R.M.K.COLLEGE OF

ENGINEERING AND TECHNOLOGY
(An Autonomous Institution)

R.S.M Nagar, Puduvoyal, Gummidipoondi Taluk, Thiruvallur Dt- 601206.
Approved by AICTE,New Delhi & Affiliated to Anna University, Chennai All the
eligible Programs are accredited by NBA& NAAC with "A" Grade. An ISO 9001-2015
certified Institution

The best practices followed by the institute are:

Best Practices: I

1. **Title of the Practice:**
   PROJECT BASED LEARNING

2. **Objectives of the Practice:**

Project-Based Learning (PBL) is an instructional approach that emphasizes hands-on, collaborative projects to engage students in solving real-world problems. The objectives of Project-Based Learning include:

- Authentic Learning, Inquiry and Investigation, Application of Knowledge and Skills, Collaboration and Communication, Research Skills.

3.The context:

Project-Based Learning (PBL) is an instructional approach that immerses students in hands-on, collaborative projects centered around real-world problems or challenges. This context emphasizes the application of academic knowledge and skills in practical scenarios, providing a dynamic learning experience.

4.The practices:

The seven steps involving in practice, consisting of:

(1) the formulating the expected learning outcome,

(2) understanding the concept of the teaching materials, (3) skills training,

(4) designing the project theme,

(5) making the project proposal,

(6) executing the tasks of projects and

(7) presentation of the project report.

5. Problems Encountered:

Here are common problems encountered in Project-Based Learning:

- Time Management, Student Engagement, Group Dynamics, Assessment Challenges, Student Readiness, Assessment of Individual Contributions.

6. Resources Required:

These resources can be categorized into several key areas:

- Curriculum Design, Professional Development, Technology, Physical resources, Assessment Tools:

7. Evidence and Success:

Here are key indicators and pieces of evidence that illustrate the effectiveness of PBL:

- Students working as a group have improved.
- Project based learning gives our students a better learning experience.
- Number of publications by the students has improved.

Best Practices: II

1. Title of the Practice:

INTEGRATION OF THE INDUSTRY'S INVOLVEMENT IN SHAPING OUR CURRICULUM DESIGN

2. Objectives of the Practice:

The integration of industry involvement in shaping curriculum design is a strategic approach that aims to bridge the gap between academic education and real-world industry needs. This collaboration brings several objectives to the forefront, fostering a more relevant, dynamic, and practical educational experience.

3. The context:

This approach is rooted in educational innovation within the industry, considering current trends in the job market during syllabus development. It offers advanced strategies to foster educational development in alignment with contemporary issues in curriculum trends.

4. The practices:

In the process of curriculum design, we align with specific knowledge partners for each

program. Curriculum delivery is an ongoing and iterative process, requiring annual revisions. Sustaining this cycle demands considerable motivation from both faculty and students. In support of this, industries often organize various motivational programs for the benefit of faculty and students.

5. Problems Encountered:

Establishing long-term collaborations requires sustained effort and commitment from both parties. Changes in leadership, priorities, or economic conditions can jeopardize the continuity of collaborations.

Disputes may arise over the ownership and sharing of intellectual property generated through collaborative projects. Industries may be reluctant to share proprietary information, while academia may seek to publish research findings.

6. Resources Required:

Successful collaboration between the industry and education sector requires careful planning and allocation of resources. It required financial resources, infrastructure and facilities. Industry personnel are required to train the faculties in the Cutting-edge Technologies.

7. Evidence and Success:
- Through various COE's (Centre of Excellence) the students are utilizing the modern infrastructure in lab equipment.
- Through COE's our faculties have been trained and hence they train the students in the recent technologies.
- Students are benefited by incorporating industry in curriculum design and has given them the scope for blended learning.

Best Practices: III

1. Title of the Practice:
CREATING DIGITAL VIDEO CONTENT FOR ONLINE LEARNING

2. Objectives of the Practice:
This facilitates the Students to view the course material when and where they like, on multiple devices. They can rewind, slow down or speed it up – they can revisit particular videos prior to assessments.

3. The context:
Use of multimedia for teaching and learning, particularly digital video, has become ubiquitous in higher education. This is driven in part by the growth in blended pedagogies and an increase in students learning solely or partly online.

4. The practices:
The Various steps involving in practice, consisting of:

Scripts, Storyboards, Learning Nuggets, Colors: Think about text and content colors to make

sure they are easy on the eyes. For example, light Orange text can be hard to read.

5. Problems Encountered:

Technical issues like internet connectivity won't be available in several locations.

6. Resources Required:

Microphones – Audio Recorder.

Screen Recording Software.

Video Editing Software

7. Evidence and Success:

- Video based lectures allow our students to learn at their own pace.
- If any student has missed the class they can still learn from the video lectures uploaded on our college website.

Best Practices: IV

1. Title of the Practice:

IDEA LAB

2.Objectives of the Practice

To provide a platform for the young engineers to foster and inculcate the modern technology usage and make use of the wide spectrum of resources to make innovative projects and prototypes.

3. **The Context**

The context of the IDEA Lab is to give importance to the new age learning experience and product development.

4. The Practices:

As a common facility embedded in the institution, the IDEA Lab will make the engineering graduates more imaginative and creative, besides getting basic training in the 21st century skill like Critical Thinking, Problem Solving, Design thinking, Collaboration, Communication, Lifelong Learning etc.

5. Problems Encountered:

Infrastructure, financial issues, training and education, copyright issues.

6. Resources Required:

Infrastructure facilities, hardware and software resources, training manuals.

7. Evidence of Success
   - IDEA Lab provides a platform for the students to work on interdisciplinary projects.
   - More number of real time projects are evolved
   - It enhances the skills of the students hence they have participated in various project-based contests and hackathons