



## **Best Practice: 1**

The first best practice followed during the academic year 2022-23

### **Title of the Practice:**

**Employability Skills enhancement to meet corporate expectations through the Industry Institution interaction**

### **Objectives:**

The objective of this practice is to empower fundamental technical skills in various emerging areas like artificial intelligence, data science, robotics, machine learning, IoT, Block Chain, Big data analytics etc. through industry exposure to students. It is also to transform students into preferable resources for industry and society with appropriate trainings in the fields of Aptitude, Logical thinking, Verbal Ability, Written Communication and Technical Skills.

### **Context:**

Industry-Institute-Interaction provides a platform for both the students as well as faculty members to be aware of industry expectations of skill sets required for students. This enables students to be aware of their skills and provides an opportunity to upgrade them. The institution has signed MOUs with leading companies/industries to facilitate students to undertake various hackathons, bootcamps, ideathons, internships, trainings, industrial visits and workshops for enabling students to become ready for corporate expectations

### **The Practice**

Academic Internships, Industrial visits, hackathons, bootcamps, ideathons, workshops act as a bridge between industry and academia. The institution has signed MOUs with leading companies such as ByteXL, Indo-Euro Synchronization Pvt Ltd, ECM Germany, Idea Labs, Supraja Technologies, Make Skilled Pvt Ltd etc for provides internships, workshops and training programs to all the students.

ARC- Applied Robotics Control Labs cluster initiative under the APSSDC, Government of Andhra Pradesh is giving a unique chance for our college students to understand the industrial concepts.

Applied Robot Control Internship is designed to introduce to students to understand the fields of automation and industrial robotics with a practical approach. The courses were delivered by pioneers in the industry, faculties from prestigious German Universities (through webinars) with the help of the faculty members from the convergence centres.

In collaboration with Indo-Euro Synchronization Pvt Ltd ARC Certification on Emerging Technologies online and offline based International Internship was executed at our ARC Centre from 29/08/2022 to 29/11/2022. The course is delivered by German & Industry Experts and the various technologies tracks include Mechatronics, Robotics & Automation, Ros Programming & Application, and PLC- Project based Learning with Robots. 116 students participated in this activity and gained knowledge on collaborative robotics applications and industrial robotics.

Training of faculty members was also held both online and onsite at the labs of APS ECM, Aachen, Germany. Online Training involved webinar sessions and training workshop in Germany helped them to understand the robots while delivering the course to the students.

The ARC Skill Centre benefited 300 students and all students have successfully completed their internship.

Our institution signed MOU with “BYTEXL” for providing campus recruitment training from II year- IV year students. Highly experienced and capable team of trainers impart knowledge on Quantitative Aptitude, Logical Reasoning, Verbal Ability and Soft Skills. Students are trained on Technical Coding as part of Regular Curriculum in CRT classes.

With a vision to enhance employability skills among students our institution collaborated with Idea Labs and organized Design Thinking (Ideathon) program from 24-1-2023 to 28-1-2023. All III & IV B.Tech CSE, IT, DS students has actively participated in this Ideathon. All the students worked for 5 days to develop and demonstrate their Project/Model/idea, and the model developed is evaluated by external jury members.

In collaboration with Make Skilled Pvt. Ltd all the departments has taken an initiative to provide awareness and hands-on training to all students through various Internship programs. Two week Internship on IOT was organized from 29/8/2022 to 14/9/2022, two week Internship on Artificial Intelligence was held from 29/8/2022 to 14/9/2022 and Robotics Bootcamp program was organized from 07-09-2022 to 11-09-2022.

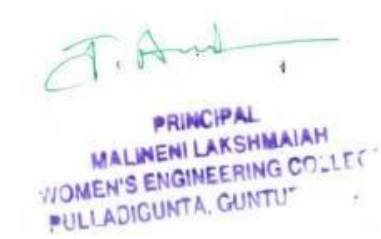
In association with Brain OVision 5 Day Bootcamp and Hackathon program was organized from 07-09-2022 to 11-09-2022 and 5 Day workshop on Data Science using Phyton was organized from 27-03-2023 to 02-04-2023.

**Problems encountered and Resources Required:**

Pre placement training is a high priority practice in MLWEC, still it faces certain problems which the management strives to solve them. Students are hesitating to take part in activities because of lack of confidence and dare. They also feel the burden of academics to participate in activities. Some of the students also lack commitment and out tracked, hence a close monitoring and mentoring by faculty is required. Mentoring and counseling system is employed by training the faculty on counseling and handling the students.

**Evidence of Success:**

Students have utilized the industrial trainings and internships to the core and have shown a tremendous improvement in the subject knowledge on latest trends and also in placements of MLWEC



Handwritten signature in green ink above a blue official stamp. The stamp text reads: PRINCIPAL, MALINENI LAKSHMAIAH, WOMEN'S ENGINEERING COLLEGE, PULLADIGUNTA, GUNTUR.



## **Best Practice: 2**

The second best practice followed during the academic year 2022-23

### **Title of the Practice:**

**To Inculcate a culture of product innovation a mindset of problem solving and social responsibility through the development of various innovative projects useful for solving pressing problems of society through Ideathons & Hackathons**

### **Objectives:**

To inculcate social responsibility in students through various innovative projects useful for the society through Engineering Knowledge. This helped the students in improving their responsibility towards social needs. Students worked on various society problems and think about viable solutions to their problem. The main objective is to develop innovative solutions to various social problems by applying engineering knowledge.

### **The Context:**

Students are expected to study on various society problems and are expected to use their engineering knowledge to provide innovative solutions to existing society's problems. This develops critical thinking ability, team leading skills among the students. This mainly focuses on data collection and analysis, engineering problem solving, mathematical modeling, and using software and hardware tool usage through hackathons

### **The Practice:**

Hackathon and Open Innovation model is conducted to provide students a platform to solve some of the pressing problems in the society. To Inculcate a culture of product innovation and a mindset of problem solving various department in our institution organizes boot camps and Hackathons. To encourage professional creativity and self-expression by using the most innovative and modern technological solutions through start-up companies like Supraja Technologies , Madblock Technologies Pvt Ltd,etc, Idea Labs.

All the students were given 36 hours time to develop and demonstrate their Project/Model, and the model developed is evaluated by external jury members.

There were two main rounds of evaluation. The 4 jury members split into two groups of two members each and evaluated all the teams works.

**Problem Statement Themes:**


- Smart Communication
- Healthcare & Biomedical devices
- Agriculture & Rural Development
- Smart Vehicles
- Robotics and Drones
- Waste management
- Renewable Energy etc.

**Problems encountered and Resources Required:**

Student from rural background may have good technical skills but may lack communication and other required skills, so special classes are to be provided to such students to boost their confidence levels and face the challenges of the world. Thus mentoring and counseling system is employed by training the faculty on counseling and handling the students.

**Evidence of success:**

- Impact of Engineering Explorations
- Introduction to Engineering and Engineering Study
- Knowledge of various disciplines of engineering
- Engineering Design Process
- Introduction to Social Innovation
- Distinguish between simple, complicated and complex problems
- Critical Thinking for Social Innovation

  
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