Attract Funds from Various Agencies / Companies through Research Projects and Consultancyinitiatives.
2. Rising cost of Overheads and resources.
3. Fixing appropriate metrics to check academic Competency among faculty members.
4. Faculty and Staff Morale due to Job Security and reputation issues.
5. Poor student enrollment due to decreasing demand for Engineering Programs.
6. Student Changing Behaviour and Expectations due to media interventions.
7. Lack of orientation upon Knowledge and skills at school education that limits their interest in pursuinghigher studies.
8. Enhancing Communication and Employability skills of the students in par with Industry requirements and limited Availability of Core Jobs in Mechanical, Electrical Engineering, etc.

Strategic Perspective Development Plan

What	Be Among the Top Engineering College producing Skillful Innovators and Socially responsible Entrepreneurs
Why	To meet the demand on Professional Development required in Engineering and Management Disciplines
How	Governance • Teaching Learning Process • Institute Interaction / Partnership • Research, Development & Innovation • Leadership Development • Alumni Engagement / Interaction & Global Initiatives
Who	Management • Students • Industry Participants • Faculty & Staff • Leadership Team • Parents & Society
Core Activities	Internal Quality Assurance • Research and Development • Faculty Developmen • Entrepreneurship & Career Guidance • Alumni Relationships • Infrastructural Development • Training & Placement • Collaboration with Institutes / Industry • Skill Development

Parameter 1 : Admission

The Parameter Admission denotes the enrollment of Students in varied departments of Engineering and Management disciplines

The Key Performance Indicators (KPI) for the Parameter Admission are identified as follows

> 1.1. Existing Programs (UG) Enrolment
> 1.2. Existing Programs (PG) Enrolment
> 1.3. New Programs Enrolment
> 1.4. Diversity

Key Performance Indicator 1.1: Existing Programs (UG) Enrolment – Enrollment of Students in Existing UG Programs offered by the Institute

Key Performance Indicator (KPI)	Measure	Metric	Target
Existing Programs (UG) Enrolment	Students Enrolment	Percentage of students enrolled	➢ Not to be lesser than 80% ➢ 10% increase in average Admissions of the Department in a Academic year ➢ Not less than 10% decrease in the Department's Average

Key Performance Indicator 1.2: Existing Programs (PG) Enrolment: – Enrollment of Students in Existing PG Programs offered by the Institute

Key Performance Indicator (KPI)	Measure	Metric	Target
Existing Programs (PG) Enrolment	Students Enrolment	Percentage of students enrolled	➢ 10% in average Admissions ➢ Not to be lesser than 50%

Key Performance Indicator 1.3: New Programs Enrolment – Enrollment of Students in New Programs introduced by the Institute in Year

Key Performance Indicator (KPI)	Measure	Metric	Target
New Programs Enrolment	Students Enrolment	Percentage of students enrolled	➢ Not to be lesser than 80%

Key Performance Indicator 1.4: Diversity – Enrollment of Students from diversified regions across state / country borders.

Key Performance Indicator (KPI)	Measure	Metric	Target
Diversity	Students Enrolment in each category (Diversity)	Percentage of Enrollment in each category	➤ Minimum 1% to 2% of the Sanctioned intake

Parameter 2: Academics

The Parameter Academics denotes the all relevant activities planned and organized to facilitate the Higher Education Learning of the students

The Key Performance Indicators (KPI) for the Parameter Academics are identified as follows

       2.1. Curriculum Development
       2.2 Students Academic Performance
       2.3. Faculty Recruitment

Key Performance Indicator 2.1: Curriculum Development – Developing the Course Contents and Assessment Components

Key Performance Indicator (KPI)	Measure	Metric	Target
Curriculum Development	Industry Requirements Societal requirements	Implementation in Curriculum Inclusion of Courses	➤ Minimum one Value Added Course in Semester

Key Performance Indicator 2.2: Students Academic Performance – Students' Performance in Assessments and Examinations conducted to ensure Academic outcomes

Key Performance Indicator (KPI)	Measure	Metric	Target
Students Academic Performance	Students Graduated	Percentage of Students Graduated	➤ 5% improvement in Each Academic year ➤ Not lesser than 85%

Key Performance Indicator 2.3: Faculty Recruitment – Hiring Qualified Faculty members as per Academic requirements

Key Performance Indicator (KPI)	Measure	Metric	Target
Faculty Recruitment	Faculty members with Research Experience (Doctorate)	Percentage of Faculty members with Doctorates	➢ 10% increase every Academic year ➢ Not lesser than 30%

Parameter 3 : . Student Development

The Parameter Student Development denotes Academic, Curricular, Co-Curricular and extra Curricular activities organized by the department for the development of students' competency.

The Key Performance Indicators (KPI) for the Parameter has been identified as follows

        3.1. Examinations

        3.2. Industry Interactions

        3.3. Placements

        3.4. Higher Studies

        3.5. Entrepreneurship

Key Performance Indicator 3.1: Examinations – Conduct of Internal Assessment Examinations and analyzing the Students' performance and improvements.

Key Performance Indicator (KPI)	Measure	Metric	Target
Examinations	Students passed Internal Assessment (IA) Examination	Percentage passed in all Courses in each IA and improvement track record.	➢ 5% improvement after every Assessment Exam ➢ Not lesser than 70% in overall

Key Performance Indicator 3.2: Industry Interactions – Arranging Interactions with real-time Industry Professionals

Key Performance Indicator (KPI)	Measure	Metric	Target
Industry Interactions	Interactions with Industry Professionals Memorandum of Understandings	Number of Interactions arranged Number of MoUs Signed / Activities Organised	➢ Minimum 2 interactions per Batch of Students in Semester ➢ Minimum One MoU per department with atleast one MoU based Activity in a Semester

Key Performance Indicator 3.3: Placements – Arrangement of On-Campus and Off Campus Placement drives by the Placement Cell

Key Performance Indicator (KPI)	Measure	Metric	Target
Placements	Students placements	Percentage	➢ 5% growth every Academic year ➢ Not lesser than 75%

Key Performance Indicator 3.4: Higher Studies – Enabling Students to pursue Higher Students by the varied department initiatives

Key Performance Indicator (KPI)	Measure	Metric	Target
Higher Studies	Students pursuing Higher Studies	Percentage	➢ 5% of the Passed out students every year

Key Performance Indicator 3.5: Entrepreneurship - Facilitation and Guidance of Entrepreneurial initiatives of Students.

Key Performance Indicator (KPI)	Measure	Metric	Target
Entrepreneurship	Students chosen Entrepreneurship	Percentage	➢ 2.5% of the Passed out students every year

Parameter 4 : Faculty Development

The Parameter Faculty Development denotes the varied activities of the faculty members, department and the Institute for the development of knowledge and skills required for effective implementation of Teaching Learning initiatives.

The Key Performance Indicators (KPI) for the Parameter has been identified as follows

4.1. Participation on FDP / QIP
4.2. Doctorate
4.3. Certifications

Key Performance Indicator 4.1: Participation on FDP / QIP – Participation of faculty members in Faculty Development Programs and Quality Improvement Programs

Key Performance Indicator (KPI)	Measure	Metric	Target
Participation on FDP / QIP	Faculty Participation	Number of faculty members	➤ Atleast 50% of the total number of Faculty members in each Department

Key Performance Indicator 4.2 : Doctorate – Facilitating the Faculty members in acquiring Doctoral degrees

Key Performance Indicator (KPI)	Measure	Metric	Target
Doctorate	Registration / Pursuance of Doctoral Studies	Number of faculty members	➤ Minimum 2 faculty member per department in an academic year

Key Performance Indicator 4.3 : Certifications – Facilitating faculty members in securing varied skill based / Knowledge based Certifications to involve actively in Teaching learning Process.

Key Performance Indicator (KPI)	Measure	Metric	Target
Certifications	Securing Certification	Number of faculty members	➤ Minimum 2 Certifications per faculty per department in an Academic year

Parameter 5 : Research and Consultancy

The parameter Research and Consultancy denotes the involvement of faculty members in varied activities resulting in research and revenue outcomes.

The Key Performance Indicators (KPI) for the Parameter has been identified as follows

     5.1. Publications

     5.2. Intellectual Property Rights

     5.3. Research Grants / Research Center

     5.4. Consultancy Projects

Key Performance Indicator 5.1: Publications – Research articles published in refereed, reputed, Indexed Research Journals with high Impact Factor.

Key Performance Indicator (KPI)	Measure	Metric	Target
Publications	Publication of Research articles	Number of articles in indexed Journals	➢ Minimum 2 per faculty per department in an Academic year

Key Performance Indicator 5.2: Intellectual Property Rights – Securing Patents / Copyrights for the innovative Products developed / Creative Conceptions evolved.

Key Performance Indicator (KPI)	Measure	Metric	Target
Intellectual Property Rights	IPRs received by Faculty members	Number of IPRs received	➢ Minimum 2 per faculty per department in an Academic year

Key Performance Indicator 5.3: Research Grants / Research Center – Submission of Research Proposals to Acquire Funds from varied agencies / Starting research center in the department to promote Doctoral research and offer Ph.D Degree

Key Performance Indicator (KPI)	Measure	Metric	Target
Research Grants / Research Center	Research Grants received / Amount Sanctioned	Number of Research Grants received / Total Amount Sanctioned	➢ Minimum 2 proposals per Senior faculty - worth Rs.5,00,000 per department in an Academic year

Key Performance Indicator 5.4: Consultancy Projects – Involvement Faculty members in Consultancy Projects in association with Industries to generate revenues.

Key Performance Indicator (KPI)	Measure	Metric	Target
Consultancy Projects	Funded Projects	Amount Received	➢ Minimum Rs.5,00,000/- per department in an Academic year

Parameter 6 : Extension Activities

The Parameter Extension Activities denotes varied activities to be arranged and organized by the Department / Institute to address / provide Social needs and requirements.

The Key Performance Indicators (KPI) for the Parameter has been identified as follows

6.1. Social Outreach

Key Performance Indicator (KPI)	Measure	Metric	Target
Social Outreach	Addressing Social needs / requirements	Number of Community Service Projects	➢ Minimum 2 per department in an Academic year

Parameter 7 : Accreditation and Ranking

The Parameter Accreditation and Ranking denotes initiatives to be pursued for acquiring accreditation / ranking to the Departments / Institute.

The Key Performance Indicators (KPI) for the Parameter has been identified as follows

7.1. National Accreditation
7.2. International Accreditation
7.3. Autonomy & Curriculum Development

Key Performance Indicators 7.1: National Accreditation – Improvising the Student / Faculty / Institute Performance in order to secure higher Grades / Ranks from Accreditation Bodies and Ranking Agencies.

Key Performance Indicator (KPI)	Measure	Metric	Target
National Accreditation	ARIIA NIRF NBA NAAC	Rank Status Rank Status Accreditation Score Accreditation Grade	➢ One among top 200 Institutions

Key Performance Indicators 7.2: International Accreditation - Improvising the Student / Faculty / Institute Performance in par with International Standards, in order to secure higher Grades / Ranks from International Accreditation Bodies and Ranking Agencies.

Key Performance Indicator (KPI)	Measure	Metric	Target
International Accreditation	ABET IET	Accreditation Score	➢ At least 3 programs to complete preliminary requirements

Key Performance Indicators 7.3: Autonomy & Curriculum Development – Developing Autonomous Curriculum in par with International Institutes.

Key Performance Indicator (KPI)	Measure	Metric	Target
Autonomy & Curriculum Development	Autonomous status	Curricular Standards	➢ Submission before the Board of Studies constituted in each Department.

Parameter 8 : Administration

The Parameter Administration denotes the effective conduct of Programs and addition Programs by the Department Heads.

The Key Performance Indicators (KPI) for the Parameter has been identified as follows

8.1. Leadership

Key Performance Indicator (KPI)	Measure	Metric	Target
Leadership	Programs Conducted	Number of Programs Conducted	➢ Minimum one program per department in an Academic year

Responsibility Centers

Parameters	Key Performance Indicator (KPI)	Responsibility Center
1. Admission	1.1. Existing Programs (UG) Enrolment	➢ HoDs ➢ Admission Cell
	1.2. Existing Programs (PG) Enrolment	
	1.3. New Programs Enrolment	
	1.4. Diversity	
2. Academics	2.1. Curriculum Development	➢ HoDs ➢ Class Advisors ➢ Faculty Member
	2.2. Students Academic Performance	
	2.3. Faculty Recruitment	
3. Student Development	3.1. Examinations	➢ Exam Cell ➢ Placement Cell ➢ Career Guidance Cell ➢ Entrepreneurship Development Cell
	3.2. Industry Interactions	
	3.3. Placements	
	3.4. Higher Studies	
	3.5. Entrepreneurship	
4. Faculty Development	4.1. Participation on FDP / QIP	➢ HoDs ➢ Faculty Members
	4.2. Doctorate	
	4.3. Certifications	
5. Research and Consultancy	5.1. Publications	➢ R&D Cell ➢ Consultancy Cell ➢ HoDs ➢ Faculty Members
	5.2. Intellectual Property Rights	
	5.3. Research Grants / Research Center	
	5.4. Consultancy Projects	
6. Extension Activities	6.1. Social Outreach	➢ UBA Cell ➢ NSS / YRC ➢ Project Guides
7. Accreditation and Ranking	7.1. National Accreditation	➢ IQAC ➢ HoDs
	7.2. International Accreditation	
	7.3. Autonomy & Curriculum Development	
8. Administration	8.1. Leadership	➢ HoDs