

INSTITUTIONAL STRATEGIC PLAN

(2021-2026)



G PULLA REDDY ENGINEERING COLLEGE

An Autonomous Institution, Kurnool, Andhra Pradesh.

Affiliated by JNTUA, Ananthapuramu, Accredited by NBA and NAAC of UGC

1. Introduction:

G. Pulla Reddy Engineering College (GPREC), the pride of Kurnool city is the brain child of late **Sri G. Pulla Reddy** (10-01-1921 to 09-05-2007), the renowned philanthropist and humanist. The present strategic plan is scheduled for coming 5 years. GPREC, for the past 36 years, the institute is focused on innovation in creating the systems for producing quality graduates and perfected the art of grooming young talent in to disciplined, task oriented and value driven workforce. Against several odds, the institute could develop a reputation for itself as the “best private engineering college for technical education” in the state of Andhra Pradesh and the entire south Indian. The institute has well strengthened its laboratories, library, and computational facilities. Efforts were made to promote research and the institute met with initial success in terms of few publications in journals of international repute and an international patent. To propel the institute from “best academic institute” to “choicest institution in R&D” that spearheads research in state of art of technologies, the institute is striving hard to create research facilities, faculty with expertise in R&D, institute and industry interaction, create multidisciplinary research groups, MOUs with national and international universities and bring about a change in culture and mindset of the faculty members to pursue research seriously on continuing basis.

Vision:

To become the choicest institute of technology and a hub of academic and industrial research and development.

Mission:

To provide conducive academic ambience, excellent infrastructure, continually updated lab equipment and committed and scholarly faculty to realize the vision of the college.

Quality Policy:

G. Pulla Reddy Engineering College, Kurnool, is engaged in imparting “quality education and training” in the field of engineering and technology. It aims to be an institute of excellence of technical education through continual improvement. The institute facilitates faculty and staff to work as a team and update their knowledge and skill to match the industrial and technological development.

2. Strength, Weakness, Opportunity and Challenges(SWOC)

The college has initiated a process of introspection in all the Departments to identify the Strengths, Weaknesses, Opportunities and Challenges (SWOC) and plan for future expansion and growth to be able to meet the aspirations of the society.

Institutional Strength

1. Curriculum Framework is synchronizing with current technologies.
2. State of the Art labs with modern teaching aids including ICT & software tools
3. Dedicated faculty, efficient supporting staff, with adequate manpower.
4. Active Professional Societies and Student Chapters.
5. Appreciative level of STTPs/FDPs are organized and Good number of extension and outreach activities.
6. Safe and Secured Environment for girl students.
7. Student centric functioning with mentoring and effective academic monitoring.
8. About 36% of the teaching staff are Ph.Ds and all of them have published papers in reputed Journals.
9. The teaching learning process moves beyond the confines of the class rooms and teachers willingly make themselves available to the students even after the mandatory teaching sessions.
10. Effective and supportive guidance from the governing body is a pillar of strength for the college which gives the needed impetus for robust growth.
11. Many societies and clubs functioning in the college for the overall development of the students. These are managed by students with the faculty playing an advisory role

12. Healthy measures in handling pandemic situation and Ragging free campus.
13. Good Placement track record.
14. Well-established Innovation and Incubation center for transforming innovative ideas into reality.
15. The Internal Quality Assurance Cell (IQAC) of the college plays a vital role in ensuring quality in education through various quality sustenance and enhancement measures and monitoring mechanisms.
16. Vivekananda Study Circle (VSC-Service Organization) and National Service Scheme units functioning effectively to address the issue of Institutional Social Responsibility (ISR).
17. Mentoring process that addresses the psychological and emotional issues faced by students as well as the staff.
18. Strong infrastructure base.
19. Well equipped laboratories, periodically modernized.
20. Large collection of books and journals in the central library with digital library section.
21. Wi-Fi enabled campus.
22. Offering of P.G and Ph.D programmes gives an impetus to the research activities.

Institutional Weakness

1. Location disadvantage is the major hurdle in forging productive partnerships with industry, research bodies and International collaborations with Foreign Universities..
2. Very Few Industry – Institute interaction programs.
3. Less number of Patent filing.

Institutional Opportunity

1. A modern infrastructure shall open the doors to a world of opportunities for the College.
2. Contribution towards Research & Development and Consultancy by utilizing the available Infrastructure.
3. Arranging a greater number of National Level /International Level Conferences.
4. Organizing specialized training programs by the internal faculty.
5. Scope for interdisciplinary and sponsored projects.
6. Tremendous opportunities for national and international collaborations with other Universities.
7. Collaboration with industry is likely to provide students with useful insights on professional skills with a thrust on entrepreneurial culture.
8. Training sessions and workshops to be organized for professional and academic development of the faculty.
9. Academic collaboration with professional institutes and other Universities for introduction of professional courses as well as add on certificate courses.
10. Value added courses can be introduced to improve the employability of students.
11. Faculty and student exchange programmes can be implemented by having MOUs with leading universities and research organizations.
12. Industrial consultancy services can be taken up by all the Departments.

Institutional Challenge

1. To achieve Placements in core companies.
2. More focus on Industrial training for faculty and students.
3. Strengthening Industry-Institute Interaction.
4. Motivating students towards Entrepreneurship, Competitive Examinations and Higher Studies.
5. Receiving grants from government and funding agencies.
6. To be conscious and vigilant about the obligation of the institution to reinforce the importance of a mindset conducive for a compassionate outlook among students to inculcate the professional and human values
7. To strengthen the Alumni forum by which regular contact could be maintained with them and valuable feedback obtained.
8. To establish the real connect between information, knowledge and wisdom and incorporate their applicability in the conventional teaching methods.
9. To evolve the institution in terms of aesthetic appearance.
10. To improve and to become one of the best technical institutions in the entire state and to compete with the renowned universities in the future.

3. **Strategic Objectives**

The Institution has set certain strategic objectives to follow during the coming five years based on the outcome of the following activities.

- Investing in human resources training and development
- Knowledge Management
- Enhancing the research activities and leveraging the research to deliver better graduate output.
- Enhancing graduate employability
- Put in place faculty retention programs
- Capitalize on rich network of alumni for institution building
- Developing web resources for 24X7 learning experience
- Industry Institute Interaction
- Improve public image of the institute through active reciprocation to local community
- Proposed to setup new and upgrade existing PG labs
- Proposed to establish R & D labs which will caters the needs of research activities of the institute
- Proposed to have MOUs with foreign universities and Research institutes
- Established world class remote learning class room to inculcate quality industry oriented training to our students.
- Proposed well planed Faculty Development Program (FDP) for all faculty and staff.
- Improving the quality of day-to-day class-room teaching using latest online/offline tools.
- Improving the Technology Awareness Programs for faculty and staff
- Improving the R & D ACTIVITIE
- To establish institutional mechanisms, processes and guidelines to generate knowledge, intellectual properties and innovations from institute and commercialization of innovations through technology transfer, technology licensing and startups etc.
- To Develop a critical mass of motivated students & faculties with creative potential, and entrepreneurial orientation & skill set.
- To build and strengthen the in-house mentor pool and human resource capacity to drive campus I&E activities; identifying, handholding and guiding potential/early- stage entrepreneurs, student innovators at the Institute on regular basis.
- To build infrastructure support and facilities to promote innovation & startup and enabling environment of easy access to resources within an outside the institute.
- To strengthen the intra and inter-institutional partnership and collaboration with ecosystem at different level and co-creation of new program interventions.

4. Action Plan to achieve above strategic Objectives and Goals

Strategic plan is a continuous process with a specific focus on accomplishing the short and long term goals in this highly competitive world. It analysis the current environment, expected future scenarios and envisages the direction towards which the institution should move to achieve the goals and objectives. This action plan is for five years (2021-2026) to achieve the GPREC strategic objectives. This action plan is to accomplish the vision and mission, which it dreams, through high-level goals with long range planning. The below action plan consists of three parts, the first part is institutional level, second is on department level and the third part is monitoring of strategic plan.

PART I - Institutional Plan

1. TEACHING LEARNING PROCESS AND ENRICHMENT OF CURRICULUM:

GPREC, being an Autonomous institution, aims to use the academic and administrative autonomy extended to such institutions by UGC and AICTE. Academic flexibility is enhanced by introducing curriculum and regulations (Scheme-17 and Scheme-20) with more focus on Open electives, project based learning, two credit courses, value added courses and summer internship. All these efforts showing good results, placements and attract meritorious students through EAMCET, JEE.

Depending on the progress of the academic reforms the curriculum is upgraded from time to time by considering the Vision and Mission of the department in line with the institute vision and Mission. All courses are designed with the Course outcomes which are in turn linked with programme outcomes and Programme educational Objectives. To achieve the above objectives the following measures are being taken.

- Transformation of conventional class rooms with latest pedagogy and ICT tools.
- Implementation of reforms in assessment and evaluation.
- Offer Honors/Additional minor engineering degrees, value added courses.
- Organizing more events under professional bodies/ chapters, Mentoring and counseling.
- Making provision in the curriculum and academic calendar to conduct Community outreach programmes.
- NSS/Department coordinators of various forums /clubs to conduct Co and extra curriculum activities.
- Identifying appropriate courses of importance, developing scheme and syllabus and Creation of facilities to introduce new programs in emerging areas.

IMPROVING THE QUALITY OF DAY-TO-DAY CLASS-ROOM TEACHING:

Teaching is the primary responsibility of an academic department and promoting the quality of teaching is a continuous process.

- Faculty members frequently opt for teaching a new course and they need refreshing.
- Fresh faculty joining the department certainly needs to be trained comprehensively.

- Even the experience faculty will stand to gain by attending development programs /orientation programs offered by experienced teachers.

2. FACULTY DEVELOPMENT PROGRAM AND TECHNOLOGY AWARENESS

The Institution is working to accomplish certain set goals with the following short Term and Long Term goals in Teaching & Learning Process.

Short Term Goal:

- To improve Research & Development & Innovation training programs to faculty
- To plan required trainee to the faculty to improve their competence
- To provide basic & advanced pedagogy training to the faculty
- To improve the skills of Technical Staff & other supporting Staff.
- As a leading institution, to share its facilities and provide necessary training to the faculty of the neighboring institutions in this region.

Long Term Goal:

To emerge as a choicest institute in field of Technology

To develop as an Advanced Research Center in cutting edge Technologies.

3. ACTION PLAN FOR TRAINING TECHNICAL AND OTHER STAFF IN FUNCTIONAL AREAS

- To organize in house training programs related to laboratory experiments
- To conduct internal workshops and to create awareness among technical staff on latest developments
- Identified agencies where technical staff in laboratories and workshops for operation and maintenance of equipment and research related relevant activities
- Identified training agencies for imparting training in office automation, usage of software etc

Complete library automation and training to all the library staff and maintenance of digital library

4. STRATEGIC PLAN ON RESEARCH & DEVELOPMENT

1. To create new infrastructure to enable research in emerging challenges in thrust/identified areas of engineering like precision agriculture, clean energy, additive manufacturing, material science, structural engineering, artificial intelligence, IoT applications, etc.
2. Actively coordinate writing proposals for larger, multidisciplinary research grants in identified research areas. Also, the number of research proposals has to be increased.
3. To facilitate inter-department collaboration and sharing of expertise on emerging areas, professional development, social and leadership opportunities and writing support, etc.
4. Improve a mechanism for appreciation of research contributions from faculty and students.
5. To start new International journals and then the indexing and ranking of these journals to be improved.
6. To start a collaborative research work with IITs, NITs, reputed research organizations, institutions of national importance, etc. Also, MoUs with higher learning institutions and industry in India and abroad.
7. To encourage the concept of “**idea to product**” and establish the incubation centers of faculty, students, alumni and industry. The incubation activities should be strengthened in order to focus on product development and patents.

8. To become a facilitating centre for patents and provide the guidance to various engineering colleges. Also, the commercialization of products and patents to be improved.
9. To build a strong eco-system for nurturing innovation and startups that will drive sustainable economic growth and generate large scale employment opportunities.

5. ACTION PLAN FOR INNOVATION & ENTREPRENEURSHIP (I&E) CELL

1. Goal of Innovation & Entrepreneurship (I&E) Policy & Action Plan

- The I&E policy aims to adopting innovative and entrepreneurial strategies and approaches at all level of HEI to establish, streamline and strengthen the I&E ecosystem to generate quality innovations and entrepreneurs.
- The action plan is a roadmap to achieve I&E policy goal by setting objectives and activities to be undertaken in the specified timeline with defined targets and milestones.
- Both I&E policy and action plan adopts a monitoring and impact evaluation methodology which ensures all planned programs and activities progress as desired and accomplish the goal.

2. Action plan for Innovation, Startups, Incubation and Entrepreneurship

To establish institutional mechanisms, processes and guidelines to generate knowledge, intellectual properties and innovations from institute and commercialization of innovations through technology transfer, technology licensing and startups etc., the programs are as follows

Thrust Areas

Startup – Activities

- A Webinar on Startups in Private and Public Sector
- How to Plan for Startups - legal and ethical steps
- Internship at start up
- Workshop on Design Thinking, critical Thinking
- Interactive Session/Mentoring Session with "Successful Start-up founders"
- Webinar On Startup Ecosystem In India
- A Webinar on Startups in Private and Public Sector
- How to Plan for Startups - legal and ethical steps

Innovation – Activities

- Innovative ideas to build projects
- Session on identifying Intellectual Property component at the early stage of Innovation
- Workshop on Prototype/Process Design and Development – Prototyping
- Factors Influencing Innovation
- Workshop on Entrepreneurship and Innovation as career opportunities
- Organizing Hackathons and Ideathons

Incubation – Activities

- Field/Exposure Visit to Incubation Unit/Patent Facilitation Centre/Technology Transfer Centre/ Co- workspaces
- Session/ Workshop on Business Model Canvas (BMC)
- Business Plan/Prototype Competition to Invite Innovative Business Models from Students

Entrepreneurship – Activities

- Mentorship session for Innovators or student Entrepreneurs through experts
- Entrepreneurship and Innovation as Career Opportunities
- Motivational session by successful Entrepreneur/ startup founder
- Workshop on Entrepreneurship Development Phases
- Entrepreneur's Life & Crossroad – Motivational Speak - To be Shared by Entrepreneurs
- Mentorship session for Innovators or student Entrepreneurs through experts
- Entrepreneurship and Innovation as Career Opportunities

Intellectual Property Rights Ecosystem – Activities

- Workshop on Intellectual Property Rights (IPRs) and IP management for start up
- Session on identifying Intellectual Property component at the early stage of Innovation
- Workshop on Intellectual Property Rights (IPRs) and IP management for start up

6. MANAGEMENT AND LEADERSHIP TRAINING

- Identified agencies for management and leadership training for Principal, HODs and other administrators
- Identified areas of training

PART II All Departments:

The present individual Department and faculty members are carrying out their strategic plan in the different technical areas given below

1. Department of Mechanical Engineering

Strategic Plan (2021-2026)

1. Research & Development Activities:

- Encourage faculty to apply for more funded research projects.
- Exploration of Knowledge through Innovation and Research providing inclusiveness to societal needs.
- Fostering and establishing core departmental and interdisciplinary research.
- Increase the number of quality Journal publications and Patents.
- Encourage the faculty to enroll as a research guide in various universities.

2. Infrastructure Facilities:

The department has established excellent infrastructure such as State-of-the-Art Laboratories. The department is having Total 12 Laboratories.

- The CAD lab is having Auto CAD and CATIA V5 R7 to perform 3D modeling of complicated objects.
- CAE lab is having ANSYS Work Bench to perform meshing and FEM analysis of 3D objects.
- CAM lab is having Espirit CAM, Master CAM, EDGE CAM softwares to generate the CNC program and simulate the Programme. CUTVIEWER lathe and CUTVIEWER mill softwares to write the CNC programme with G codes and M codes and simulation of the written programme can be done by the students.
- DATA BASE MANAGEMENT Lab is having MATLAB software.

- MACHINE TOOLS lab is provided with different types of Lathe machines, Radial Drilling machine, Shaper, Planner and surface grinding machine.
- HEAT ENGINES Lab and HEAT TRANSFER Lab are provided with latest equipment to conduct the experiments by the students..
- PLM lab is having PLM-Windchill software.
- Stir Casting Machine to produce Aluminium metal matrix composites.
- Composites lab is having INSTRAN universal testing machine and DUCOM wear testing equipment to conduct various test on polymer composites and Metal Matrix composites.
- All the Class rooms are provided CBTs.
- All the faculty rooms are provided with Internet facilities and well infrastructure.
- All the computer labs provided with 150 computers and SERVER.
- Sufficient infrastructure for facilitating the faculty to undertake consultancy work.

3. Training & Placement:

To increase industry specific eligible students Placements

- Training students in competitive Coding.
- Training students on coding platforms like Hacker rank, Code Tantra .
- Encouraging students in participating Hackathons.
- Offering Employability course in 5th and 6th semesters.
- Time table is framed to train students on employability skills.
- Soft skills training was given from 3th semester onwards with Experienced trainers.

4. Faculty Development:

- To get the faculty updated with the current technological changes of the industry and to undergo certification programs.
- Encourage to attend and organize FDPs/Short Term Courses.

5. Student Participation:

1. Motivate students to participate in coding competitions and Hackathons.
2. Provide good academic ambience and support for co-curricular & extra-curricular activities.
3. Increase student participation in national & regional programs and conferences.

2. CIVIL ENGINEERING DEPARTMENT

Strategic Plan

1. Action Plan to achieve strategic Objectives and Goals of Each Department.

A) Research & Development Activities

- Encourage the faculty to send the proposals for Major Research Project, Minor Research Project and Young Scientist Research Award
- Support the faculty for filing patents

B) Innovations & Entrepreneurship Activities

- To impart entrepreneurship skills among the students
- To conduct awareness programmes by the District Industries Centre for developing entrepreneurship and promoting start-up with innovative ideas.

C) For Individual Or Department Research Activities

- To improve the faculty research publications
- To attain all the faculty to have Ph.D. degree
- To encourage the faculty to enroll as a Research Supervisors of various Universities

D) For Joint And Collaborative Research Signed

- To support the faculty for joint publications in refereed impact factor journals with P.G students and Research Scholars
- To apply the Research proposals required for improving consultancy services
- To organize an International conference on Recent Trends in Civil Engineering

2. Action Plan for Collaborating with Indian & Foreign Institutions in Academic & Research Area through MoUs of Each Department.

A. Faculty Development Program And Teaching And Learning

- To organize FDP on Teaching and Learning Process for newly recruited faculty.
- To sponsor all the faculty to attend FDP on Teaching and Learning Process every year
- To conduct workshop on Modern Surveying Instruments like Total Station, DGPS and Drone Surveying to the faculty
- To make MOU with Osmania University, NIT Warangal and IIT for the collaborative Research

B. Improving The Quality Of Day-To-Day Class-Room Teaching.

- Introduce ICT tools in the Teaching – Learning Process
- Suggest all the faculty to involve in E-Content Development
- Procure new/latest software in computer laboratory
- All the faculty are required to maintain course files properly for the subjects handling. The content of the course file will be verified at the beginning of the every semester by the Department committee consisting of HOD, Dean and one senior faculty.

C. Technology Awareness Programs

- To conduct the Technology Awareness Programs for faculty and students
- To encourage the faculty to attend Expos and Exhibitions on latest building materials

3. Action Plan for Training Technical and other Staff in Functional Areas of each Department.

- To conduct a workshop on Testing procedures for Lab Technicians
- To conduct a awareness programme on File maintenance for supporting staff (Non-Teaching staff) and a awareness programme on Housekeeping for Helpers/Attendees

4. Action plan for improving collaboration with industry

- To arrange Guest Lectures by the Industry experts
- To make MOU with National Highways Authority of India (NHAI), CREDAI and National Academy of Construction (NAC) for students Internships and for imparting knowledge on Modern construction Technologies
- To make MOU with Roads and Buildings (R&B) Department, Govt. of A.P. for creating awareness to the students on Specifications and Standard Schedule of rates and organize a workshop on “Testing procedures for materials” to the Field Engineers

3. DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

STRATEGIC PLAN (2021– 2026)

1. Action Plane for Teaching Learning Process

RECOMMENDATION	ACTIONPLANS
Bench mark with Premier Institutes like IIT	<ul style="list-style-type: none">• Constitute academic teams and visit premier institutions• Customize & Implement best practices
Effective Curriculum planning and implementation	<ul style="list-style-type: none">• Design curriculum as per all graduate attributes and Expectations of stakeholders• Develop lesson plan as per academic calendar• Develop e-learning content• Bench mark with industry requirements• Use of LMS to support students
Upgrading faculty & staff competence	<ul style="list-style-type: none">• Conduct training need analysis• Conduct/depute faculty and staff for competence development• Support paper publications and presentations• Provide opportunities for networking
Knowledge Delivery & Outcome based education	<ul style="list-style-type: none">• Define outcomes of each teaching learning initiative• Continuous Assessment and evaluation to measure outcomes• Establish Research Culture• Access to online learning• Mentor on academic, career & higher educational opportunities
Evaluation & Assessment	<ul style="list-style-type: none">• Create proper feedback system• Continuous progress assessment• Question bank development & Term end examinations

2. Action Plan for Research and Development Activities

RECOMMENDATION	ACTIONPLANS
R&D Infrastructure & Teams	<ul style="list-style-type: none"> Increasing both human and physical resources required for research. Enhancing R&D laboratory in the department Dedicated R&D facilitation & documentation centre Competent technical staff for R&D labs
Establishing Centres of Excellence	<ul style="list-style-type: none"> Enhancing and upgrading the existing Centers of excellence. To create more such active centres on areas with potentially large societal impact. The Centres of Excellence will also be multi-institutional, involving partnerships with Industries, IITs and other Foreign Universities
MOU with premier institutes/ R&D labs	<ul style="list-style-type: none"> MoUs with higher learning institutions in India & abroad. Collaborations with IISC, IITs, CSIR, ISRO, DRDO, etc. Multi & inter disciplinary research and product development
Incubation Centre /Product Development	<ul style="list-style-type: none"> Encourage more number of “idea to product” pre-incubation activities Enhancing and developing the incubation centres Focus on Start-ups and Product development Tie-up with DST for Incubation support

3. Action Plane for Infrastructure Facilities

RECOMMENDATION	ACTIONPLANS
Academic infrastructure	<ul style="list-style-type: none"> Aesthetic Classrooms, Seminar halls Smart Classrooms Multi media and support equipment in classrooms E-Learning facilities State of the art Laboratory & equipment Online learning tools Evaluation & assessment tools Learning Management System ICT Tools used for 360 deg. Feedback.

Library	<ul style="list-style-type: none"> • Library infrastructure upgradation • Increase access for e-Resources • Resources automation & Access (24X7) • Digitization of Library resources • Establishing cloud based e-library & online access
Sports, Canteen & Hostel	<ul style="list-style-type: none"> • Effective utilization of sports (indoor/outdoor) facilities • Add more recreational facilities in hostels • Upgrade food court
Laboratory-R&D Equipment	<ul style="list-style-type: none"> • R&D Laboratory and its maintenance • Industry equipment (centers of competence) for consultancy

4. Training, Placement, Entrepreneurship and Higher Education

RECOMMENDATION	ACTION PLANS
Institute – Industry Interaction	<ul style="list-style-type: none"> • Formation of industry institute interaction cell • MoUs with industries • Support for internships, visits, trainings, guest lectures • Identifications of industry needs and advice on Curriculum for extra courses apart from curriculum. • Providing opportunities for Industry based/sponsored projects • Providing career guidance • Strengthen training & placement • Establishing innovation centres
Entrepreneurship	<ul style="list-style-type: none"> • Effective functioning of entrepreneurship development Cell • MoUs with organizations for entrepreneurship development • Providing training & guidance for entrepreneurship development • Bringing more experts of the field for seminar, lecture, workshop for entrepreneurship development • Encouraging Student startups' in incubation center • MOUs with the Investors to implement Student Innovative Ideas

Training & Placement	<ul style="list-style-type: none"> • Provide Quality Placement, career guidance and entrepreneurial opportunities to students. • Increase the number of industry alliances and placement opportunities. • Produce Industry ready professionals with proper attitude • Enrollment of Students in Internship programs in different renowned corporate houses
Higher Education	<ul style="list-style-type: none"> • Preparing students in GATE, MAT, CAT,GRE,TOEFL etc examinations

5. Action Plane for Faculty and Staff Empowerment Strategies

RECOMMENDATION	ACTIONPLANS
Talent Hiring & Retention policy	<ul style="list-style-type: none"> • Merit based hiring policy formulation & implementation • Career advancement Schemes • Scientific induction/ orientation of new talent • Critical talent identification & retention measures
Rewards & Recognitions	<ul style="list-style-type: none"> • Rewards–recognitions & incentives • Welfare policy formulation & implementation
Conducive work environment	<ul style="list-style-type: none"> • Best work facilities and infrastructure • Role & responsibilities clarity and empowerment
Career growth & Development	<ul style="list-style-type: none"> • Sponsorship/Deputation, for higher education & Exchange programmes • Sponsorship to participate in national/international conferences • Encourage to do research and publications in reputed journals • Active participation in product development

6. Action Plan for Student Participation:

RECOMMENDATION	ACTIONPLANS
Student Activities on & off Campus	<ul style="list-style-type: none"> • Budget allocation for student development programs and activities • Students Trainings & Placement Activities • Active Participation (IEEE, ISTE CAD, VSC,NSS etc) in student clubs • Student's representation in various committee and cell • Participation in competitions (Coding, Hackathon, Workshops & Symposiums etc) • Organizing competitions • Credit transfer & compensation • Rewards & recognitions of achievers • Participation in Co-Curricular Activities and extracurricular activities • Participating in social, sports, cultural and welfare activities • Industrial Tours

4. ELECTRICAL AND ELECTRONICS ENGINEERING DEPARTMENT

Strategic Plan

1. Teaching Learning Process:

1. Achieving Academic excellence by identifying the student needs and see that learning takes place.
2. Strengthen the curriculum by removing the obsolete and including the needs of the industry
3. Motivate the faculty to implement innovative teaching methodologies like using ICT Tools, implementing flipped classroom, classroom discussions, talk the book program, 5 minute talk etc
4. Encourage faculty members to involve in development of e-content in their courses.
5. To inculcate a culture of belongingness towards society and nation among the students by including courses like ethics ,universal human values and Indian constitution in the curriculum.

2. Research & Development Activities:

1. To facilitate inter-department collaboration and sharing of expertise on emerging areas, Professional development, social and leadership opportunities and writing support, etc
2. Exploration of Knowledge through Innovation and Research providing inclusiveness to societal needs.

3. Create new research centers in which we can lead, such as renewable energy, IoT
4. To encourage faculty to publish research papers in quality Journal publications.
5. To encourage and assist faculty in publishing patents
6. Encourage the faculty to enroll as a research guide in various universities.

3. Infrastructure Facilities:

1. Provide the best class infrastructure in the field of electrical engineering
2. To create infrastructure for facilitating the faculty to undertake research work.
3. Establishing Center of Excellences and e-class rooms.

4. Training & Placement:

1. Provide career guidance and create awareness on entrepreneurial opportunities.
2. Increase the number of industry alliances and placement opportunities.
3. Encourage students to take up core jobs.
4. Increase the number of students going for higher education
5. Increase the number of placements through guidance, coaching, arranging mock interviews etc

5. Faculty Development:

1. To create awareness among the faculty about the current technological changes of the industry and to undergo certification programs to acquire the skills .
2. Encourage the faculty to attend and organize FDPs/Short Term Courses in the emerging areas of Electrical Engineering

6. Student Participation:

1. Motivate students to participate in coding competitions and Hackathons.
2. Increase the student participation in events organized by the college
3. Empowering students to activities on their own.
4. Improve activities related to various national and international organizations like IEI, ISTE and IEEE

5. COMPUTER SCIENCE AND ENGINEERING DEPARTMENT

Strategic Plan

1. Teaching Learning Process:

- Design the curriculum to enhance the technical and problem solving skills of the students to meet the current industry requirements.
- Faculty are instructed to use at least one innovative methodology for teaching their subjects.
- Faculty are encouraged to involve and develop E-Content for their respective courses.

2. Research & Development Activities:

- Faculty are encouraged to apply for various funding projects.
- Department conducts awareness sessions on drafting research proposals by experts
- Encourage the faculty to enroll as a research guide in various universities.
- Increase the number of quality Journal publications and Patents.

3. Infrastructure Facilities:

- To upgrade the infrastructure facilities to meet the requirements of emerging technologies in computer science.
- To establish E-class rooms with adequate ICT facilities.

4. Training & Placement:

- Provide Quality training to the students by eminent faculty and industry experts to improve the placements in reputed companies.
- Motivate the students to pursue higher education by taking up exams like GATE, GRE etc...
- The MOUs with EPAM, IBM, CISCO and EduSkills will be continued to enhance the programming skills of students and faculty.

5. Faculty Development Programs:

- Faculty are motivated to register for ATAL FDP programs and NPTEL courses.
- Planning to apply for ATAL academy to conduct FDPs in emerging areas.
- Faculty are encouraged to participate in industry oriented activities

6. Student Participation:

- Motivate students to participate in coding competitions, Ideathons and Hackathons.
- Encourage the students to participate in various activities related to technical forums and clubs.
- Motivate students to participate in various technical presentations and conferences.
- Students are encouraged to register for various technical courses offered by APSSDC.

6. DEPARTMENT OF EMERGING TECHNOLOGIES IN COMPUTER SCIENCE

Strategic Plan

1. Teaching Learning Process:

- Achieving Academic excellence by curriculum orientation and fostering experiential learning through ICT.
- Strengthen the curriculum for the all-round personality development of the students.
- Motivate the faculty to implement innovative teaching methodologies.
- Encourage faculty members to involve in development of e-content in their courses.

2. Research & Development Activities:

- Encourage faculty to apply for more funded research projects.
- Exploration of Knowledge through Innovation and Research providing inclusiveness to societal needs.
- Fostering and establishing core departmental and interdisciplinary research.
- Increase the number of quality Journal publications and Patents.
- Encourage the faculty to enroll as a research guide in various universities.

3. Infrastructure Facilities:

- Provide the best class infrastructure to explore the field of engineering, Management and research.
- To create infrastructure for facilitating the faculty to undertake consultancy work.
- Establishing Center of Excellences and e-class rooms.

4. Training & Placement:

- Provide Quality Placement, career guidance and entrepreneurial opportunities to students.
- Increase the number of industry alliances and placement opportunities.
- Produce Industry ready professionals with proper attitude.
- Enhance MOU with premier Indian Technological Institutes and foreign Universities and Research Organizations.

5. Faculty Development:

- To get the faculty updated with the current technological changes of the industry and to undergo certification programs.
- Encourage to attend and organize FDPs/Short Term Courses.

6. Student Participation:

- Motivate students to participate in coding competitions and Hackathons.
- Provide good academic ambience and support for co-curricular & extra-curricular activities.
- Increase student participation in national & regional programs and conferences.

6. HUMANITIES & BASIC SCIENCES DEPARTMENT

Strategic plan

1. Enhancing Graduate Employability

- ❖ English labs have been modernized in order to enhance good communication, learning and pronunciation skills to meet the demands of current requirements in employability.
- ❖ To meet the global demand, various online courses and self-learning courses have been introduced and will be continuously updated according to the need.
- ❖ English club activities are regularly conducted for students to overcome their hesitancy to speak.
- ❖ In the current times, as there is huge demand in software field, students are provided with platforms like Codetantra, Hebion, Hawkathon to improve programming skills.

2. Faculty Retention Programs

- ❖ Faculty ratification will be issued very often for the advancement in the career.
- ❖ Eligible faculty will be promoted to the higher positions.

3. Faculty Development Program (FDP)

- ❖ To enhance the teaching-learning process and sharing of knowledge, faculties are constantly encouraged to attend and organize FDP's within and outside the institution.
- ❖ Faculty induction programme is made mandatory for newly appointed faculty.

4. R & D Activities

- ❖ Apart from academics, faculties are encouraged to involve in research activities to meet society demands.
- ❖ To encourage the faculty to publish research papers in standard journals and are given incentives
- ❖ Faculties are advised to enroll as research guides in the universities.
- ❖ Faculties are constantly motivated to apply for funded research projects.

5. Student Participation

- ❖ To understand the universal human values, students are mandated to participate in community service activities.
- ❖ For maintaining the physical fitness, students are mandated to participate in sports and games.
- ❖ To explore the hidden talent among students they are encouraged to participate in co- curricular and extra-curricular activities.
- ❖ To enhance the logical, reasoning abilities and general awareness, various events like Brain Wreck, Rhetoric, Essay Writing, Elocution and Quiz competitions are regularly conducted.

PART III - STRATEGY IMPLEMENTATION AND MONITORING

All the independent committees/cells formed by the principal and departments will be periodically monitor the progress of the implementation of strategic plan by the principal. If the implementation evaluation indicators show that the progress is not up to the mark or it is not going in the correct direction, then the committee will suggest corrective steps and has to be followed by the implementation team. Monitoring is an important and essential aspect of the strategic plan. The evaluation committee will prepare a comprehensive report and submit to the Governing Body through principal. Implementation team may not be a part of Evaluation committee. The outcomes of the whole strategic plan will be reviewed by principal.

Implementation & Monitoring at Institutional & Department Level

TARGET	ROLES
Teaching learning Process	Principal, HODs, Faculty and Staff
Research Development Activities	Principal, Research and Development cell, HOD and Faculty
Infrastructure development and learning resources	Governing Council, Chairman, Principal,
Training and Placement	Principal, Training and Placement officer, HoDs, Professor In-charge of each dept. and team of Training & Placement.
Faculty and Staff empowerment strategies	Governing Council, Chairman, Principal, HODs, Faculty
Student Participation	Principal, HoDs, Dean ,Professor & Faculty Coordinator & Student Co-coordinators