AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY



A NAAC A+ Accredited institution, Approved by AICTE, Permanently affiliated to JNTU-GV

Tamaram, Makavarapalem, Narsipatnam, Anakapalle dist., AP-531113

STRATEGIC PLAN

2022-2027

The following are the milestones for the quality enhancement of the Institution:

- Teaching & learning process
- Curriculum development
- Examination and Evaluation,
- Student's development and participation
- Admission of students.
- Internal Quality Assurance System
- Alumni Interaction

Towards meeting the above milestones, following plan is adopted to implement

S.No	Parameter	Plan
<u>S.No</u>	Parameter Teaching learning Process	 Plan As an affiliated institution, it follows the curriculum offered by the university. In addition, the college academic committee plans for the academics and the preparation of Academic Calendar is planned in order to ensure smooth functioning of teaching. Focus on the implementation of the OBE and choice-based credit system (CBCS). Determine course outcomes (COs) according to Blooms taxonomy Decide on the degree to which the COs correlate with the Pos and PSOs.Take into account industry needs and technological challenges. Use of more teaching aids and adopt more ICT. Development of e- learning resources. Promote research culture & facilities. Provide mentoring and personal support. Follow a transparent and fair feedback system. Conduct training based on need analysis. Evaluation parameters and benchmarking. Continuous assessment to measure outcomes.
		Performance development through credit system.Implementation of best practices .

2.	Internal Quality Assurance System	 Establishment of IQAC done. Framing of Quality Policy & publishing regularly. Formation of Quality Monitoring Committee & functioning. Educating & Training of all employees. Periodic check & guidance quality improvement. Establishment of audit team and process. Audit for remedial measures. Promoting best practices. Annual report preparation & submission.
3.	Leadership and participative nanagement	 Establishment of functional committees and decentralizing the academic, administration and student related committees & responsibilities. Prescribe duties, responsibilities and accountability.
4.	Examination and Evaluation	 The college follows the semester system as per guidelines of the JNTU-GV, VIZIANAGARAM. The college has also supplemented the continuous performance evaluation of the students with two internal examinations per semester based on theory and multiple choice. Assignments, Major / Mini projects, seminars, end of semester examinations etc. with the conventional written examination are part and parcel of the evaluation. The examination reforms are done by the affiliated JNTU-GV at regular intervals. Online computer examinations a standardized, impeccable and frequently updated database of objective questions is used for the conduct of online examinations. Compulsory online courses are introduced to encourage students to choose the course that interests them from the potential courses listed. Compulsory publication of the article in the listed journals and antiplagiarism check of the dissertation for PG students.
5.	Good Governance	 Vision, Mission development & their articulation in every key position. Inclusion of industrialists & academicians in the GB. Evaluation of Institute's performance and benchmarking. Institutional strategic goals setting. Institutional Strategic development plan. Monitoring and Implementing the Quality Management Systems. Following organization structure. Smooth Working of statutory committees. Establishing E governance. Leadership development through decentralization. Establishing internal audit committee. Code of conduct and policy formulation, approval and implementation. Establishing fair and transparent performance appraisal system.
6.	Students levelopment	 Student's representation in various committee and cell.

7.	and participation Admission of students Institute - Organization Interaction	 Participation & Organizing in several competitions. Rewards & recognitions of academic achievers. Budget allocation for student development programmes and activities. Participation in extracurricular activities. Participating in social and welfare activities. The Principal of The College, together with the Admissions Committee, Takes up the Admission Procedure. , Financial Support Is Provided by The Flexible Payment of Fees in Multiple Instalments for Students in Need. Institution Will Be Guiding to Make the Right Choice of Course of Study Combination of Branches at The Time of Admission. 70% of the admissions are made Through the State Government by the Convener of Andhra Pradesh EAPCET. The Remaining 30% of Students are Admitted by the Management as per the Guidelines of APSCHE (Andhra Pradesh State Council for Higher Education). MoUs with skill development organizations. Support for internships, visits, trainings, guest lectures Bringing more experts of the field for seminar, lecture, workshop for technical and entrepreneurship development Providing opportunities for Industry based/sponsored projects. Providing career guidance.
9.	Alumni Interaction	 Strengthen training & placement. Strengthening of Alumni association and active participation Data base creation, Regular interactions with alumni and networking. Recognition of successful alumni. Exploring Contributions. Sponsorships/scholarships/fund generation. Leverage for guest lectures/ internships/ placements/ training/entrepreneurship.
10	Community services and outreach activities	 Dedicated NSS cell. Exclusive NCC Unit. Budget from institution resources. Identify community and social development work. Identify challenges of society for development work. Conducting awareness camps. Conducting blood donation camps.
11	Physical infrastructure	 Infrastructure building development & modification. Smart Class rooms, Tutorials, Seminar halls. Modernization of Laboratory & equipment.

Library infrastructure up gradation
Functional facilities for e-learning
Safety & Security management
• Water facility
Medical facility
 Developing sports (indoor/outdoor) facilities
Plantations
• Rain water harvesting
Renewable Energy usage
• Hygiene, zero plastic & green campus

Avanthi Institute of Engg. & Technolog, Tamaram, Makavarapalem Md., Anakapalli District., Pin: 531

STRATEGIC PLAN IMPLEMENTATION

Plan 1: Enhance the Teaching & Learning Process:

- Adopt Outcome-Based Education (OBE) and Choice-Based Credit System (CBCS): Ensure that the curriculum is structured to meet industry and research standards. Faculty will be trained to implement OBE effectively, and the credit system will be optimized for flexible learning pathways.
- Define and Align Course Outcomes (COs) with Program Outcomes (POs) and Program-Specific Outcomes (PSOs): The institution will map all courses to ensure students acquire necessary skills and knowledge, with periodic assessments to track effectiveness.
- Utilize Modern Teaching Aids and ICT Tools: Classrooms will be equipped with smart boards, digital repositories, and simulation software to enhance interactive learning experiences.
- Develop E-learning Resources: A dedicated online portal will be established, hosting video lectures, assignments, and interactive learning modules to support students' academic progression.
- Encourage Research and Innovation: Faculty and students will be encouraged to undertake research projects, collaborate with industries, and participate in innovation-driven competitions.
- Mentorship and Personal Support: Each student will be assigned a faculty mentor for academic and personal guidance, fostering a nurturing and growth-oriented learning environment.
- Implement a Transparent and Continuous Feedback System: Anonymous student feedback and peer evaluations will be conducted periodically to assess faculty performance and course effectiveness.
- Conduct Training and Faculty Development Programs: Regular workshops and seminars will be held to keep faculty updated on the latest teaching methodologies and technological advancements.
- Regular Assessment and Performance Evaluation: Assessments will be diversified to include online quizzes, open-book exams, and practical assignments that test conceptual clarity and problem-solving skills.
- Best Practices in Teaching: Faculty will adopt experiential learning approaches, including industry visits, case studies, and flipped classrooms, to make learning more engaging and practical.

Plan 2: Strengthen the Internal Quality Assurance System

- 1. Establish and Strengthen the IQAC: The IQAC will monitor academic performance, suggest improvements, and ensure accreditation standards are met.
- 2. Develop and Publish a Comprehensive Quality Policy: Policies on quality enhancement will be made accessible to all stakeholders and reviewed annually.
- 3. Conduct Periodic Quality Audits: Internal and external audits will be performed to evaluate adherence to quality benchmarks and suggest enhancements.
- 4. Promote Benchmarking and Continuous Improvement: Performance indicators will be compared with leading institutions to adopt best practices and improve institutional efficiency.

Plan 3: Promote Leadership & Participative Management

- 1. Decentralized Decision-Making: Different committees will be formed, involving faculty, students, and staff, ensuring inclusivity in decision-making processes.
- 2. Define Responsibilities and Accountability: Clear role definitions and responsibility matrices will be created to enhance institutional governance and performance.

Plan 4: Improve Examination & Evaluation Methods

- 1. Implement Continuous and Comprehensive Evaluation (CCE): A blend of formative and summative assessments will ensure holistic evaluation of student capabilities.
- 2. Introduce Online and AI-based Evaluation Systems: Automated assessment systems will be introduced to ensure transparency and efficiency in grading.
- 3. Encourage Research and Paper Publications for Postgraduates: Postgraduate students will be required to publish in indexed journals as part of their academic requirements.

Plan 5: Ensure Good Governance

- 1. Define Institutional Vision and Mission Clearly: All institutional goals will be aligned with national and global educational trends.
- 2. Strengthen Governing Bodies with Experts: Industry leaders and academicians will be included in decision-making bodies to bring external expertise.

Plan 6: Support Student Development & Participation

1. Expand Training and Placement Activities: Career counseling and industry readiness programs will be enhanced to improve student employability.

- 2. Increase Student Participation in Committees and Clubs: Students will be encouraged to take leadership roles in clubs and professional bodies.
- 3. Allocate Dedicated Budget for Student Initiatives: Financial support will be provided for student-led initiatives, projects, and entrepreneurship activities.

Plan 7: Optimize the Admission Process

- 1. Ensure Transparent and Merit-Based Admission: A clear, unbiased selection process will be implemented to ensure diversity and inclusion.
- 2. Offer Financial Aid and Scholarships: Various scholarships and financial aid programs will be introduced to support economically disadvantaged students.

Plan 8: Strengthen Industry-Institute Interaction

- 1. Establish Strong MoUs with Leading Industries: Industry collaborations will be strengthened through partnerships, internships, and live projects.
- 2. Encourage Industry-Sponsored Projects: Industry representatives will be involved in curriculum design and mentorship of student projects.

Plan 9: Enhance Alumni Engagement

- 1. Strengthen Alumni Networks: Regular alumni meets and networking events will be organized to leverage alumni expertise and resources.
- 2. Encourage Alumni Contributions and Collaborations: Alumni will be encouraged to contribute through scholarships, mentorship, and guest lectures.

Plan 10: Expand Community Service & Outreach

- 1. Increase NSS and NCC Activities: Social responsibility initiatives will be expanded to instil a culture of service among students.
- 2. Allocate Funds for Social Welfare Projects: Institutional funds will be dedicated to supporting social welfare programs and community development projects.

Plan 11: Develop & Maintain Physical Infrastructure

- 1. Upgrade Labs, Libraries, and Classrooms: Investment in state-of-the-art infrastructure to support advanced learning methodologies.
- 2. Enhance Safety, Security, and Environmental Sustainability: Green campus initiatives, waste management, and campus security enhancements will be prioritized.

STRATEGIC GOALS FOR INSTITUTIONAL DEVELOPMENT AND LEADERSHIP ENHANCEMENT

Goal 1: Achieving Autonomy Status by the 2024-25 Academic Year

The primary goal for Avanthi Institute of Engineering & Technology is to confer autonomy status by the 2024-25 academic year. This milestone will grant the college greater flexibility in academic and administrative functions, allowing for more dynamic curriculum development, innovative teaching methodologies, and enhanced industry collaboration. To achieve this goal, the following steps will be undertaken:

- 1. **Preparation of Documentation and Accreditation Process**: The college will prepare and submit the necessary documentation to the relevant accreditation bodies and educational authorities. This will include demonstrating the college's readiness in terms of infrastructure, faculty quality, student outcomes, and research capabilities, ensuring that it meets all the criteria set forth for granting autonomy.
- 2. **Curriculum Revisions and Innovations**: The college will present a proposal to the accrediting bodies showcasing its intent to revise and update the curriculum. This will focus on aligning academic programs with current industry trends and emerging technologies, and will emphasize the flexibility needed for a more dynamic educational experience.
- 3. **Institutional Strengthening**: The college will work on strengthening its administrative processes and governance structures to ensure that it can handle the additional responsibilities that come with autonomy. This will include improving faculty recruitment processes, enhancing student support services, and setting up mechanisms for faster decision-making.
- 4. **Industry and Academic Partnerships**: Strengthening collaborations with industry and academic partners will be emphasized as part of the autonomy application process. By showcasing these partnerships, the college will demonstrate its commitment to offering practical, industry-aligned education and contributing to research and innovation.
- 5. **Continuous Monitoring and Improvement**: A dedicated team will be set up to monitor the progress of achieving autonomy and ensure that all aspects of the application process are handled efficiently. This will include regular evaluations and improvements in key areas such as teaching, research, and student support.

By the end of the 2024-25 academic year, Avanthi Institute of Engineering & Technology aims to secure autonomy status, positioning itself as an institution capable of providing a more innovative, industry-relevant, and student-centric educational experience.

Goal 2: Strengthening and Widening the NCC Unit

The National Cadet Corps (NCC) plays a significant role in the holistic development of students, instilling qualities such as discipline, leadership, and a sense of responsibility. At Avanthi Institute of Engineering & Technology, the primary goal is to strengthen and broaden the existing NCC unit by including girls and expanding its reach within the college community. This initiative aims to provide equal opportunities for all students, ensuring that both male and female students have the chance to benefit from the enriching experience NCC offers.

In this effort, the following measures will be taken:

- 1. **Inclusion of Female Cadets**: Currently, the college has a predominantly male-dominated NCC unit. The goal is to create an inclusive environment by encouraging and recruiting more female cadets to join the unit. This will help in bridging gender gaps, fostering inclusivity, and providing an equal platform for female students to develop leadership and organizational skills.
- 2. NCC Lieutenant Commissioning: To further boost the stature of the NCC unit and provide strong leadership, one of the faculty members will be appointed and commissioned as an NCC Lieutenant. This prestigious role will involve serving as a mentor to the cadets, ensuring the unit's activities are properly managed, and strengthening the connection between the college and the national NCC network. The faculty member chosen will undergo necessary training and certification to fulfill this role effectively.
- 3. Leadership Development: Both male and female cadets will be given opportunities to participate in leadership development programs, aimed at enhancing their decision-making, team-building, and public-speaking skills. By creating a structured environment, the NCC unit will serve as a training ground for future leaders, preparing them for various roles in their professional lives.
- 4. Participation in National and Regional Activities: Increased female participation will allow the college to showcase the diversity and strength of its NCC unit in national and regional events. The NCC cadets will represent the college in various camps, parades, and social welfare activities, thereby enhancing the college's visibility and reinforcing its commitment to national service.

A well-established Research and Development (R&D) Cell is essential for promoting innovation, improving academic excellence, and supporting the advancement of knowledge. At Avanthi Institute of Engineering and Technology the focus is to strengthen the existing R&D Cell by introducing more structured initiatives, encouraging faculty and student participation, and fostering a culture of research-driven innovation. This goal aims to create an environment where both faculty and students can engage in meaningful research activities that have practical applications.

The following steps will be taken to realize this goal:

- 1. **Improved Infrastructure and Facilities**: Strengthening the R&D Cell will involve upgrading the existing infrastructure, including providing access to state-of-the-art laboratories, advanced software tools, and equipment. The goal is to ensure that the college has the necessary resources to conduct cutting-edge research in various fields of engineering and technology.
- 2. Collaborations with Industry and Academia: Establishing strong collaborations with industries and academic institutions will be key to expanding the research capabilities of the R&D Cell. By partnering with leading organizations, the college can offer students and faculty the opportunity to work on real-world problems, ensuring that research outputs have practical significance and impact.
- 3. **Research Funding and Grants**: The R&D Cell will actively seek research grants from governmental and non-governmental bodies. By applying for funding, the cell can support student and faculty research projects that address current technological challenges. This funding will also be used to organize workshops, seminars, and conferences related to emerging trends in technology and innovation.
- 4. Promoting Student Participation: The R&D Cell will engage students in ongoing research projects, encouraging them to take part in the development of new technologies and solutions. Special emphasis will be placed on projects that have commercial viability or can be used to address societal challenges, such as sustainable energy, healthcare technologies, and communication systems.
- 5. Faculty Development and Training: Providing faculty members with opportunities for professional development in research will help them stay up-to-date with current trends and methodologies. This will also encourage them to publish research papers in reputed journals and present their work at national and international conferences, enhancing the college's academic reputation.

- 6. Creating a Culture of Innovation: The R&D Cell will also work on creating a culture of innovation within the college. This involves organizing hackathons, innovation challenges, and idea-generation workshops, which will provide students and faculty with platforms to showcase their ideas and prototypes. The goal is to develop a mindset where research is seen as a tool for solving real-world problems and driving technological advancements.
- 7. **Recognizing and Rewarding Research Excellence**: To encourage sustained research efforts, the R&D Cell will implement a system of rewards and recognition for outstanding research contributions. This could include awards for the best research papers, innovative projects, and collaborative efforts that result in tangible outcomes, whether in terms of patents, publications, or products.
- 8. **Strengthening the Research Output**: The ultimate aim of this goal is to increase the quantity and quality of research output from the college. By focusing on interdisciplinary research, the R&D Cell will create an environment that nurtures innovation across various domains, such as electrical engineering, computer science, mechanical engineering, and electronics.
- 9. Industry-Based Projects: Collaborating with industries for project-based research will ensure that the research conducted is relevant and impactful. Students and faculty will be encouraged to work on industry-sponsored projects that not only contribute to academic knowledge but also provide practical solutions to real-world challenges.
- 10. **International Research Collaborations**: To position Avanthi Institute of Engineering & Technology as a leader in research and development, the R&D Cell will explore opportunities for international collaboration. This will open up avenues for global partnerships, joint research programs, and student exchange initiatives, ensuring that the college is at the forefront of technological advancements and innovations.