



# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY

**An Autonomous Institution**

(Accredited by NAAC, Approved by AICTE New Delhi & Permanently Affiliated to JNTUH)  
Aziz Nagar Gate, C.B. Post, Hyderabad - 500 075

## **STRATEGIC PLAN**

**2015-2020**



**JANUARY - 2015**

## **1. SWOC Analysis**

## **2. Strategic Goals :Key Parameter Indicators derived from Vision & Mission**

- Facilitating high-quality knowledge
- Development of competencies and skills
- Enabling to handle the technological challenges
- Fostering human values and all-round development
- The quality of courses and its sustainability
- Promote R&D and Consultancy through strong Industry Institute Interaction to address the societal problems
- Innovation & Entrepreneurship
- Create good infrastructural facilities for optimization of knowledge acquisition
- Nurture the students holistically and make them competent to excel in the global scenario

## **3. Proposed Strategic Plan**

## **4. Actionable tasks to implement the Strategic Plan**

## **1. SWOC ANALYSIS**

### **Strengths:**

1. Working towards the Vision & Mission of the Institute
2. Qualified and Experienced faculty and staff
3. Well Equipped Laboratories and infrastructure
4. Around 40% of faculty registered for Ph.D
5. The senior faculty pursuing solutions to critical research, have applied for patents
6. Guidance in elite research projects granted from DST,UGC,DRDO
7. Around 30+ MoU's in all departments with industries
8. Good academic culture, ambience and working environment leading to high students and faculty satisfaction.
9. Management supports faculty qualifications up gradation
10. Students are given awards and rewards for merit achievement
11. Mentoring System with regular monitoring of attendance of students and their performance in examinations.
12. Holistic development of Students
13. Institute location is accessible to all the Stakeholders

### **Weaknesses:**

1. Getting good senior professors with research aptitude
2. MoU's with core companies
3. Sanctioning of grants from DST/UGC for private Institutions
4. Less number of faculty with Ph.D.
5. R & D and consultancy activities are limited and research culture needs to be strengthened.

### **Opportunities**

1. Continuous efforts from departments for applying research projects from various agencies.
2. The institution plans to collaborate and interact with research laboratories, institutes and industry for research activities to enter formal MoUs.
3. Establishment of research centers in emerging areas in all departments.
4. To provide seed-money to faculty for research in all departments of the institute to undertake inter-disciplinary research, the e-library facility available serves the cause.
5. Measures to be taken by institution to facilitate smooth progress & implementation of research schemes and projects by providing support in terms of technology and information.
6. The efforts for Consultancy Projects will be placed vigorously for improving Technical Skills and Re-sharpening Knowledge.
7. As many faculty members registered for Ph.D the scope for research activity increases further.

8. With the addition of new infrastructure sanctioned by AICTE through MODROBS, The research can be well organized and show cased through research center sanctioned by JNTUH.
9. Autonomy would enable the Institute to address the shortcomings under affiliationsystem.
10. Leveraging locational advantage to network with institutes of higher learning, industry and research organisations for consultancy, collaborative R & D Projects, sponsored research, academic interaction, student internships etc.
11. Use its alumni base for institutional growth.

### **Challenges**

1. Establishing high end labs for the courses with the help of industry support.
2. To recruit competent faculty members and Recruitment of all doctorates in the departments.
3. Develop Industry ready courses in curriculum.
4. Bringing good Research Ecosystem in the Institute.
5. Quality of student intake in certain departments due to change in preferences.

## **Proposed Strategic Plan**

### **Vision and Mission of the Institute**

#### **Vision:**

- To develop into a reputed Institution at National and International level in Engineering, Technology and Management by generation and dissemination of knowledge through intellectual, cultural and ethical efforts with human values.
- To foster Scientific Temper in promoting the World class professional and technical expertise.

#### **Mission:**

- To create state of art infrastructural facilities for optimization of knowledge acquisition
- To nurture the students holistically and make them competent to excel in the global scenario
- To promote R&D and Consultancy through strong Industry Institute Interaction to address the societal problem

### **Quality Policy**

- To ensure high standards to educate, enrich and excel in imparting professional education, by top-quality-faculty who endeavors to mould the students into socially responsible professionals through creative team-work, innovation and research.

### **Key Parameter Indicators derived from Vision & Mission**

1. Facilitating high-quality knowledge
2. Development of competencies and skills
3. Enabling to handle the technological challenges
4. Fostering human values and all-round development

5. Curriculum beneficial to the students in terms of Internships/Projects (Fast Track Curriculum)
6. Promote R&D and Consultancy through strong Industry Institute Interaction to address the societal problems.
7. Create good infrastructural facilities for optimization of knowledge acquisition.
8. Nurture the students holistically and make them competent to excel in the global scenario.

## **Actionable tasks to implement the Strategic Plan**

### **Targets & Strategies**

#### **Strategies to achieve Vision & Mission :**

1. To establish better academic practices and procedures
2. To be a choice for good quality students and competent faculty
3. To nurture the students holistically and make them competent to excel in the global scenario
4. To produce technically competent and ethically strong graduates
5. To encourage Research & Consultancy
6. To develop a smart campus

#### **1. To establish better academic practices and procedures**

- Revision of curriculum & academic regulations
- Introduction of courses as per industry trends
- Introduction of more number of professional electives
- Introduction of open electives
- Fast Track Curriculum
- Introduction of industry supported electives
- Encouraging for online certification courses
- Provision for Industry internships
- Introduction of Skill Development Courses.
- Introduction of structured co-curricular and extra-curricular activities
- Introduction of courses on life skills
- Introduction of courses to promote entrepreneurial skills

#### **Revision of examination regulations & procedures:**

1. More emphasis on continuous learning and assessment.
2. Introduction of Bloom's Taxonomy in learning and assessment.
3. Examination reforms.
4. Early declaration of results on completion of exams.

#### **Introduction of best practices**

1. Improving course delivery to meet learning and assessment levels of Bloom's Taxonomy
2. Implementation of Outcome Based Education (OBE)
3. Strengthening Industry Institute Interaction

#### **MoUs with industries and research institutions for:**

1. Consultancy
2. Research
3. Faculty training and encouraging for attending conferences and FDP'S

#### **Self and Collaborative Learning Initiatives:**

1. Online certification courses.
2. Internships.
3. Peer Group Learning

### **2. To be a choice for good quality students and competent faculty**

- Recruitment of good quality faculty members
- Innovations in Teaching for better understandability
- Implementation of IQAC goals and strategies for overall quality improvement of the Institute
- ICT enabled facilities in the class room
- Good Infrastructural facilities
- Good quality placements
- NBA reaccreditation/Civil Department NBA Accreditation
- NAAC 2<sup>nd</sup> Cycle
- Autonomous Renewal

### **3. To nurture the students holistically and make them competent to excel in the global scenario**

- Strengthening of Professional societies and club activities
- Student Clubs for overall development
- Participation in Hackathons and Inter Institute events
- Introduction of Skill Development Courses from 1st year onwards
- Introduction of courses on life skills
- Introduction of structured co-curricular and extra-curricular activities
- Encourage students to participate in Games, Sports and cultural activities
- Introduction of courses to promote entrepreneurial skills
- Introduction of Technical Skills training during 3<sup>rd</sup> year
- Introduction of online courses
- Introduction of industry oriented Add-on courses
- Encourage participation of students in voluntary and extension activities

#### **4.To produce technically competent and ethically strong graduates**

- To introduce weekly sessions on human values and professional ethics
- Arranging technical Expert sessions
- Conducting National & International Conferences
- Encouraging students to write and guiding them to publish in good journals
- Encouraging them to do small projects in 2<sup>nd</sup> year B.Tech
- Applying for student patents

#### **5.To encourage Research & Consultancy**

- Constitution of Research Advisory Board
- Monitoring the progress of the faculty pursuing Doctoral programme
- Training programmes on writing research papers
- Awareness programmes on funding agencies

- Training programmes on writing proposals
- Encourage faculty to publish papers in indexed journals
- Encourage faculty with Ph.D to submit project proposals for funding
- Financial support for research publications
- Establish Centres of Excellence with industry collaboration
- Department wise research groups to strengthen research
- Establish Centres of Excellence with industry collaboration

## **6. To develop a smart campus**

- Wifi enabled campus
- Desktop & Laptop facility to all faculty members
- Introduction to Biometric Attendance to faculty and staff
- Establishment of Campus surveillance System
- Plastic free campus
- Facilities for alternative sources of energy and Energy Conservation (Solar Energy/use of LED bulbs,power efficient equipment and Wheeling to the Grid)
- Landscaping with trees and plan

## **IQAC Goals and Functions**

### **Goals**

- To develop a quality system for conscious, consistent and catalytic programmed action to improve the academic and administrative performance of the College
- To promote measures for institutional functioning towards quality enhancement through internationalization of quality culture and institutionalization of best practices

### **Function**

- Development and application of quality benchmarks/parameters for the various academic and administrative activities of the Colleges.
- Facilitating the creation of a learner-centric environment conducive for quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process.
- Arrangement for feedback responses from students, parents and other stakeholders on quality related institutional processes and Curriculum development.
- Dissemination of information on the various quality parameters of higher education.
- Organization of inter and intra institutional workshops, seminars on quality related themes and promotion of quality circles.
- Documentation of the various programmes /activities of the College, leading to quality improvement.
- Acting as a nodal agency of the college for coordinating quality-related activities, including adoption and dissemination of good practices.
- Development and maintenance of institutional database through MIS for the purpose of maintaining / enhancing the institutional quality.
- Development of the Annual Quality Assurance Report (AQAR) of the College based on the quality parameters/assessment criteria developed by the relevant quality assurance body (like NAAC, NBA, AB) in the prescribed format.
- Participation in various rankings NIRF/ARIIA and other rankings

### **Teaching-Learning**

IQAC is formed with senior academicians. IQAC conducts review meetings every month with every department and assess the progress in academics,

- IQAC conducts Periodically FDP's on teaching methodologies, communication skills and recent transformations in engineering education
- It monitors the teaching abilities of faculty and take measures to improve teaching skills.
- Collaborations with IUCEE in teaching and learning practices to improve quality of teaching.
- Implementation of Teaching / Learning process using Multimedia lectures, CBT lectures, NPTEL video lectures, IUCEE webinars etc.
- Faculty Orientation Programmes are organized in the beginning of every academic year in basic pedagogy
- Faculty certification program training by International Society for Engineering Education
- Faculty gave lectures in GENTLE: Global Education network for teaching & learning.
- Faculty course content development : Faculty are involved in course content development in collaboration with IIIT enhance education.

- Guest lecturers in various domains by eminent academicians, Technologists, researchers etc.
- STEM (Science, Technology, Engineering & Mathematics) based training to meet global needs
- Implementation of Project based Learning by faculty in the departments.
- Faculty self-appraisal done at the end of every academic year.
- Incentives to faculty for research, research publications and qualification up gradation.
- To nurture and fortify the skills of the students and faculty all the departments has Departmental Associations.
- Departmental Associations and clubs are functioning along with various National and International Professional Bodies like ISTE, ACM, CSI and IETE Institutional and Students Chapters.
- Publication of College Magazine Cartwheel.
- It monitors the faculty to use latest teaching methodologies in the class room.
- It encourages staff members to publish papers in reputed Journals.
- It help faculty members to write research proposals to UGC, DST, AICTE and ISTE.
- Development of Quality benchmark / parameters for various academic and administrative activities of the institute.
- Organization of workshops, seminars and quality related themes.
- Documentation of various programmes/ activities leading to quality improvement.
- Conducting internal quality, Academic quality audit periodically.
- In addition self-assessment report from faculty is collected and analyzed.
- Students Feedback is collected and analyzed to improve the quality of teaching and necessary action taken on the faculty with low feedback.

## **Prospective Plan**

The objective consider under IQAC center of excellence are as follows

- Provide Stake holders satisfaction.
- Maintain and upgrade standards.
- Bringing accountability in every aspects of its functioning.
- Improve working conditions and raise motivation level of its teaching.
- To create an image and visibility to attract best students or best stakeholders.
- Bring consistency in its functioning so that quality becomes integral part of our college.
- Emphasis on curriculum aspects.
- Teaching learning and its evaluation.

Maintaining Of Quality As Per The Parameters Prescribed

- Develop and deploy action plans for effective implementation of the curriculum
  - Interact with beneficiaries such as Industry, research bodies and the university In effective preparation of the curriculum
  - Analyze/ ensure that the stated objectives of curriculum are achieved in the course of implementation
- Area Of Priorities
- Enrichment Courses
  - Progression to higher studies
  - Improved potential for employability

Students And Alumni Contribute To The Effective Functioning Of The IQAC

- The students play the role of active learners who help in creating systems according to their needs and requirements.
- They make suggestions regarding improvement in teaching-learning process, examination system,
- Improve in infrastructural facilities like library services, Internet, canteen services etc.
- The student members of Class Monitoring Committees offer their observations / views for enhancing teaching – learning process and conduct of various co-curricular / extra-curricular activities in the institute

- Alumni are very active and productive in analyzing the requirements of external environment and attributes of the other colleagues and communicating the remedial measures to be taken up at institution level.
- Alumni are sensitizing the students by sharing their views in several interactive sessions with students and staff. Etc, every year.

Framework

Academic System

- IQAC is the main academic body to monitor and control all the academic related activities, including the preparation of academic calendar.
- It is also responsible for faculty training in the usage of teaching tools in multimedia and the evaluation of student feedback, peer evaluation and effective counseling.

### **Administrative System**

By forming various administrative related Committees with defined duties and responsibilities of various activities. The student representation in college committees will strengthen the administrative system. Internal and external audit system for college accounts along with the computerization of all office functions.

Professional Society Activities

Head of the Department must ensure of a minimum of 20% of the students should enroll themselves as members of international professional societies.

Maintain record of student memberships with membership card as proof.

### **Nature of activities**

The professional societies are to conduct student programs to include training, specialized subject orientation, guest lectures, sponsored programmes of local / state / national level activities in collaboration with the central agency. The activities should be conducted on regular basis and proceedings should be recorded.

Periodicity

**Departmental Clubs:** All the students of the department should become members of this association. Student members from other departments can also be co-opted in this association. The body will decide the membership fees to be collected. And executive committee will be elected by the students. A Professor in-charge will be a compulsory member for the executive body. Students of second, third and fourth year are eligible to be members of this association. Various activities like seminars, group discussions, quizzes, technical symposiums etc should be conducted once in every fortnight for two hours from 3:10 to 5:00 PM regularly. Professor in-charge will be responsible for recording of all these events / activities.

**Impact:** Students are expected to improve professional, organizational, technical skills and knowledge.

- Interaction with National and International subject experts.
- Interaction with student colleagues.

*Activity Record (Departmental Association)*

- Membership
- List of events conducted
- Correspondence with experts
- Expert lecturer / photographs / record
- Expert comments record

*Local chapters (ISTE, IEEE & IETE student chapters)*

- Governing regulations of the chapter and the parent body
- Chapter budget and approvals
- Assets record
- Membership
- Donations and contributions
- Activities

- Governing Body Meeting
- Resolutions and Action Plans
- Examinations & Results
- Preparation of Certificates if any
- Assessment Reports & Awards.

**News Letter:** The College news letter must be sent to all Alumni using web and their comments are recorded. Each department should obtain information of students in a proper format. It is HOD's responsibility to issue two news letters from his desk to all students, alumni, Industry departments and dignitaries.

