KESHAV MEMORIAL INSTITUTE OF TECHNOLOGY, NARAYANGUDA, HYDERABAD

Perspective Plan

Innovation Centre for Educational Tools

KMIT has several notable innovations to its credit. We have created the Tessellator (Test and collate) which has radically and dramatically enriched our Teaching learning process. Other extremely useful products we have built are **"**Sanjaya**"** app and the **"**Netra**"** app for parent and student awareness and participation. Several more products are being planned to assist and enable teaching and learning process.

One of the tools being planned is for customized education for every student. We wish to use technology to ensure that we move away from **"**one size fits all**"** philosophy of education and ensure that we created a learning environment where in every student will learn based on the students individual capabilities.

Innovation Centre for Other Products

The students and faculty of KMIT have already started creating products in the area of robotics, agriculture, transport training, machine learning etc. A new building with the adequate infrastructure and seed finding will be created on the campus. KMIT has already started build a strong base for next generation product development by imparting education using SONET (School of New and Emerging Technologies). We wish to encourage students and faculty to build new products based on Blockchain, BigData, Machine Learning, Fog computing, Internet of Things-, Full stack etc. The preliminary base for these technologies is already getting established using the SONET program.

Research and Paper Publication

KMIT's focus has always been towards innovative product creation rather than mere paper publication. Our**"** Tesselllator**"** and **"**Sanjaya**"** have received large publicity and will soon be implemented at other campuses. However we recognize that we also have to encourage our faculty and students to start publishing papers describing the architecture and innovations in these products. As mentioned before, we believe that this ideology of create, implement and then publish is the correct policy to follow and will guide our research process. We have never espoused the **"**publish or perish**"** ideology. In our opinion this **"**publish for sake of publish**"** philosophy is behind India's relative poor performance in the area of product innovation and research.

Online Education

We believe that today colleges and universities have a responsibility to support their alumni even after they graduate. The technology landscape is fast changing. New technology is entering the market every day. Our alumni of working professional will need to stay abreast of these developments all the time. We already have a platform called **"**Telecsope**"** which is used for education at home. We will start using this platform to offer courses on the latest technologies not only to our alumni but also to software industry as a whole. The programmes will however be paid programs.

Faculty Development Program:

We recognize that in order to deliver KMIT's objective and aspiration we need an extremely competent faculty pool. To fulfil these requirements in the past KMIT used to run 3 M Tech programs. However it was found that the quality of students who joined this program were not up to the mark and hence these programs were closed.

Learning from this experience, KMIT proposed to modify the selection process so that student are preselected using an elaborate vetting process and then given full scholarship (up to Rs.30,000 a month) and enrolled into an M Tech program. The purpose of the M Tech program would be then to import deep technical skills, import the basics of research of developments and innovation also develop then in various teaching learning pedagogical process. These students after passing their M Tech will either be absorbed in our institutions or other colleges.

We strongly believe that this model of faculty development will go a long way in enriching India**'**s Engineering college eco system KMIT aspires to be a thought leader and forerunner in the area of faculty development.

Academics:

Curriculum Development

- Orientation programs for Teachers
- Development of dynamic curriculum with industry input
- Professional skills development in students, staff and Faculty
- Choice and flexibility through elective subjects
- Participation of industry professionals in teaching and advisory boards
- Student-centered learning strategies
- Project and research based teaching-learning processes
- New pedagogy methodology
- Motivating teachers for research

Academic Resources

- Well arranged lab manuals
- Scientifically customized learning resources
- Software's for subject domain learning
- Mini projects for integrating skills
- Interactive expert lectures
- Transparent documents between the teachers and students
- Continuous updates of the manuals and lecture notes
- Compulsory industrial visits/training
- Free educational resources

Academic Monitoring

- Faculty development
- Curriculum Implementation and Assessment Norms
- Continuous assessment
- Result Analysis
- Development and Use of new learning resources
- Students attendance
- Library facilities and e-Resources
- Laboratory standards and Manuals
- Closed Loop system i.e. corrective measures through feedback mechanism.
- Well trained engineering Teachers
- NAAC accreditation & Academic audits
- Mandatory NBA accreditation.

E-Learning

- Students and teachers to benefit.
- Career counseling sessions
- Relay/Video streaming of lectures from digital media Studios.
- Spoken Tutorials and Online freeware
- Involvement of other institutes in the network for digital learning's.
- On-line e-courses for learning & audit courses..
- e-Depository of lectures, presentation, educational videos.

Language Laboratory

- Communication skills development
- Technical & business writing skills development
- Foreign language skills (students and faculty)
- Training for teachers for communication with students

Online Examination

- Online examinations
- Practical questions.
- Question Banks for important subjects
- Balanced and errorless Question Papers.

Human Resource Development:

Faculty Development	Industrial Training for Teachers
• Orientation trainings • Subject/Content update training • Pedagogy -Teaching and Learning processes • Industrial Training • Management skills (Project & Time management) • Hands-on-skills trainings. • Financial management training, • Intellectual Property Management • HR and Interpersonal Communications training • Life Skills, communication skills & Professional Skills • Research Methodology	• Industry Education Partnership Cell • Collaboration with Industrial Organizations • Deputation for industrial training • Latest state-of-the art technology developments • Industrial/Corporate Practices exposure • Latest shop floor practices and Human Resource Management • Confidence and self-Esteem building • Innovation and Research skills
Build Academic Expertise	**Center of Excellence**
• Design and Development of Need based Curricula. • Design and Development of Lab Manuals and other virtual resources. • Academic Audit of the Departments. • Faculty & Student development program. • Conduct of on-line Examinations • Result Processing and analysis • Joint Certification Programs with industry and other organizations. • Consultancy Services • Focus on development of skills and competencies for solving real life problems	• To meet the current needs of industry and Society • Industry-Institute Partnership in Innovation. • Bridging technology gaps between industry and academics. • Improve employability and entrepreneurship. • Hands on Practical Experience of recent technologies practiced in the industry. • Faculty development and enrichment. • Project and research programs. • Setting up CEP Programs. • Revenue generation. • Information Processing and Planning of research • Technology development and Transfer
Skill Development	**Non Teaching Staff Development**
• To become entrepreneurs. • To promote science and technology development • To support 'Start up' for traditional knowledge	• Industrial/Corporate Practices exposure • Hands-on-skills trainings • Deputation for industrial training • Confidence and Self-esteem building • HR and Interpersonal Communications training • Qualification improvement

Administrative Reforms:

e-Governance	
• Cashless transactions • On line affiliation system by JNTUH • Quick and confirmed communication. • Information dissemination (Circulars, Academic Calendar, Curricula, Exam Timetable, Exam Results, Office Orders, etc. available on web site)	• Online information dissemination • Online availability of faculty, staff and students data • On-line registration for courses • Online verification of information • Online feedback • Online attendance system and e-Notice board

Student Centric Activities

State/National Level Student Technical Quiz Competitions	State/ National Level Student Technical Paper Competitions
• Learning peripheral and interdisciplinary knowledge. • Development of broader vision for opportunities. • Knowledge sharing. • Development of confidence and self-esteem . • Grooming to Industry's expectations of professional competence. • Certification and Cash prizes for winning teams and Internships	• Self-study skills • Presentation skills • Information search skills • Research abilities • Knowledge sharing skills • Defense skills
Career Fair	**Talent Search**
• Technical & Vocational education reaching to all students • Dissemination of information to the students • Aptitude Testing • Student Counseling • Information on Industrial Training. • Motivating Lectures • Theme talks :	• Promoting innovation, talent and Creativity programs through project competition. • Encouraging with cash prize for winners • Finishing Schools-Life Skills, communication skills & Professional Skills
Scholarships	**Training and Placement**
• Scholarships to needy and meritorious students. • Social responsibility of Scholars.	• Create platform for placement through campus interview, Pool Campus. • Create equal opportunity for all students and industries. • Finishing Schools, Counseling and Remedial Training
Internship for Students	
• In-plant training /internship all students.	

Promotion of Innovation

Innovation	Networking Resource Centre
• Promote and boost the ability of faculty & students towards innovation • Innovation for product, process or system • IP management and processing fees for patent • Technology Transfer support • Incubation Centre	• Champion Industry & Patron Department connected together for industry interaction. • Promotion of industry meetings and participation in education and Incubation of ideas • Number of ideas incubated

Promotion of Excellence

Best Laboratory Award	Best Industry Institution Interaction Award
• To motivate departments to develop full fledged Laboratories on their own • Requirement: All working laboratory equipments required based on curriculum Development of in-house new experiments Completion of 100% practical's as per curriculum Additional learning material developed etc.	• To encourage & acknowledge departments to develop Interaction with industry. • Requirements: ▪ Industry visits, Percentage students sent for training, Number of industry sponsored projects, Industry training attended by faculty ▪ Number of self organized trainings, Number of

Industry training workshops

Best Department Award

- To Encourage departments to participate in networking activities with other departments
- Requirements:
  - Excellent academic performance,
  - Curriculum development

Best Research Award

- To encourage faculty and students to pursue research in frontier areas of technology
- Requirement:

  Number of papers in high impact Indexed journals

  Maximum number of faculty involved in research

  Maximum amount generated as research funds

Best Innovation Award

- To encourage innovation in all sectors of education fields
- Maximum innovative ideas
- Best Commercialized patents
- Maximum encouragement to students and faculty and staff to innovate

Best Entrepreneurship Award

- To encourage entrepreneurship in graduates in all sectors
- Maximum entrepreneurs

Best Teacher Award

- To Motivate and appreciate teachers for teaching
- Criteria: Innovative teaching methodologies, concern for students, expertise in subject domain and popularization of science and technology