



**MUTHAYAMMAL ENGINEERING COLLEGE**

(An Autonomous Institution)

(Approved by AICTE, New Delhi, Accredited by NAAC & Affiliated to Anna University)

Rasipuram - 637 408, Namakkal Dist., Tamil Nadu



**INTERNAL QUALITY ASSURANCE CELL**

**INNOVATIVE PRACTICES**

**FOR**

**FACULTY**



# MUTHAYAMMAL ENGINEERING COLLEGE

(An Autonomous Institution)

Rasipuram - 637 408, Namakkal Dt., Tamil Nadu

INTERNAL QUALITY ASSURANCE CELL



## INNOVATIVE PRACTICES FOR FACULTY (IPF)

- |               |                                                                    |
|---------------|--------------------------------------------------------------------|
| <b>IPF#1</b>  | <b>TASTE</b> : Teacher's Associated Seminar Towards Excellence     |
| <b>IPF#2</b>  | <b>SAFE</b> : Semester - Wise Activities by Faculty for Excellence |
| <b>IPF#3</b>  | <b>MuDiL</b> : MultiDisciplinary Lectures                          |
| <b>IPF#4</b>  | <b>FRP</b> : Faculty Recharge Program                              |
| <b>IPF#5</b>  | <b>OCC</b> : Online Certification Courses                          |
| <b>IPF#6</b>  | <b>FSSA</b> : Faculty Support for Student Activities               |
| <b>IPF#7</b>  | <b>FVI</b> : Faculty Visit to Industries / Institutions            |
| <b>IPF#8</b>  | <b>FGT</b> : Faculty Guest Talk                                    |
| <b>IPF#9</b>  | <b>MVLC</b> : Muthayammal Virtual Learning Centre                  |
| <b>IPF#10</b> | <b>TSIGE</b> : Teachers Support for Idea Generation and Execution  |
| <b>IPF#11</b> | <b>FIRA</b> : Faculty Interaction with Renowned Academicians       |

  
PRINCIPAL,  
MUTHAYAMMAL ENGINEERING COLLEGE  
(AUTONOMOUS)  
RASIPURAM-637 408, NAMAKKAL Dt.  
TAMIL NADU



## **IPF#1: TASTE - Teacher's Associated Seminar Towards Excellence**

Teachers and the Teaching Learning Process are considered to be the vital component in any Academic Institution. In particular, the ability of the Teachers to understand and interpret the concepts to present to the learners is to be given priority. This Seminar (TASTE) will provide an environment to enhance the Teaching Skills of the Teachers to become a Good Teacher.

### **Objectives**

- To enhance the confidence level of the Teachers
- To listen the Senior Professors on Teaching Methodology for Technical Subjects
- To deliver the Lecture to the Peer Group for improving the Teaching ability
- To improve the Presentation Skill of the Faculty Members
- To learn Do's and Don'ts during the Technical Teaching

### **Implementation Strategy**

- Faculty Members are identified to deliver Technical Seminar to the Colleagues
- Monthly Schedule is prepared for Presentation and circulated among Faculty Members
- Seminar Topics are shared with the content of delivery
- Faculty Members are invited to attend the Seminar for enriching their Knowledge
- Record of Seminar with Faculty Attendance is maintained
- Feedback is shared to the Presenter for further improvement, if necessary
- Certificates are provided to the Presenters

### **Outcome of the Practice**

- Quality of Teaching – Learning has enhanced
- Faculty interaction with other Department Colleagues for Multidisciplinary activities are found more
- Presentation Skills of the Faculty Members is enriched

### **Contribution for PO Attainments**

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
√	√	√	√	√	√	√	√	√	√	√	√

## **IPF#2: SAFE - Semester – Wise Activities by Faculty for Excellence**

Faculty Members are encouraged and provided opportunities to enhance their profile in terms of Participation in Workshops, Seminars, FDPs, Online Courses, Interaction with Eminent Professors, Preparation of Learning Material on Advanced Topics, Proposals Submission for Grants, Motivating Students for Paper Presentation/Project/Contest and Publications. In this context, achievable targets in all categories of activities are set in consultation with Faculty Members to focus in a Semester and reviewed at the end of the Semester.

### **Objectives**

- To motivate the Faculty Members to contribute for Academic Excellence
- To enrich their Knowledge in relevant Domain

### **Implementation Strategy**

- Semester-wise Activities by Faculty to be focused
- SAFE Coordinator collects the set targets at the beginning of every Semester
- Department encourages all Faculty Members to contribute
- Faculty Members submit the report at the end of every Semester for review and plan for next Semester
- Each activity is assigned credit points and credit points earned by the Faculty Members are calculated for Future Plan

### **Outcome of the Practice**

- Faculty Members contribution towards Academic Excellence is focused better and improved
- Industry – Academia collaborative activities are enhanced
- Significant improvement in Faculty Publications
- Good number of Paper Presentation/Project/Contest participation by Students

### **Contribution for PO Attainments**

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
√	√	√	√	√	√	√	√	√	√	√	√



### **IPF#3: MuDiL - MultiDisciplinary Lectures**

Need for MultiDisciplinary Learning by the Students have become necessary in the recent years. In this context, MultiDisciplinary Lectures (MuDiL) are planned to have more inter Department Interactions. This activity provides opportunity for the Faculty Members to share their Multidisciplinary Knowledge with Students of various Departments.

#### **Objectives**

- To enhance Inter-Departmental Collaboration among Faculty Members and Students
- To encourage the Faculty Members to focus on Multidisciplinary Project

#### **Implementation Strategy**

- Faculty Members are identified to interact with other Department Students
- Schedule for MultiDisciplinary Lectures is prepared and shared to the Students
- Students are motivated to share their ideas for finding solution for Real Time Problems
- Idea Ambassadors are identified to interact with Peer Group Students in various Programmes
- Collected Ideas are maintained in the Idea Tank to discuss for the feasibility analysis
- MultiDisciplinary Activities like Projects and Paper Presentations are organised

#### **Outcome of the Practice**

- More Multidisciplinary Projects
- Utilization of Inter-Departmental Laboratory resources are improved
- Faculty Members Multi-Domain activities are increased

#### **Contribution for PO Attainments**

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
√	√	√		√	√	√	√	√	√		√

#### **IPF#4: FRP - Faculty Recharge Program**

Faculty Members are to be charged with more Programs for the Continuous Progress in Academic Excellence. The Faculty Members are encouraged to attend the Domain Specific Programs to update their Technical Skills. This supports to understand the Subject concepts in diverse perspective.

##### **Objectives**

- To provide a forum for Faculty Members to become expertise in their domain
- To encourage Faculty Members for more participation

##### **Implementation Strategy**

- Faculty Members visit websites of various Institutions to identify the important programs
- Information about the program including the organizing Institution, Duration, Starting Date, Resource Person and Registration Fees are shared
- Approval is obtained from Principal through HOD for On Duty to attend the Program
- Event Participation Report along with Certificates are submitted to the Department
- Talk is delivered for sharing the Learning to Peer Groups

##### **Outcome of the Practice**

- More No. of Participation by Faculty Members
- Domain Knowledge of the Faculty is enhanced

##### **Contribution for PO Attainments:**

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
√	√	√		√	√	√	√		√		

## **IPF#5: OCC - Online Certification Courses**

Faculty Members are encouraged for the Online Certification Courses like NPTEL, Coursera, Udemy offered by National and International Organizations through Online. Faculty Members register the Course based on their interest to enhance the Technical Knowledge.

### **Objectives**

- To augment the Teaching –Learning Process
- To create an opportunity for the Faculty to listen to National/International Expert Lectures
- To become Expert with sound Technical Knowledge in their Domain

### **Implementation Strategy**

- Faculty Members identify Online Certification Courses of various Institutions/Industries
- Collect the information about the Course including Organization, Duration and Registration Fees
- Permission is obtained from Principal through HOD to attend the Course
- Details of Certificates are submitted to the Department
- Interaction among the Faculty Members are arranged

### **Outcome of the Practice**

- Performance of Faculty Members has improved
- Subject Knowledge of the Faculty enhanced
- More Students are guided in Advanced Domain

### **Contribution for PO Attainments**

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
√	√	√		√	√	√	√		√	√	√



## **IPF#6: FSSA - Faculty Support for Student Activities**

Faculty Members in general motivate and guide the students to participate in various activities like Symposium, Seminars, Workshops, Conferences and Projects. Faculty Members need to follow the Students progress regularly and review the activities. However, the need to motivate all the students to enhance their skills have become important in the recent past. Hence the Faculty Members are assigned with a group of Students to motivate them to take part in the activities and recorded.

### **Objectives**

- To motivate the Students for more participation
- To create a platform for Students to interact with outside world

### **Implementation Strategy**

- Faculty Members visit websites of various Institutions to identify important Programs
- Information about the identified Programs are shared with the Students
- Faculty Members motivate the Students to prepare and participate in the Program
- Faculty Members provide guidance to prepare and win the Prizes
- Faculty Members collect the Certificates and other details of the participation for further support

### **Outcome of the Practice**

- More Participation by Students
- Interest of Students enhanced
- More Prizes are won

### **Contribution for PO Attainments**

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
√	√	√		√	√	√	√	√	√	√	√



## **IPF#7: FVI - Faculty Visit to Industries/Institutions**

Visit by Faculty Members to Industries/Institutions is expected to create better collaboration between Industry and Academia. It provide platform for the Faculty Members for interaction in terms of Curriculum Design, Knowledge Sharing, Facility Utilization, Exposure to Industrial Atmosphere and for subsequent Placement.

### **Objectives**

- To foster the Consultancy Culture in the Institution
- To promote the Intellectual Capability of Faculty Members
- To effectively utilize the expertise for Academic Development

### **Implementation Strategy**

- Industries/Institutions are identified for Faculty Visit
- Permission for Visit to Organization are obtained
- Report on Visit is submitted to the Coordinator
- Faculty Members visited delivers a talk to the Colleagues for Knowledge sharing

### **Outcome of the Practice**

- Created opportunities to work with Industry/Institution for collaboration
- Good No. of Consultancy Projects are carried out
- Knowledge Enrichment in Emerging Technologies of Engineering

### **Contribution for PO Attainments**

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
√	√	√	√	√	√	√					

## **IPF#8: FGT - Faculty Guest Talk**

Faculty Guest Talk provides platform for the Faculty Members to deliver talk in other Organizations. It is expected to enhance the interactions in terms of Academic and Research among the Faculty Members of different Institutions.

### **Objectives**

- To improve the presentation ability of Faculty Members
- To share the expertise to Students and Faculty Members of other Institution

### **Implementation Strategy**

- Interact with other Institutions to deliver the Guest Talk
- Deliver the Talks to the Department Colleagues to receive more inputs to enhance the content to deliver
- Submit the Report and Certificates to the Department

### **Outcome of the Practice**

- Faculty Collaborative works have improved
- Created opportunity to interact with Professors of Reputed Institutions

### **Contribution for PO Attainments**

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
√	√	√		√	√	√			√	√	



## **IPF#9: MVLC- Muthayammal Virtual Learning Centre**

Lectures by Faculty Members and other important Video Contents are maintained in MVLC for effective use by Students and Faculty Members.

### **Objectives**

- To enhance the Subject Knowledge of the Faculty Members
- To access the Subject Materials 24X7 by the Students
- To utilize Multimedia Content for deep understanding of the concepts

### **Implementation Strategy**

- Learning Materials by the Faculty Members are recorded and prepared/maintained in the Centre
- Quality of the Learning Material is reviewed by Designated Authorities
- Learning Materials are made available to the Students

### **Outcome of the Practice**

- Repository for e-content developed by the Faculty Members is enhanced
- Availability of Digital Content for access by Students 24X7 is effectively utilized

### **Contribution for PO Attainments**

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
√	√	√	√	√	√	√	√	√	√		

## **IPF#10: TSIGE - Teachers Support for Idea Generation and Execution**

Students have young and fresh mind to think without borders. Hence, the Faculty Members motivate and encourage them to come out with Innovative Ideas for solving Real Time issues.

### **Objectives**

- To motivate and support the Students to generate Ideas for Solving Real Time Problems
- To analyze the feasibility of executing the Idea as Projects/ Products

### **Implementation Strategy**

- Faculty Members interact with the Students of their Parent Department and other Departments during Multi Disciplinary Lectures (MuDiL)
- Heterogeneous Stream of Students are grouped as a Team
- Students are supported for implementation of the Projects
- Students are encouraged to participate in the Project Contest like Hackathon's
- Students are also supported to File the Patents and Publish Articles

### **Outcome of the Practice**

- Faculty Members Multi-Domain activities are increased
- Domain Knowledge of the Faculty is enhanced

### **Contribution for PO Attainments**

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
√	√	√			√	√	√	√	√	√	



## **IPF#11: FIRA - Faculty Interaction with Renowned Academicians**

Faculty Members interact with the Academicians of IITs/NITs, Universities and Renowned Institutions for Academic and Research Collaborations.

### **Objectives**

- To enhance the Collaboration with Experts
- To utilize the Knowledge and Expertise for individual growth as well as the Department

### **Implementation Strategy**

- Institutions are identified for Faculty Interaction
- Permission are obtained from the Organization for Visit
- MoU's were also signed
- Report of the FIRA is submitted for further activities

### **Outcome of the Practice (Past Three Years)**

- Created opportunities to work with Institution for Collaboration
- Knowledge enrichment in Emerging Technologies were enhanced
- Quality of Publications Presentations are enriched
- 210 Research Publications are Co-Authored
- MoU's Signed with
  - Siemens Centre of Excellence, NIT, Trichy
  - Thakur College of Engineering and Technology, Mumbai
  - Vignan's Institute of Information Technology, Visakhapatnam

### **Contribution for PO Attainments**

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
√	√	√	√	√	√	√		√			