2.2.4. A. IMPACT ANALYSIS OF INDUSTRY-INSTITUTE INTERACTION AND ACTIONS TAKEN

Academic Year: 2019-2020

The details of industry-institute interaction are analyzed as bar graph given below for this academic year.



INDUSTRY-INSTITUTE INTERACTION IN 2019-2020

B. OBSERVATIONS

The following observations were made on the industry -institute interactions

- 5 guest lectures/workshops/seminars were delivered by industry experts for the partial delivery of regular courses.
- 2 companies were visited to enhance the experiential learning of the students.
- 21 students have undergone the internships.
- The participation of faculty members in the FDP/Seminars/Workshops conducted by industries is about 8.
- 1 Consultancy work was carried out at Fleming Laboratories Limited.

C. IMPACT ANALYSIS OF THE INDUSTRY-INSTITUTE INTERACTION

S.No	Title of Guest Lecture/Workshop	Impact Analysis
1.	Guest Lecture on GTO and IGCT Characteristics	 The final year students have done a project based on power electronics. Students were able to acquire the knowledge on in-depth knowledge can help the audience grasp complex concepts better and apply them in real- world scenarios.
2.	Guest Lecture on Recent trends in Embedded Systems	• Students were able to acquire knowledge on current industry insights, promote skill development, stimulate research and innovation, and provide networking opportunities.
3.	Guest Lecture on Pollution control technologies and waste disposal in coal power plant	• Students were able to assess the effects and outcomes of the lecture on various aspects related to environmental protection and sustainable practices in the context of coal-based power generation.
4.	WebinaronArtificialIntelligenceandApplicationinElectrical Engineering	• Students were able to track the incorporation of AI technologies and methodologies in electrical engineering practices over time.
5.	Seminar on Functions of SCADA and EMS	• This guest lecture enhances the students' understanding of SCADA and EMS functions in power systems.
6.	Industrial visit to sun beam generators	• Students have gained practical experience on the design, fabrication, winding techniques and manufacturing of generator set used in factories, complexes and apartments.
7.	Industrial visit to TVS training services	• Students have gained practical exposure to latest technologies, best practices, and strategies employed in the field.

D. Action taken on impact Analysis

- The guest lectures delivered by the industrial experts have to be increased in the next academic year.
- The faculty members are advised to use the ICT tools like youtube links of industries to enhance the learning level of students.

2.2.4. A. IMPACT ANALYSIS OF INDUSTRY-INSTITUTE INTERACTION AND ACTIONS TAKEN

Academic Year: 2020-2021

The details of industry-institute interaction are analyzed as bar graph given below for this academic year.



INDUSTRY-INSTITUTE INTERACTION IN 2020-2021

B. OBSERVATIONS

The following observations were made on the industry –institute interactions in this academic year.

- 6 guest lectures/workshops/seminars were delivered by industry experts for the partial delivery of regular courses.
- 13 students have undergone the internships.

C. IMPACT ANALYSIS OF THE INDUSTRY-INSTITUTE INTERACTION

S.No	Title of Guest Lecture/Workshop	Impact Analysis
1.	Webinar on ARDUINO and IOT	 Students have gathered technical skills in electronics, programming, and sensor integration. III year students have done the mini projects based on Arduino and IOT.
2.	Webinar on Wind Energy Conversion Systems	Students have acquired knowledge on clean energy and adoption of wind energy technologies.
3.	Webinar on Career guidance in diversified Technologies	Students have acquired knowledge related to career choices, skill development, and professional growth in the field of diversified technologies.

D. Action taken on impact Analysis

- The guest lectures delivered by the industrial experts have to be increased in the next academic year.
- The feedback response of the students is good for all the guest lectures/workshops and seminars.

2.2.4. A. IMPACT ANALYSIS OF INDUSTRY-INSTITUTE INTERACTION AND ACTIONS TAKEN

Academic Year: 2021-2022

The details of industry-institute interaction are analyzed as bar graph given below for this academic year.



INDUSTRY-INSTITUTE INTERACTION IN 2021-2022

B. OBSERVATIONS

The following observations were made on the industry –institute interactions in this academic year.

- The suggestions given in the academic year 2020-21 were carried out in this academic year and 9 guest lectures/workshops/seminars were delivered by industry experts for the partial delivery of regular courses.
- 2 industrial visits were arranged.
- 13 students have undergone the internships
- C. 2 consultancy works were carried out by the faculty members.

D. IMPACT ANALYSIS OF THE INDUSTRY-INSTITUTE INTERACTION

S.No	Title of Guest Lecture/Workshop	Impact Analysis
1.	Workshop on Overview of PLC & SCADA, Industrial Automation Using PLC	Students have gained knowledge on PLC (Programmable Logic Controller), SCADA (Supervisory Control and Data Acquisition), and industrial automation concepts by hands on training.
2.	Seminar on Magnetic Field in Multiple Media	This seminar addressed the importance of magnetic shielding in different applications and industries. It also highlighted the electromagnetic compatibility (EMC) considerations, allowing students to understand how magnetic fields influence electronic devices.
3.	Guest Lecture on Real time Embedded System and its applications	Students have acquired knowledge on advancements in embedded systems technology, such as faster processors, improved memory management, and optimized algorithms and high speed embedded devices.
4.	Workshop on Automotive gears	Students have gained experience on real-world applications of automotive gears and have acquired technical skills on gear design, selection, assembly, and troubleshooting.
5.	Guest Lecture on Grid Integration Issues in WPP	Students have in depth understanding of the challenges and solutions related to integrating wind power plants into the electrical grid.
6.	Guest Lecture on Stepper motor and Servo motor control	Students have acquired the knowledge on diverse applications of stepper and servo motors and are better equipped to leverage cutting-edge technologies, leading to innovative solutions and advancements in automation and robotics.
7.	Seminar on RTOS	Students have learnt about understand the basics of Real time operating system and its real time operations in embedded system.
8.	Guest Lecture on distant protection of transmission lines	Students gained a better understanding of the principles, techniques, and challenges associated with protecting transmission lines from faults.
9.	Guest Lecture on Concept of controllability and observability	Students have learned about the practical application of controllability and observability in various engineering and scientific fields. This knowledge helps them to bridge the gap between theoretical concepts and real-world implementations.
10.	Industry visit to Ennore Thermal Power Station	Students have gained knowledge on practical understanding of the functioning, operations, and technologies involved in the generation of thermal power. The visit aimed to offer insights into the significant role played by the power station in supplying electricity to the region and contributing to the country's energy infrastructure.

S.No	Title of Guest Lecture/Workshop	Impact Analysis
11.	Consultancy work	The consultancy work carried out on harmonic analysis led to the establishment of best practices and guidelines for harmonic analysis and mitigation, benefiting the industry as a whole.
12.	Establishment of Sponsored Laboratory	 This lab enabled the research work to be carried out in electric vehicle technology. It has provided a platform for students to work on advanced projects related to EV design, battery technology, power electronics, and smart charging solutions.

E. Action taken on impact Analysis

- Final year students are motivated to do the industry related projects as it will be useful for their career development.
- Industrial training to faculty members should be initiated.
- The feedback response of the students is good for all the guest lectures/workshops and seminars.

2.2.4. A. IMPACT ANALYSIS OF INDUSTRY-INSTITUTE INTERACTION AND ACTIONS TAKEN

Academic Year: 2022-2023

The details of industry-institute interaction are analyzed as bar graph given below for this academic year.



INDUSTRY-INSTITUTE INTERACTION IN 2022-2023

B. OBSERVATIONS

The following observations were made on the industry – institute interactions in the academic year.

- 7 guest lectures/workshops/seminars were delivered by industry experts for the partial delivery of regular courses.
- 4 Industries have taught the Naan Mudhalvan Courses.
- 2 industrial visits were arranged.
- 42 students have undergone the inplant training/ internships.
- 1 consultancy work is ongoing in the department.
- The suggestions given in the previous academic year were carried out in this year and 1 Industrial training is given to faculty members in SRINAR Electronics.
- 1 Final year student has done the final year project in the company (VI Micro Systems).

S.No	Title of Guest Lecture/Workshop	Impact Analysis
1.	Guest Lecture on Present Indian and international energy scenario of conventional and RE sources	Students have gained an in-depth overview of the energy scenario in India, emphasizing the country's dependence on coal and the need to diversify its energy sources to meet growing demand sustainably.
2.	Workshop on PCB Design Using ORCAD Software	Students are provided with valuable skills and knowledge in PCB design using a widely-used EDA tool. The hands-on approach and practical exercises enabled participants to gain confidence in using ORCAD software for their future PCB design projects.
3.	Guest lecture on BIMOS Cascade Amplifier	Students have gained a comprehensive understanding of BIMOS Cascade Amplifier technical details, underlying principles, and real-world applications, providing valuable insights that enhance participants' knowledge.
4.	Guest Lecture on HV Testing of electrical power apparatus	Students have acquired knowledge on importance and methodologies of HV testing in ensuring the performance and reliability of electrical power apparatus.
5.	Guest Lecture on Introduction to commercial DS processor	Students have gained knowledge on understanding the role and significance of DSP processors in real-time signal processing applications, Familiarity with the architecture and components of commercial DSP processors and awareness of popular commercial DSP processor families available in the market.
6.	Guest Lecture on Design of controllers	Students were introduced to adaptive control techniques, where the controller parameters are adjusted based on changes in the system dynamics. Robust control, which deals with uncertainties and disturbances in the system.

C. IMPACT ANALYSIS OF THE INDUSTRY-INSTITUTE INTERACTION

7.	Seminar on Introduction	Students were introduced to the challenges of maintaining stability
	to magnetic levitation	in a levitating object and the control systems used to regulate the
	system	levitation height and position.
8.	Consultancy work	This work facilitates the integration of renewable energy, ensures
		compliance with standards, and accelerates project timelines while
		reducing costs and risks. Overall, consultancy work in this field is
		instrumental in driving innovation and sustainability in the energy
		industry.
9.	Industrial visit to Neyveli Lignite power Corporation	Students have gained knowledge on practical exposure to the
		operations and processes of a leading lignite mining and power
		generation company.
10.	Industrial visit to Sugar mills.	Students have gained knowledge on
		• Practical understanding of sugar manufacturing and the
		importance of sustainable practices in the sugar industry
		• Efficient operations of a sugar mill and its contribution to
		the local agricultural economy.

D. Action taken on impact Analysis

- Final year students are motivated to do the industry related projects as it will be useful for their career development.
- The feedback response of the students is good for all the guest lectures/workshops and seminars.