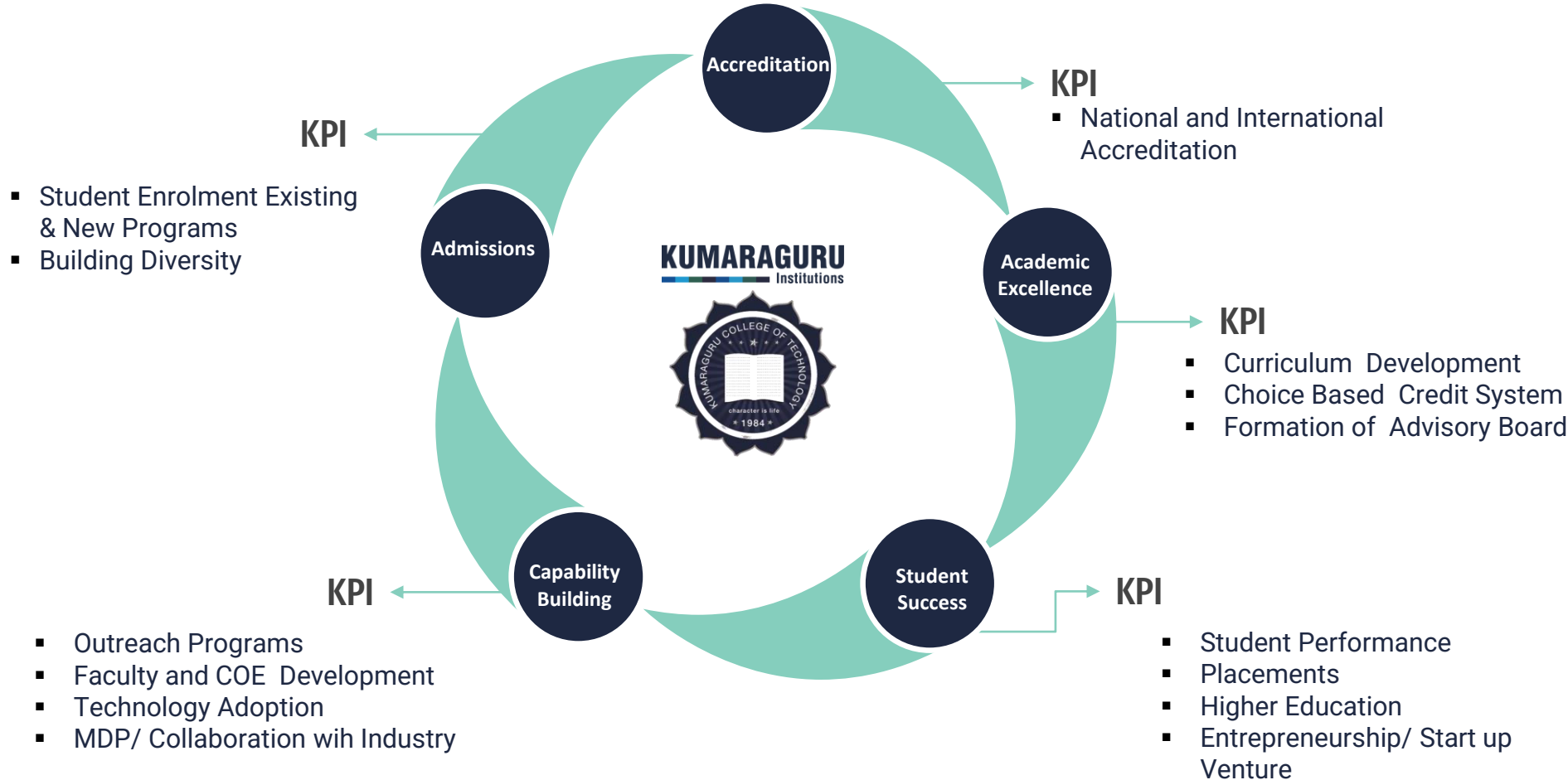
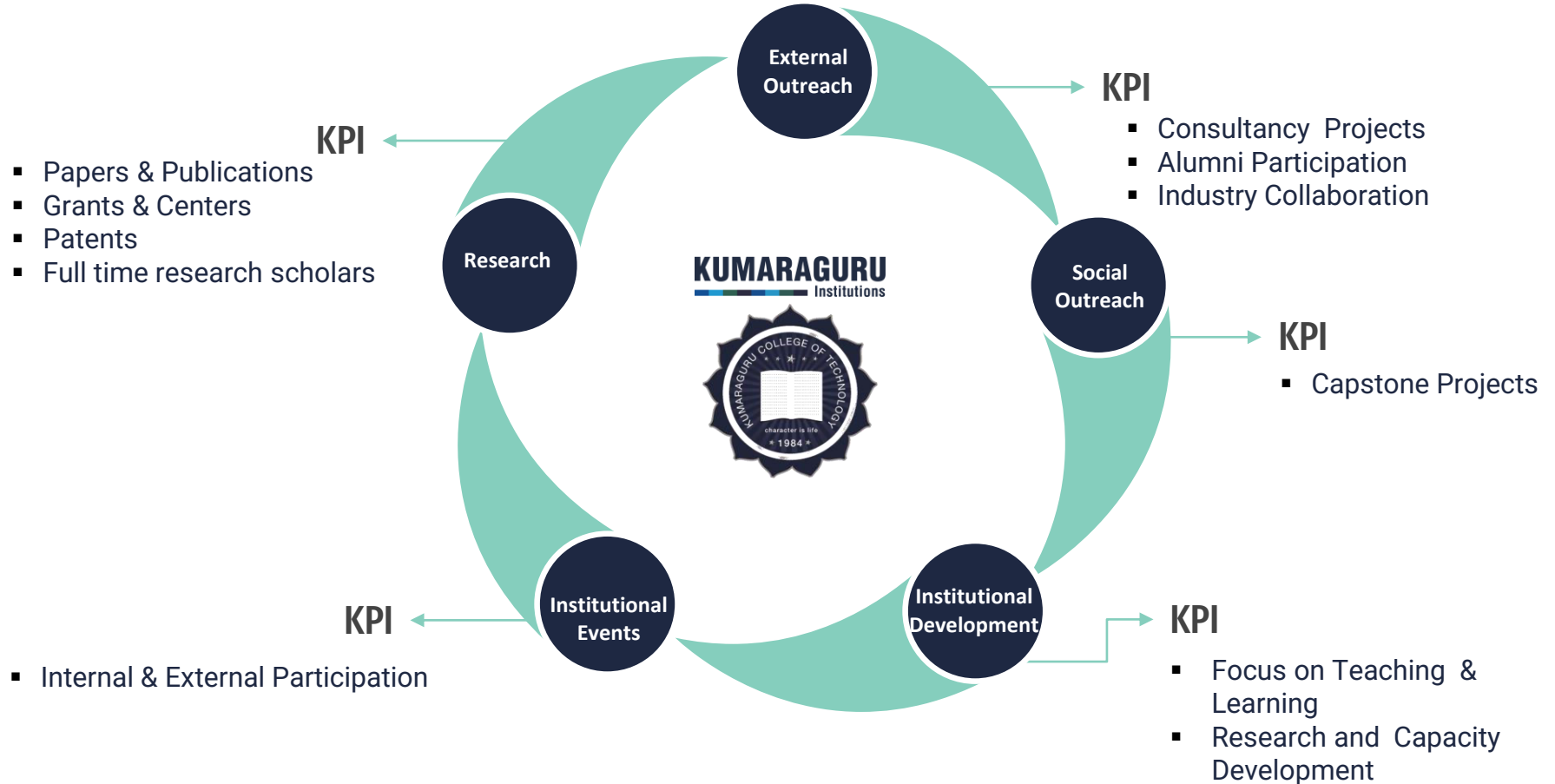


# Strategic Plan Academic Year 2023-24



# Strategic Plan

## Academic Year 2023-24





## Vision of the Institute

The vision of the college is to become a technical university of International Standards through continuous improvement.

## Mission of the Institute

Kumaraguru College of Technology is committed to providing quality Education and Training in Engineering and Technology to prepare students for life and work equipping them to contribute to the technological, economic and social development of India. The College pursues excellence in providing training to develop a sense of professional responsibility, social and cultural awareness and set students on the path to leadership.

## Strategic plan

Considering the dynamic transformation of Higher Education in terms of Expansion, Enrolment, Quality and Access, KCT would like to position itself in the Top 50 Engineering Institutions of the Country.

## Overall Focus:

- Development of Vision and or revision of Mission for the Institution and each department to reflect the emerging trends.
- Outline the Value systems to achieve this.
- Specify the Differentiators for each department in clear terms that will set it apart from other institutions.
- Three important goals every year for the next three years.

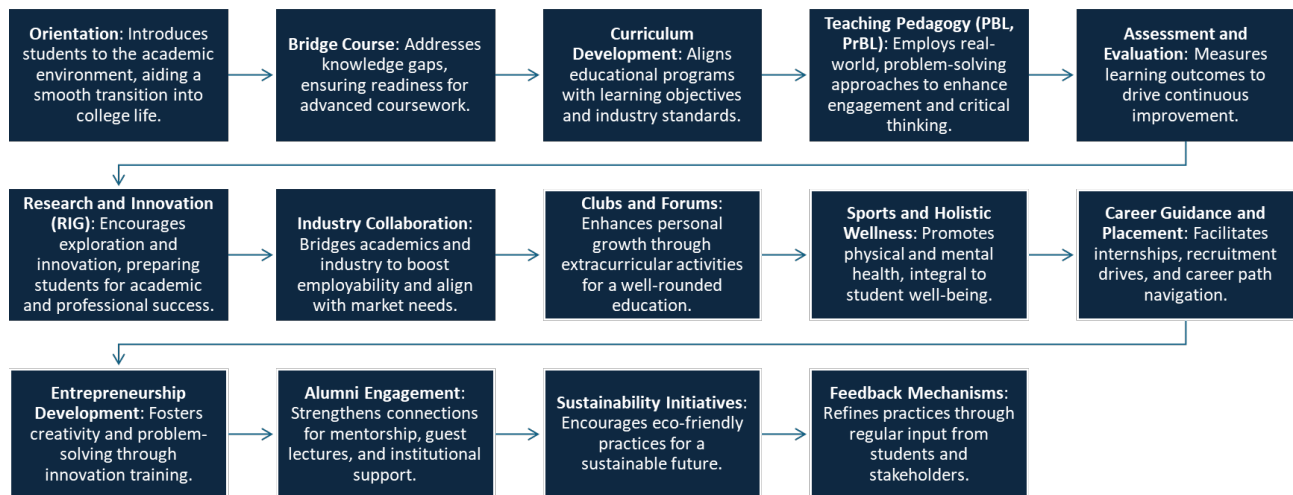
To accomplish the same, the institution has evolved the following strategies with implementation plan through various work systems.

1. **Governance and Transparency:** Implement governance structures with clear accountability and inclusive decision-making.
2. **Teaching, Learning, and Curriculum Development:** Engage in continuous syllabus revision using feedback from industry, alumni, and faculty.
3. **Quality and Ranking:** Strives to maintain high academic standards through continuous quality improvement initiatives, aligning with accreditation benchmarks. Aims to consistently improve its national and international ranking by enhancing research output, student outcomes, and industry collaborations.



3. **Research, Development, and Innovation:** Focus on increasing research output, securing patents, and attracting research funding.
4. **Faculty and Student Development:** Regular faculty training and student engagement in extra-curricular activities to enhance learning outcomes.

### VALUE CHAIN



### Governance Structure:

The governance structure at KCT follows a model aimed at ensuring accountability and transparency. The structure has various Statutory, Mandatory and Non-statutory Committees to ensure compliance, performance and to excel beyond minimum requirements laid down by the regulatory authorities, whose Membership, Frequency of Meeting and Functions are defined as per the guidelines of UGC, NAAC, AICTE and Affiliating University.

### Knowledge Development (Curriculum, Academics, Value Additions):

KCT aims to continuously update its curriculum, ensuring that it stays relevant to industry needs and emerging trends in technology. A rigorous feedback process is followed where input from industry, alumni, and faculty is incorporated into the syllabus revision.

Key Initiatives:

- Regulations / Curriculum Revisions
- One-Credit Courses: Introduction of innovative courses in emerging fields like AI, IoT, and Data Science.
- Value-Added Certifications: Professional certifications in collaboration with international bodies



## Credit Systems and Structure

To provide a robust academic foundation while fostering interdisciplinary learning, the institution adopts an innovative and flexible credit system designed to align with contemporary and future needs. Key features include:

- **Micro-Credentials:** Short, specialized certifications in areas like sustainability, foreign languages, innovation-practicum, and arts & design to enhance learners' skills.
- **Flexible Comprehensive Learning Framework:** A three-pronged structure emphasizing General Education, Skill Development, and Emerging Technologies.
- **Domain-Specific Honours & Specialization Cohorts:** Tailored pathways allowing students to excel in specific disciplines.
- **STEAMM Approach:** Integrating Science, Technology, Engineering, Arts, Mathematics, and Management for holistic education.

## Professional Development (Research Publications, Funds, Patents, Entrepreneurship, Innovation, Mandatory Internship):

Professional development at KCT is driven by increasing research output, filing patents, and securing external research funding. The institution aims to foster innovation through active participation in research and development activities.

Key Areas of Focus:

- Research Publications in Q1 Journals
- Patents
- External Funding

## Exploratory Professional Pathways

The curriculum offers diverse tracks to cater to varied learner aspirations:

- **Research and Innovation Track:** Encouraging academic research and cutting-edge technological advancements.
- **Entrepreneurship and Family Business Track:** Fostering entrepreneurial thinking and skills to manage family businesses.
- **Skill and Career Track:** Equipping students with industry-relevant skills for career readiness.



- **Social Entrepreneurship Track:** Building leadership for socially impactful ventures.
- **Mandatory Internships:** Providing hands-on experience across all tracks.

### Delivery Model:

To ensure accessibility and inclusivity, the following delivery models are implemented:

- **Multidisciplinary Courses:** Encouraging cross-domain learning and collaboration.
- **Credit Equivalence for Skill-Based Courses:** Recognizing non-traditional learning outcomes.
- **MOOC Integration:** Allowing up to 30% of credits via online platforms for flexible learning.
- **Inclusion of Professors of Practice/Adjunct Professors:** Industry experts enhance applied learning.
- **Foundation in AI:** Basics of Artificial Intelligence incorporated into all programs.
- **Active Learning and Micro-Learning:** Hands-on problem-solving and short, focused courses.
- **Design Thinking & Block/Blended Teaching:** Innovative teaching strategies combining physical and digital learning environments.

### Learner-Centric Systems

The institution prioritizes holistic development and inclusivity through:

- **Life-Skills Training:** Programs for physical, mental, and digital well-being.
- **Value Education:** Emphasizing ethics, global citizenship, and socio-economic inclusion.
- **Custom Learning Tracks:** Fast-track pathways for advanced learners and extended support for slower-paced learners, including accommodations for differential learners.
- **Core Competency Development:** Courses on management, finance, and ethics.

By implementing these strategies, the institution aims to foster lifelong learning, global competence, and societal contributions in its learners.



## Assessments and Grading

Assessments are designed to promote understanding, critical thinking, and practical application:

- **Continuous Internal Assessments (CIA):** Reserved for laboratory courses to ensure skill development.
- **Comprehensive Online Tests:** MCQ-based evaluations integrated as CIA components for theory courses.
- **Flexible Summative Assessments:** Adapting question patterns to cater to diverse learner needs.
- **Course Withdrawal Options:** Allowing students to optimize their learning paths.
- **Diverse Assessment Modes:** Tailored for both physical and online courses.

## Stakeholder Feedback (Students, Parents, Alumni, Faculty):

A comprehensive feedback mechanism has been established at KCT to ensure continuous improvement. The feedback system includes inputs from students, parents, alumni, and faculty, which are used to inform decisions related to curriculum development, facilities improvement, and other strategic actions.

Key Components of the Feedback System:

- **Student Feedback:** Collected after each semester via surveys to assess academic delivery and resources.
- **Alumni Feedback:** Annual alumni meet to collect feedback on employability and industry relevance of the curriculum.
- **Faculty Feedback:** Regular peer review sessions to ensure high teaching standards.



**Fig. 1 Translation of Strategic Plan to Faculty Performance Indicator**

Strategic plans are converted into Key Result Areas (KRA), which in turn converted into Key Performance Indicators (KPI), considering parameters / metrics used for benchmarking and those metrics relevant to Accreditation, Ranking and Institutional Growth (Fig.1). KPIs are then converted



into Goals and Targets of faculty members of different cadres – Heads, Professors, Associate Professors and Assistant Professors (Table.1).

### Monitoring and Evaluation:

Monitoring and evaluation are essential to ensure that strategic goals are met. KCT uses a structured process involving the tracking of Key Performance Indicators (KPIs) for each department and faculty. KPIs are reviewed annually, and adjustments are made to ensure continuous improvement.

### Core Analysis & Mapping:

- Charting the Value Chain from Orientation to Placements in pictorial form and mentioning the value intended.
- Defining Goals & Targets.
- Performing SWOT analysis: Strengths & Weakness – internal. Opportunities & Threats – external.
- Spelling out the Core competencies of each department in building skills and knowledge, which are linked to Budget and resources.
- Preparation of Budget and Utilization.

### Implementation of the Strategic Plan:

- Providing the manpower matrix, structure and systems needed.
- Fine tuning the culture & leadership abilities.
- Implementing the change management in the department.

### Evaluation & Tracking

- Effective Performance Appraisal and Development System (PADS) and other measures that might be relevant to implement strategy.
- Continuous monitoring.
- Developing the checks and balances for control of operations to achieve the goals and targets.
- Appropriate corrective actions to be taken achieve the goals and targets.





**Table 1 Mapping and Relation between KRA and Benchmarking Metrics**

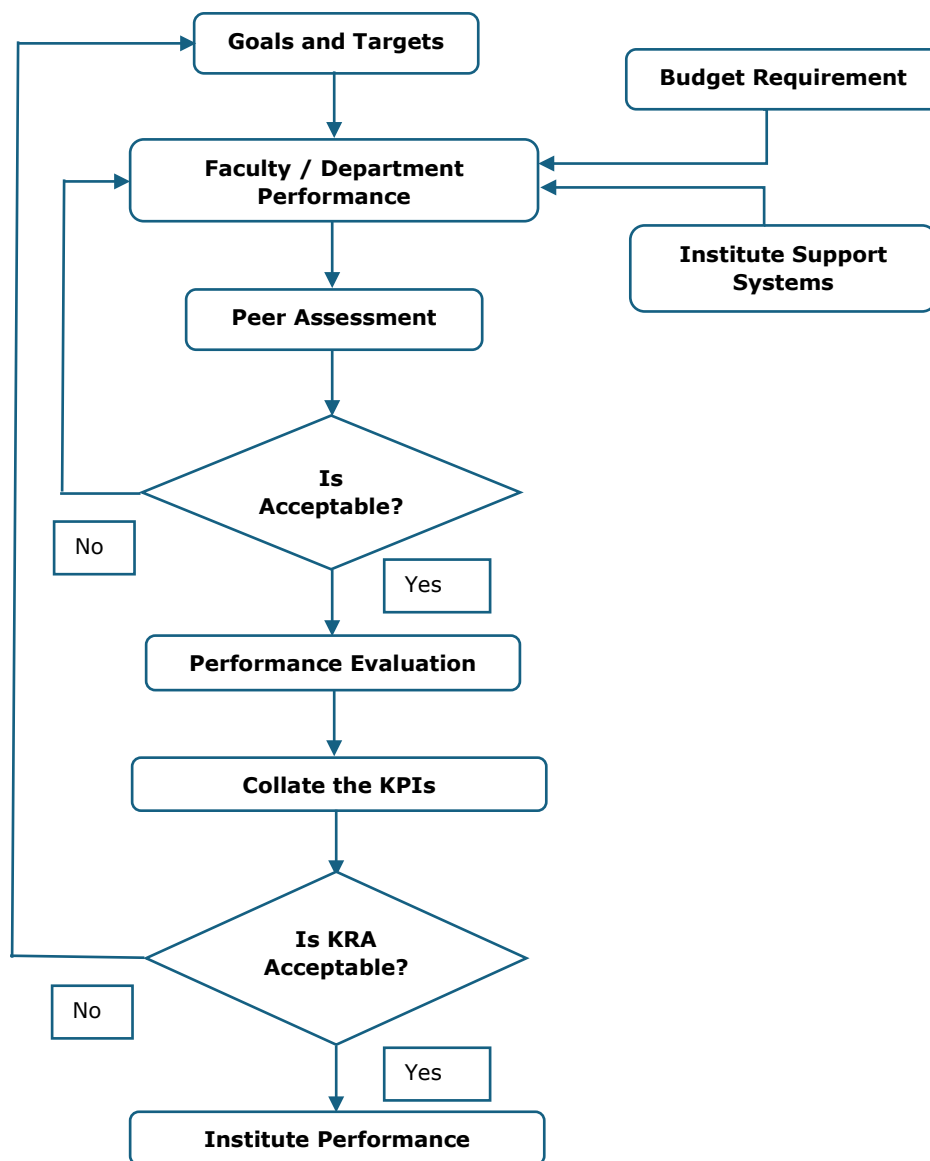
Key Result Areas	Benchmarking Metrics		
	NBA	NAAC	NIRF
Academics and Student Outcomes, Accreditation and Ranking	Industry Feedback for curriculum / Syllabus revision, Guiding Mini-projects, Capstone Projects, Publishing Papers out of Student Projects (Conference / Journal), Organising Invited Lectures, Field Visits, Course Outcome, Publication of Newsletter, Technical Magazine, Feedback on Course Delivery & Lab Facilities, Providing Self-Learning Materials (MOOCs / Weblinks), Professional Body Certified Courses, Organising Tech Events for Intra College/ Inter-College, Utilisation of Academic Budget, Developing Online Courses	Number of courses revised (Syllabus at least 25%), Receiving Feedback of Syllabus from Industry - Alumni - Faculty Abroad, Number of Elective Course Designed, Number of Value Added Courses Delivered / Organised, Number of One-Credit Courses Coordinated, Number of Guided-Self-Study Elective guided, Discussing Current Issues, Number of Innovative Mini-Projects	No of Full-time Ph D Scholars, Development of New Lab Facilities, % Pass in ESE, Conducting Coaching for GATE, Arranging Coaching for IELTS / TOEFL / GRE / UPSC, Training Students to Participate in National Level Events
Research Based Practices and Outcomes, Accreditation and Ranking	Faculty Qualification, Ph D Guidance, Publication, Book / Chapters, Monographs, Projects, Consultancy, Product Development, Patent, Recognition	Seed Grants, Receiving National / International Awards, Establishment of Laboratories, International Fellowship, Awards, Supervisor Recognition, Research Centre, Undertaking Community projects, Research Related Programs Organised,	Publication, Quality of Publication (Citation), Patents, Research Funding, Consultancy Revenue



Key Result Areas	Benchmarking Metrics		
	NBA	NAAC	NIRF
		Citation, Consultancy Revenue, Research Exchange, Research collaboration, Research MoUs, Internships	
Human Potential Development and Excellence, Institutional Initiatives	Department/ Institute level Responsibility, In-charge of Extra / Co-curricular Activities, Upskilling, Sabbatical Assignment, Participation in STTP/National / International Competitions, Organising Programs for Marginalised Communities / Societies, Organising Alumni Meet	Training for Undertaking Consultancy, Benchmarking for Best Practices, Recruiting Renowned Adhoc Faculty Member, Inter-Institutional MoUs for Exchange Programs,	Publishing Papers in Popular Journals (Trade), Organise Institute-Industry Meet
External & Industry Outreach, Societal Outreach	Involvement of Industry / Society in Extra and Co-curricular Activities, Entrepreneurship, Training of Faculty / Students, Placement Training, Industry / Professional Body Certification, Membership, Mentoring Faculty-Consultancy / Solving Industry Problems, Interaction with Local Body / NGO / Societies for Problem Solving, Industrial Training to Faculty, Training of Staff, Identification of Visiting Faculty, Modules Delivered by Industry Experts,	Collaboration with Industry / Agencies / Society, Training of Students and Faculty, Faculty Exchange, Sharing of Resources by Industry, MoUs, Community Services, Addressing rural issues	Inviting Scientists from DST / DSIR / DRDO / CSIR, etc for Events and Programs, Relationship with NGOs to support ESCS, Entrepreneurship Development, Organising EDP for Industry Persons)



These Goals and Targets are assigned to different Cadres of faculty members, as annual Performance Criteria / Targets. While preparing the annual budgets, individual faculty members are encouraged to submit the requirements (budgets) to meet their needs and reach their goals. Faculty Teams are formed to peer-assess the performance of the Members and indicate the areas that require improvement at regular intervals (Fig. 2). At regular intervals, the performances of all the members, Departments are collated and presented in IQAC, Governing Council Meeting for validation and suggestions.



**Fig. 2 Attainment of Goals and Targets and KRAs**