GLOBAL STANDARDS
GIET
AUTONOMOUS INSTITUTION

GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY
APPROVED BY AICTE | NAAC 'A' GRADE | ACCREDITED BY NBA | RECOGNIZED BY UGC, U/Sec. 2(f) & 12(B) | PERMANENT AFFILIATION TO JNTUK, KAKINADA
GIET CAMPUS, CHAITANYA KNOWLEDGE CITY, NH-16, RAJAMAHENDRAVARAM, EAST GODAVARI, A.P.
Phone: +91 7799770536 | email: principal@giet.ac.in | http://www.giet.ac.in

BEST PRACTICES

Best Practice 1

1. **Title: Synthesizing Engineering know-how for empowering society.**

2. **Objectives**
   - ✓ Identifying societal needs
   - ✓ Selection of technology and tools that are apt to opt
   - ✓ Designing solution methodologies for the right problems with right technologies
   - ✓ Implementation & evaluation of solutions

3. **Context**
   - ✓ Engineering students equipped with technology & tools and society at large are seldom on same page. Coming together of both the parties is required to realize the fruits of science & technology for empowering society.
   - ✓ In this context, students of Godavari Institute of Engineering & Technology visit the neighboring communities and interact with people to understand their problems. Later students with their faculty mentors map requirements into specifications

4. **Practice**
   - ✓ The NSS wing of college often goes to villages in neighborhood and educate people on the use of technology for improving their standards of life and enhancing productivity in their respective professions
   - ✓ Projects carried using IoT, Embedded Systems & mechanisms to automate the conventional practices, which otherwise consume lot of resources and time , in the areas like healthcare, energy, safety practices are considered as academic projects and are given credits
   - ✓ IT products both web based & mobile based are developed by faculty and students are used by the neighborhood community

GLOBAL STANDARDS
GIET
AUTONOMOUS INSTITUTION

GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY

APPROVED BY AICTE | NAAC 'A' GRADE | ACCREDITED BY NBA | RECOGNIZED BY UGC, U/Sec. 2(f) & 12(B) | PERMANENT AFFILIATION TO JNTUK, KAKINADA

GIET CAMPUS, CHAITANYA KNOWLEDGE CITY, NH-16, RAJAMAHENDRAVARAM, EAST GODAVARI, A.P.

Phone: +91 7799770536 | email: principal@giet.ac.in | http://www.giet.ac.in

5. **Evidence**
   - ✓ Mobile App developed by our students was used during 'Godavari Pushkaram' and was appreciated by local Municipal administration
   - ✓ Security bangles for women designed & developed by students of the college for women empowerment, was awarded as best innovation in innovation challenge conducted by JNTU
   - ✓ Sanjeev Rath, a mobile stretcher was developed by our students and is being used in KIMS, a thousand bed hospital
   - ✓ Best project award in Microsoft innovation center's (MIC) competitions was bagged by students for the product developed for logistics

6. **Problems encountered & resources required**
   - ✓ Time and resources were spent in developing proofs of concept to convince people in local communities to use technology
   - ✓ Financial problems encountered were addressed by seeking funding from local businesses.

PRINCIPAL
Godavari Institute of
Engineering & Technology
NH-16, Chaitanya Knowledge City
RAJAHMUNDRY

AUTONOMOUS INSTITUTION

GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY

APPROVED BY AICTE | NAAC 'A' GRADE | ACCREDITED BY NBA | RECOGNIZED BY UGC, U/Sec. 2(f) & 12(B) | PERMANENT AFFILIATION TO JNTUK, KAKINADA

GIET CAMPUS, CHAITANYA KNOWLEDGE CITY, NH-16, RAJAMAHENDRAVARAM, EAST GODAVARI, A.P.

Phone: +91 7799770536 | email: principal@giet.ac.in | http://www.giet.ac.in

Best Practices 2

1. **Title: Embracing Active Cooperative Learning (ACL) Practices to achieve Graduate Attributes.**

2. **Aim of GIET:**

   - **GROWTH** - Nurturing growth by laying a strong foundation and enabling empowerment through education by embracing Active Cooperative Learning.
   - **INNOVATION** – Promoting innovation through breakthrough engineering practices using ACL
   - **EXCELLENCE** - Creating an Engineering ecosystem that promotes excellence through ACL.
   - **TRANSFORMATION** – Enabling transformation through cutting-edge research and pioneering change.

3. **Objectives:**
   - ✓ To achieve immersion learning for maximum retention by students
   - ✓ To utilize ICT for maximum impact in minimum amount of time
   - ✓ To impart an attitude of practice in students

4. **Context:**

   A typical Technical Education class-room involves teacher presenting one-way lecture and student following. This practice may leave a weary student wondering without understanding. Average span of attention in psychology of a student is for about 20 minutes and the lecture period is about 50 minutes. Active Cooperative Learning practices engage the students in doing tasks under the supervision of an instructor. This will improve the absorption and retention. ACL is an educational approach that promotes interaction amongst students and shared responsibility for academic achievement. Active Cooperative Learning Practices can achieve Graduate Attributes by shifting from "Teacher Centric" to "Learner Centric" approach. So, combination of several pedagogical teaching methods can meet the needs of changing requirements of the society.

5. **Practice:**
   - ✓ Academic planning through emphasis on discrete lesson plan items to facilitate ACL.
   - ✓ Encourage students to maintain a reflective journal to monitor the academic growth by the student himself/herself.
   - ✓ Self-driven learning practices help students to actively participate continuously and learn by experience.
   - ✓ Students have the flexibility to learn better by Flipped Classroom , Think-Pair-Share, Jig-saw strategy, blended learning by ICT.
   - ✓ To make habit of Growth, Innovation, Excellence, and Transformation (GIET) into both teachers and students.

6. **Evidence of success**
   - ✓ The classes became lively and more and more students attend classes raptly. As a result, class attendance improved.
   - ✓ Student's grasp of the subject matter increased and hence success rate at Summative Evaluation increased.
   - ✓ Students began to express themselves better and hence they fared well at Campus Selection Interviews. Thus, the average starting salary package increased slightly.
   - ✓ Students started owning their work and hence the plagiarism percentage in the projects reduced in general.
   - ✓ Several students started thinking out of the box because of greater depths of understanding. One student is about to file an application for patent of an innovative idea.
   - ✓ Students started thinking of practical, societal problems and hence more entrepreneurial activity is observed in the campus.

7. **Problems encountered and Resources required**
   - ✓ Initial inertia of students and teachers in adopting newer methods of teaching thwarted the progress of ACL at expected rate. This necessitated special counseling on the part of the administrators to nudge the teachers and students in proper direction
   - ✓ The class preparation and planning takes more time and effort. This problem is addressed by empowering faculty members with more efficiency in class preparation by deputing them for FDPs/Training Programs and also by providing Teaching Assistants.

INSTITUTE OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS) RJY.

PRINCIPAL
Godavari Institute of
Engineering & Technology
NH-16, Chaitanya Knowledge City
RAJAHMUNDRY