UNIVERSITY WITH A PURPOSE

REPORT OF WORKSHOP/SEMINAR CONDUCTED ON INDUSTRY/ACADEMIA AT SCHOOL OF ENGINEERING, UPES.

2018-2019

BRIEF REPORT ON "FUTURISTIC FOUR-WHEEL STEERING SYSTEM" CONDUCTED AT SCHOOL OF ENGINEERING, UPES.

1) Slide/Banner/Photos

2) Date, Venue and Topic

Workshop on "Futuristic Four-Wheel Steering System" *at UPES*, SoE on 04-07-2018.

3) Speaker(s) and their profiles

Dr. Manaswini Rath Associate Vice President, Autonomous Driving at KPIT Bengaluru. She has an experience of more than 18 years in the automobile industry. She specializes in Product Development, Strategy, Business Development, Systems & Safety Engineering, Execution Excellence, General Management, and Self-Development Skills. He conducted around 100+ invited seminars/workshops through various industries and universities throughout globe.

4) Attendees Details (Nos/Schools/Departments/ Teaching or Non-Teaching)

A total of 84 people participate in this seminar including 18 faculty members and 66 students from the school of engineering.

5) Brief report about the event

A Four Wheel steering (4WS) System is also known as "Quadra Steering System". Quadra steer is system that gives full size vehicles greater ease while driving at low speed, and improves stability, handling and control at higher speed. Quadra steering system works in following three phases Negative phase, Neutral phase, Positive phase. It enables the car to be steered into tighter parking spaces. Dr. Manaswini Rath discussed about the innovations, future trends, state of art industrial practices, current projects, and global career opportunities for aspiring engineers.

BRIEF REPORT ON "IOT INDUSTRIAL APPLICABLE VEHICLE SIMULATION SYSTEM" CONDUCTED AT SCHOOL OF ENGINEERING, UPES.

1) Slide/Banner/Photos

2) Date, Venue and Topic

Workshop on "IoT Industrial applicable Vehicle Simulation System" *at UPES*, SoE on 04-07-2018.

3) Speaker(s) and their profiles

Mr. Pranay Agarwal co-founder and CEO at TIF labs, Bengaluru. He played a crucial role in the establishment and growth of the company. Actively involved in several core areas including strategy and planning, business development and Business Intelligence while overseeing core Business growth of the company. Actively involved with technology team to get innovation-driven solutions. He conducted around 120+ invited seminars/workshops through various government institutions and universities in India.

4) Attendees Details (Nos/Schools/Departments/ Teaching or Non-Teaching)

A total of 46 people participate in this seminar including 12 faculty members and 34 students from the school of engineering.

5) Brief report about the event

The Internet of Things (IoT) is upon us! There are already more smart devices connected to the internet today than there are human beings in the world. Designing IoT devices is creating massive opportunities for existing businesses and giving rise to brand new markets and companies. The potential economic impact has been estimated to be more than $10 trillion per year. Mr. Pranay discussed about the innovations, state of art industrial practices, live projects, career opportunities for aspiring engineers.

BRIEF REPORT ON "THE PROTECTION OF INTELLECTUAL PROPERTY RIGHTS FOR ENFORCEMENT OFFICIALS" CONDUCTED AT SCHOOL OF ENGINEERING, UPES.

1) Slide/Banner/Photos

2) Date, Venue and Topic

Workshop on "The Protection of Intellectual Property Rights for Enforcement Officials" *at UPES*, SoE on04-07-2018.

3) Speaker(s) and their profiles

Ms. Samta Mehra associated with Remfray & Sagar, New Delhi is Intellectual Property attorney. Her professional experience spans nearly two decades, during the course of which she has acted for leading domestic and multinational companies in the protection and enforcement of IP rights.

4) Attendees Details (Nos/Schools/Departments/ Teaching or Non-Teaching)

A total of 96 people participate in this seminar including 52 faculty members and 44 students from the school of engineering.

5) Brief report about the event

Intellectual property is a key concern in the quest for growth, development and competitiveness. Advancement in knowledge broadly conceived is a key driver of economic prosperity in the twenty-first century. The ongoing revolution in information and communication technologies (ICT) has dramatically reduced the costs of creating, processing and transmitting knowledge, both nationally and across borders. Ms. Samta Mehra a well-known counsellor discusses about the legal and business aspects about the IP significance for engineers, entrepreneurs, techno managers, and scientists.

BRIEF REPORT ON "SEMINAR ON AUTOMATED ENERGY METER READING FOR BILLING PURPOSE" CONDUCTED AT SCHOOL OF ENGINEERING, UPES.

1) Slide/Banner/Photos

2) Date, Venue and Topic

Seminar on "Seminar on Automated Energy Meter Reading for Billing Purpose" *at UPES*, SoE on 04-07-2018.

3) Speaker(s) and their profiles

Mr. Vikrant Sangal from Uttrakhand Power Corporation Limited, Dehradun. He is manager and has an experience of more than 25 years. He had conducted around 20+ invited workshop through various institution and universities in India.

4) Attendees Details (Nos/Schools/Departments/ Teaching or Non-Teaching)

A total of 68 people participate in this seminar including 28 faculty members and 40 students from school of engineering.

5) Brief report about the event

AEMR (Automatic Energy Meter Reading) is the modern Power measuring device. It is being used in measuring electricity, gas, water consumption in many countries in the world since it has a lot of advantages that the old analog meters do not have. Participants learned about its advantages in safety, real time measuring and time save as well as it has a better user interface and digital data analysis. The seminar exposes the students about government policies, practical implications, constraints and future predictions.

BRIEF REPORT ON "ENHANCED OIL RECOVERY-MISCIBLE FLOODING IN-SITU COMBUSTION" CONDUCTED AT SCHOOL OF ENGINEERING, UPES.

1) Slide/Banner/Photos

2) Date, Venue and Topic

Workshop on "Enhanced oil recovery-miscible flooding in-situ combustion" *at UPES* under the IEEE student chapter of the University on 15th Sep 2018.

3) Speaker(s) and their profiles

Mr. Chandrasheel from Cairn India, Gurugram. He is a system engineer and has an experience of more than 10 years. He conducted around 20+ workshop through various institution and universities in India.

4) Attendees Details (Nos/Schools/Departments/ Teaching or Non-Teaching)

A total of 58 people participate in this. The faculty members (10 in numbers) are from the different department of school of engineering. There were 43 students and 5 nonteaching staff.

5) Brief report about the event

In this workshop, the expert has explained modern techniques and methods. Enhanced oil recovery (EOR) refers to the technologies developed to increase extraction of crude oil from reservoirs after primary production. Where, In situ combustion (ISC) is one of the methods developed for EOR.

BRIEF REPORT ON "WIRELESS COMMUNICATIONS FROM HIGH ALTITUDE PLATFORMS" CONDUCTED AT SCHOOL OF ENGINEERING, UPES.

1) Slide/Banner/Photos

2) Date, Venue and Topic

Training program on "Wireless Communications from High Altitude Platforms" *at UPES* under the IEEE student chapter of the University on 29th September 2018.

3) Speaker(s) and their profiles

Mr. Devendra from Ericsson, New Delhi. He is a system engineer and has an experience of more than 15 years. He conducted around 10+ workshop through various institution and universities in India.

4) Attendees Details (Nos/Schools/Departments/ Teaching or Non-Teaching)

A total of 58 people participate in this. The faculty members (10 in numbers) are from the department of Electrical and Electronics Engineering department. There were 43 students and 5 nonteaching staff.

5) Brief report about the event

In this workshop expert briefly explained about the methods of Wireless Communications from High Altitude Platforms. Furthermore, advanced features are taught along with hands on lab session. As per the trainer, demand for high-capacity wireless services is bringing increasing challenges, especially for delivery of the 'last mile'. Participants learned about the need for line-of-sight propagation paths that represents a constraint unless very large numbers of base-station masts are deployed also about the satellite communication systems.

BRIEF REPORT ON "Internet of Things Based Architecture of Web and Smart Home Interface" CONDUCTED AT SCHOOL OF ENGINEERING, UPES.

1) Slide/Banner/Photos

2) Date, Venue and Topic

Seminar on "Internet of Things Based Architecture of Web and Smart Home Interface" *at UPES* under the IEEE student chapter of the University on 11th August 2018.

3) Speaker(s) and their profiles

Mr. Akash from Agilent Technologies, New Delhi. He is a system engineer and has an experience of more than 15 years. He conducted around 50+ workshop through various institution and universities in India.

4) Attendees Details (Nos/Schools/Departments/ Teaching or Non-Teaching)

A total of 58 people participate in this. The faculty members (10 in numbers) are from the department of Electrical and Electronics Engineering department. There were 43 students and 5 non-teaching staff.

5) Brief repot about the event.

In this workshop, Mr. Akash has explained the objectives and different applications of Internet of Things, in various areas like society, environment and the industry. Participants of the seminar learnt about the IoT architecture and their usages in web and smart home interface. Apart from theoretical concepts trainer also taught hands on practical session.

BRIEF REPORT ON "EARTHQUAKE RESISTANT BUILDING CONSTRUCTION" CONDUCTED AT SCHOOL OF ENGINEERING, UPES.

1) Slide/Banner/Photos

2) Date, Venue and Topic

Seminar on "Earthquake Resistant Building Construction" *at UPES* under the IEEE student chapter of the University on 15th Sep 2018.

3) Speaker(s) and their profiles

Mr. Bijoy from Larson and Toubro, New Delhi. He is a system engineer and has an experience of more than 14 years. He conducted around 40+ workshop through various institution and universities in India.

4) Attendees Details (Nos/Schools/Departments/ Teaching or Non-Teaching)

A total of 58 people participate in this. The faculty members (10 in numbers) are from different department of school of engineering. There were 43 students and 5 nonteaching staff.

5) Brief repot about the event

In this seminar a brief discussion about on Earthquake Resistant Building Construction, modern methods and techniques have been explained. Where participants have learnt that that the most important advanced techniques of earthquake resistant design and construction are Base Isolation and Energy Dissipation Devices. Trainer also displayed different structures for making earthquake resistant building through simulation mode.

BRIEF REPORT ON "PREDICTIVE MAINTENANCE USING THERMAL IMAGING" CONDUCTED AT SCHOOL OF ENGINEERING, UPES.

1) Slide/Banner/Photos

2) Date, Venue and Topic

Seminar on "Predictive Maintenance using Thermal Imaging" *at UPES* under the IEEE student chapter of the University on 18th September 2018.

3) Speaker(s) and their profiles

Mr. Yogesh from, Siemens New Delhi. He is a system engineer and has an experience of more than 15 years. He conducted around 14+ workshop through various institution and universities in India.

4) Attendees Details (Nos/Schools/Departments/ Teaching or Non-Teaching)

A total of 58 people participate in this. The faculty members (10 in numbers) are from the department of Electrical and Electronics Engineering department. There were 43 students and 5 nonteaching staff.

5) Brief repot about the event

In this seminar a brief discussion on Predictive Maintenance have been explained by using Thermal Imaging, with hands on practical usages. Mr. Yogesh explained the problems related to maintenance (during the last decade), while maintenance managers have grown to rely more and more on thermal imaging for preventive maintenance and troubleshooting in manufacturing processes. The reason is simple: Heat is often an early indicator of degradation, and cold spots often suggest blown fuses or failed capacitors. Participants learnt about thermal imaging (Infrared thermography) and how to produces a visible graph or thermographic image of thermal energy (radiated from objects). Identifying abnormal thermal patterns before a failure can help extend asset life and enhance the facility's condition-based or proactive maintenance capabilities.