

# QUANTUM UNIVERSITY



## Student Centric Methods



## Annual Report on Experiential Learning Methodologies

**Academic Year (2018–2019)**

# **ANNUAL REPORT EXPERIENTIAL LEARNING METHODOLOGIES**



**Academic Year (2018-2019)**



Registrar  
Quantum University

## **Experiential Learning Methodologies**

### **2018-2019**

Experiential learning is a dynamic educational approach that centers on the acquisition of knowledge through firsthand encounters, active participation, and subsequent reflection. In our educational framework, we prioritize immersing students in a spectrum of experiences that span both technical and non-technical domains. The overarching goal is to cultivate a holistic skill set by engaging in various activities, facilitated and overseen by our dedicated faculty.

Students are encouraged to delve into the realm of experiential learning through project development, where they actively apply theoretical knowledge to real-world scenarios. Additionally, they participate in enlightening student seminars, enriching student development programs, and interactive workshops that foster skill acquisition and critical thinking.

Industrial visits are integral to this experiential paradigm, offering students a firsthand glimpse into professional environments, broadening their perspectives, and connecting theoretical concepts to practical applications. Moreover, internships provide an immersive experience, allowing students to apply classroom knowledge in authentic work settings, thereby bridging the gap between academia and industry.

Our faculty actively designs, executes, and monitors these activities to ensure a seamless integration of experiential learning into the academic curriculum. Through regular reflection on their experiences, students not only reinforce their understanding but also identify areas for improvement, facilitating continuous skill enhancement. In essence, our experiential learning approach empowers students to evolve as well-rounded individuals equipped with a robust blend of theoretical knowledge and practical proficiency.

### **Experiential learning**

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- Industrial Visits
  - Workshops
  - Training Programs
  - Internships
  - Lab Work
  - Studio Work
  - Clinical Experiences

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Industrial Visit Report	S No.	Department	Title	Venue/ Key Person	Affiliation	Date	No. of Students
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	2	Faculty of Technology & Faculty of Sciences	Industrial Visit to GINNI FILAMENTS LTD. Sidcul, Haridwar.	GINNI FILAMENTS LTD. Sidcul, Haridwar	GINNI FILAMENTS LTD.	24/08/2018	40
	3	Faculty of Technology	Industrial Visit to CSIR-CBRI, Roorkee	CSIR-CBRI, Roorkee	CSIR-CBRI, Roorkee	28/08/2018	32
	4	Department of Agricultural Studies	Visit of Agro-meteorological Observatory	Muzaffarabad Saharanpur	Muzaffarabad Saharanpur	06/09/2018	62
	5	Department of Mechanical Engineering	Unitech Machine Ltd.	Unitech Machine Ltd.	Unitech Machine Ltd.	08/09/2018	31
	6	Department of Agricultural Studies	Visit of Agro-meteorological Observatory	Muzaffarabad Saharanpur	Muzaffarabad Saharanpur	10/09/2018	55
	7	Department of Agricultural Studies	Visit of Agro-meteorological Observatory	Muzaffarabad, Saharanpur	Muzaffarabad , Saharanpur	11/09/2018	66
	8	Department of Agricultural Studies	Industrial Visit of Krishi Mandi, Chhutmalpur	Visit of Market	Chhutmalpur	11/09/2018	55

	9	Department of Agricultural Studies	Industrial Visit to Centre for Aromatic Plants, Dehradun	Center for Aromatic Plants, Dehradun	Aromatic Plants, Dehradun	17/09/2018	50
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	12	Department of Civil Engineering	Industrial Visit to Everest Pvt. Ltd., Bhagwanpur	Everest Pvt. Ltd., Bhagwanpur	Bhagwanpur	04/10/2018	42
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	18	Department of Computer Science and Engineering	Industrial Visit at Cynoteck Technology, Dehradun	Cynoteck Technology, Dehradun	Cynoteck Technology, Dehradun	08/03/2019	35
	19	Department of Business Administration	Industrial Visit at Finolex Company, Jhabrera, Roorkee	Industrial Visit at Finolex Company,	Finolex Company, Jhabrera, Roorkee	15/04/2019	40

				Jhabrera, Roorkee			
	20	Department of Agricultural Studies	Visit of Polyhouse / Nursery	A. R. Nursery, Harora, Dehradun Road, Saharanpur	A. R. Nursery, Harora	09/08/2019	82
	21	Department of Agricultural Studies	Visit of Agro-meteorologic al Observatory	Muzaffarabad Saharanpur	Muzaffarabad Saharanpur	31/08/2019	58
Workshop and conferences	1	Department of Hospitality and Tourism	Workshop on Carving Art	Mr. Deepak Raturi.	Compass Catering Services, Qatar, UAE	15/09/2018	25
	2	Department of Paramedical Sciences	Workshop on Blood Sample Collection and Testing	Mr. Sanjay Rawat and Mr. Amit Joshi	IMA Dehradun	17/10/2018	110
	3	Department of Civil Engineering	Workshop on Truss Bridge Design	Mr. A. Chakradhar Reddy	Proficient Trainer, Skyfi labs	22/10/2018 - 23/10/2018	30
	4	Department of Agricultural Studies	Workshop on Food Processing Unit	Mr. Madhuri Chaudhary & Mr. Arun Kumar	Experts in the Food Processing Unit	16/11/2018	55
	5	Department of Mechanical Engineering	Workshop on Engine Disassembly & Assembly	Mr. Vivek Kumar	Assistant Professor, Quantum University	17/11/2018	78
	6	Department of Mechanical Engineering	Workshop on Fabrication of Water Rocket	Mr. Vivek Kumar Sharma & Mr. Surinder Kumar	Quantum University	09/02/2019	25
	7	Department of Hospitality and Tourism	Workshop on Italian Cuisine	Mr. Deepak Raturi	Compass Catering Services, W.L.L., Qatar, UAE	15/02/2019	19
	8	Department of Mechanical Engineering	Workshop on TIG & MIG Welding	Mr. Mukesh Kumar	Quantum University	16/02/2019	25

	9	Department of Hospitality and Tourism	Workshop on "Mixology"	Mr. Gaurav Mamgain	Quantum University	02/03/2019	20
	10	Department of Computer Science & Engineering	Workshop on Big Data using Hadoop	Mr. Amitava Choudhury, Mrs. Ambika Aggarwal	Asst. Prof., UPES, Dehradun	27/03/2019	60
	11	Department of Mechanical Engineering	Design and Fabrication of Gear	Mr. Ashu Kumar and Mr. Mange Ram	Quantum University, Roorkee	30/03/2019	21
	12	Department of Computer Science & Engineering	Web Designing & Development Using Bootstrap and PHP	Mr. Rajat Tyagi	Cetpa InfoTech PVT.LTD. Roorkee	22/04/2019	40
	13	Department of Hospitality and Tourism	Workshop on "Hotel Communication Skills"	Mr. D. C. Vashishth	Senior Faculty, Quantum University.	31/08/2019	16
	14	Department of Hospitality and Tourism	Workshop on "Personal Hygiene"	Mr. D.C Vashishth	Assist. Prof., Quantum University.	07/09/2019	10
	15	Department of Mechanical Engineering	'Workshop on Engine Assembly-Disassembly	Mr. Vivek Kumar, Mr. Arun Kumar, Mr. Jai Prasad Agarwal	Quantum University	31/09/2019	50



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## Event Report Industrial Visit 2018-2019

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### **1. Industrial visit to “Ambuja Cement Ltd.” Sikandrapur – 21/08/2018**

The Department of Mechanical Engineering organized a remarkable industrial visit to Ambuja Cement Ltd., Roorkee, on August 21, 2018. Accompanied by two faculty members, more than 22 students eagerly explored different processes, latest technologies, and the industrial atmosphere of the plant.

Upon arrival at 10:30 am, Mr. Nitin Batra, Head HR, welcomed the group and provided an insightful orientation about the company. Various department heads briefed the students, emphasizing security and safety protocols. Students were then guided by a company manager, learning firsthand about the production processes and the journey of products from manufacturing to customers.

This immersive experience allowed students to witness the operational intricacies of a cement plant, fostering a deeper understanding of industrial processes and technologies.



**A Glimpse from Industrial visit to Ambuja Cement Ltd. Sikandrapur**



## **2. Industrial Visit to GINNI FILAMENTS LTD. Sidcul, Haridwar. – 24/08/2018**

An industrial visit was organized by the Faculty of Technology & the faculty of Sciences to Ginni Filaments Ltd., Sidcul, Haridwar for 40 students of 1<sup>st</sup> year B. Tech. & B.Sc. (Hons.) PCM on 24/08/2018. Ginni Filaments are pioneers in the domestic market for manufacture of consumer and institutional wipes, and have integrated operations with applications in personal care and medical industries. Quantum University students had the good opportunity to visit this State-of-the-Art manufacturing facility and observe their fully automated Consumer Product Division with in-house design and developments capability.

The students were given a comprehensive tour of the raw material and cosmetic divisions; Lab micro tests were explained and then a demonstration of product test (consumer wipes) was arranged for the benefit of the students. Water purification and waste water management were other important areas which were explained to the students. At the end of this extremely informative industrial visit each student was provided with two samples of consumer wipes as a souvenir. The visit was extremely helpful in creating awareness in the students about the use and application of advanced technology in every sector of manufacturing and production.



**Group Shot of Industrial visit of Students to Ginni Filaments Ltd., Sidcul, Haridwar**

### **3. Industrial Visit to CSIR-CBRI, Roorkee - 28/08/2018**

Thirty Two Students of First Year B. Tech. (ME & CE branches) went for an industrial visit to CSIR-CBRI, Roorkee on August 28, 2018. The students were greeted by the technical staff who showed them the operation of the 300T Universal Testing Machine. They also visited the Hydraulic Lab, Mycological Lab, and Structural Labs. The technical staff at CBRI explained in detail the technology of various types of housing construction and building materials e.g., construction of special mud houses. The students saw several models of infrastructure of buildings and got to know about the management of buildings. They also learnt about new techniques of building roofs. When they visited the Mycological Lab, the students had the opportunity to learn about various types of fungus. The visit proved to be very informative and educational for the students.



Image from the Exposure visit to CSIR-CBRI where students gained valuable insights on Hydraulic Lab, Mycological Lab, and Structural Labs.

#### **4. Visit of Agrometeorological Observatory - 06/09/2018**

Explore the Agrometeorological Observatory in Muzaffarabad, Dist. Saharanpur, where the fascinating world of weather and agriculture converge. On the notable date of 06/09/2018, Mr. Sayam Ram, a dedicated scientist, opened the doors to a realm where science meets nature.

Within the observatory's walls, a wealth of knowledge was shared with the Students of Agricultural Studies. Mr. Ram eloquently described the establishment and intricate functioning of various instruments such as the Sunshine Recorder, Soil Thermometer, and Rain Gauge. Enthusiastic students (62 in Nos.) had the privilege of delving into the mysteries of weather patterns and their profound impact on agriculture.



**Picture from Agrometeorology Observatory in Saharanpur, Quantum students learning about the functioning of Sunshine Recorder, Soil thermometer, Rain Gauge**



### **5. Industrial Visit at Unitech Machine Ltd. – 08/09/2018**

An Industrial visit to “Unitech Machines Ltd.”, Sikandrapur - Bhinswal Road, Lekashwari, Pargana, Bhagwanpur, Roorkee– 247667 was organized by the Department of Mechanical Engineering on Saturday, 8<sup>th</sup> September, 2018. The trip had a quorum of 31 students and 3 faculties visited Unitech Machines Ltd. to understand different processes, industrial atmosphere & latest most demanding technologies etc. In this visit students were very eagerly waiting to listen to industrial higher authorities.

In the morning at 10:30 pm we reached Unitech Machines Ltd. As soon as we reached the company, we were guided by Mr. Jasbeer Chaudhary, head HR to a common room where orientation of the company was given by heads of various departments. A session on security and safety issues was also conducted.



Image from Unitech Machines Ltd it was Opportunity for Students to learn about the technology used in industries for production and assembly line

## **6. Visit of Agrometeorological Observatory - 10/09/2018**

Step into the world of Muzaffarabad, Dist. Saharanpur, where a group of inquisitive 55 first-year students from the B. Sc. (Hons.) Agriculture program, section A2, embarked on a captivating journey. Their destination was the Agrometeorological Observatory, a place brimming with insights on weather and Agriculture.

Guiding them on this educational adventure was the observatory's adept custodian, Mr. Sayam Ram. With warmth and expertise, he unveiled the story behind the observatory's establishment and the remarkable instruments that define its purpose. These instruments, such as the Sunshine Recorder, Soil Thermometer, and Rain Gauge, served as the silent sentinels of meteorological data collection, enabling a deeper understanding of nature's rhythms.





**Step into the world of Agrometeorological Observatory in Muzaffarabad, Dist. Saharanpur where Quantum Mates peeked into insights on weather and agriculture**



## **7. Visit of agrometeorological Observatory - 11/09/2018**

A fruitful day spent into the vibrant world of Muzaffarabad, Dist. Saharanpur, where the eager minds of B.Sc. (Hons.) Agriculture 66 first-year students, section A2, embarked on a fascinating expedition. The final destination was The Agro meteorological Observatory, a hub of scientific exploration nestled amidst nature's embrace.

At the helm of this enlightening experience was Mr. Sayam Ram, the observatory's dedicated custodian. With passion and expertise, he unveiled the mysteries behind the observatory's establishment and the diverse array of instruments that adorned its halls. These instruments, including the Sunshine Recorder, Soil Thermometer, and Rain Gauge, stood as witnesses to the art of capturing meteorological nuances, painting a vivid picture of the ever-changing weather.



**Picture Taken during Exposure visit to Agrometeorological Observatory Located in Saharanpur**

## **8 . Industrial Visit of Krishi Mandi, Chhutmalpur- 11/09/2018**

On 11/09/2018, second-year B.Sc. (Hons.) Agriculture students delved into the world of marketing during their Agriculture course. To enhance their understanding of marketing strategies, 55 students of B.Sc. Agriculture 2nd year, section A1, embarked on a field trip to the vibrant Krishi mandi, Chhutmalpur.

Here, they engaged with the mandi's head, gaining valuable insights into the intricate steps of the marketing process. This immersive experience not only acquainted them with local and wholesale marketing but also provided a practical perspective, enriching their academic journey.



**Students learning about marketing and sales process of cash crops and vegetables in Krishi Mandi in Chhutmalpur.**



### **9. Industrial Visit to Centre for Aromatic Plants, Dehradun - 17/09/2018**

In an enriching experience on 17/09/2018, third and fourth-year students (50 in No's) explored CAP, Dehradun, accompanied by faculty members Mr. Naveen Chandra and Mr. Vimal Chaudhary. Delving into the realm of quality plant material production, cultivation, and aromatic plant extension, students gained valuable insights. They were enlightened about various medicinal plants and their applications, emphasizing how cultivating aromatic crops has significantly bolstered Uttarakhand farmers' economy.



**Few Glimpses from the exposure visit to Center for Aromatic Plants in Dehradun where students gained valuable insights on plants and flowers.**

## **10. Industrial Visit on Supply Chain Management – 21/09/2018**

On September 21, 2018, about 31 students of the Department of Business & Management were engaged in an insightful interactive session focused on Ambuja Cement's supply chain management. During the visit, they explored various plant areas, gaining firsthand knowledge of the diverse functions within. Moreover, students discovered the unique practices that have propelled Ambuja to its prominent position as a leading cement brand in India. This experience provided a comprehensive understanding of effective supply chain strategies and cemented their appreciation for Ambuja's industry leadership.



**Glance into the world of Industrial Visit to Witness the Supply Chain Management**



### **11. Industrial Visit to Krishi Utpadan Mandi Samiti, Saharanpur - 28/09/2018**

The Department of Agricultural Studies, Quantum University, Roorkee has conducted an industrial visit of 27 students of B.Sc. (Hons.) Agriculture second year to Krishi Utpadan Mandi Samiti, Saharanpur on October 24<sup>th</sup> 2018. The objective of the Mandi visit was to acquaint the students with the structure and function of the Mandi system.

It was started with the discussion with Mr. Anurag Singh, Assistant Manager, Mandi Samiti Saharanpur. He discussed the weighing procedure of different agricultural commodities with students. Then we went to the food grain section of Mandi where students saw the live process of Auction of rice with the help of a commission agent. Team of Mr. Anurag takes us to different sections of Mandi like the food grain section, vegetable and fruit section, Godowns etc. Students also visit the mango pack house plant. A healthy discussion for about one hour was conducted among the students.





**Agriculture Students learning the functioning of a Kisan Mandi and how the yields are sold in the market in real time**



## **12. Industrial Visit to Everest Pvt. Ltd., Bhagwanpur - 04/10/2018**

Industrial Visit to Everest Pvt. Ltd. Bhagwanpur, was organized by the Department of Civil Engineering to give real insight into the working procedures being followed in the industries. 42 students of 2<sup>nd</sup>, and 3<sup>rd</sup> year of Civil Engineering were accompanied by 2 faculty members.

The college bus departed at 11:10 AM on 04/10/2018 and reached the destination at 11:30 AM, where they were graciously welcomed by Mr. Praful Maheshwari. The visit was followed by the lecture, given by Mr. Praful Maheshwari. He delivered knowledge about working on Everest in various Projects.

Then students were taken to Steel Building Solutions, where they learned about the manufacturing process of some steel sections (like – beams, Channel sections, T – beams, sheets of metals, etc.), and the fire safety of the structure. Students also visited different places in the plant with their workers and they learned about the ways of handling industrial materials, operating cranes, and working with electrical circuits.

Students also interacted with the Plant head Mr. Sussodia. He shared his experience with the students and introduced several features about the plant such as the installed capacity of 50,000 of Fibre Cement Boards, 40, 000 metric tons of steel fabrication products, and 1-lakh of roofing products per annum.



**Exposure visit of Engineering Students in Everest Pvt. Ltd., Bhagwanpur**

### **13. Industrial visit at Food Processing Unit - 16/11/2018**

B. Sc. (Hons.) Agriculture 55 students were treated to an enlightening day at a company garden in Saharanpur, diving into the world of food processing. Guided by experts, Mr. Madhuri Chaudhary shared insights on selecting raw materials for products like jam and jelly, while Mr. Arun Kumar ji highlighted the art of food preservation using natural methods. The students had hands-on experience with various processing equipment. Additionally, they learned about department-organized training programs beneficial for the public, enhancing their knowledge in the field.



**Glimpse into images from the industrial visit to a food processing unit for agro based value added products in Saharanpur**



#### **14. Industrial Visit to Company Garden - 08/02/2019**

On a sunny day on February 8th, 2019, the Department of Agricultural Studies organized a delightful visit to Saharanpur's Company Garden for enthusiastic B. Sc. (Hons.) Agriculture 3rd year students (26 in No's). The garden, adorned with a vibrant palette of ornamental plants, became the backdrop for an educational escapade like no other.

Guided by seasoned horticulturists, these students were introduced to the enchanting world of ornamental plants. Amidst the blooms and fragrances, they learned the delicate art of plant maintenance and landscape design. It was more than just a lesson; it was a hands-on experience where they could feel the soil, touch the leaves, and understand the essence of nurturing living things.



**Group Picture of students taken During Exploring the World of Plants in Company Garden Saharanpur**

## **15. Industrial Visit to Hotel Regenta & Hotel Ramada Dehradun -09/02/2019**

The Department of Hospitality and Tourism at Quantum University, Roorkee, orchestrated an insightful industry visit for 20 Bachelor of Hotel Management students on February 9, 2019. Led by Mr. Gaurav Mangain and Mr. Naveen Rana, students toured Hotel Regenta and Hotel Ramada, starting with a descriptive show round.

Upon arrival at 11:30 AM, 20 students were warmly welcomed in the hotel's HR department by Mr. Atul, the HR Manager. Following a comprehensive briefing and refreshments, students were divided into small groups and explored various hotel departments.

The Training Manager shared valuable insights about the hotel industry's glamorous careers and how to seize opportunities in this global job market. The visit concluded with faculty members presenting mementoes to Executive Housekeeper Ms. Sahiba and HR Manager Mr. Atul, marking a memorable learning experience for the students.



**In the Picture BHM students touring Hotel Regenta and Hotel Ramada as part of their experiential learning**



## **16. Industrial Visit to Nursery - 09/02/2019**

On 9<sup>th</sup> February 2019, about 27 Agriculture Students of the Gardening Club embarked on an enriching excursion to Chutmalpur Nursery. Here, amidst the fragrant blossoms and verdant foliage, these students embarked on a hands-on journey into the world of plants.

Under the expert guidance of horticulturists, these budding student enthusiasts explored the nursery, acquainting themselves with a diverse array of plants and their delicate seedlings. It wasn't just a sightseeing adventure; it was an immersive lesson in the art of cultivation. They learned the intricate process of preparing seedlings, understanding the subtle balance of soil, water, and sunlight that nurtures life from a tiny seed.



**Glance at the picture where students from gardening club at Quantum University embarked on an enriching excursion to Chutmalpur Nursery**

## **17. Industrial Visit – 19/02/2019**

On February 19, 2019, about 25 Civil Engineering students embarked on an insightful industrial visit to Pathri Power House in Bahadrabad, Haridwar. The day commenced with a detailed introduction to the Power House, canal, and barrage by Mr. Pankaj Chandola.

Highlights:

- 1. Hydraulic Machines: Students explored the design and functioning of hydraulic machines, gaining practical knowledge.
- 2. New Technologies: Exposure to cutting-edge technologies in automatic energy sorting, expanding their understanding of modern advancements.
- 3. Construction Materials: Delved into the concepts of various construction materials used in the Power House, enhancing their material knowledge.
- 4. Canal Design: Learned about canal design principles, focusing on maintaining drop and head for the Kaplan Turbine, a key aspect of hydroelectric power systems.
- 5. Barrage Automation: Explored the design of automatic on/off gates for the barrage, understanding the crucial automation aspects in power plant operations.

This visit not only broadened their horizons but also provided hands-on experience, shaping them into well-rounded civil engineers.



**Group Picture of Civil Engineering students from an insightful industrial visit to Pathri Power House in Bahadrabad, Haridwar**



## **18. Industrial Visit at Cynoteck Technology, Dehradun – 08/03/2019**

On March 8, 2019, students of Department of Computer Science and Engineering in Dehradun were treated to an enlightening experience at Cynoteck, a leading IT services provider. This dynamic company specializes in CRM Consultation, Application Development, Mobile App Development, Web Development, and Offshore Development. Their seasoned Project Managers shared invaluable insights on mature development methodologies, exceeding client expectations, and ensuring the success of off-shoring projects.

Moreover, 35 students were introduced to cutting-edge technologies like Salesforce, Microsoft Dynamics 365 CRM and ERP, Mobile App Development, Web Development, IOT, and Integration. Cynoteck's team showcased their working environment, providing a glimpse into industry practices and demonstrating how developers collaborate in diverse settings. This visit not only exposed students to real-world industry practices but also prepared them for future careers by giving them a firsthand look at the professional landscape.

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**In the picture Quantum Students learning about the how an IT company handle day to day operations**

### **19. Industrial Visit at Finolex Company, Jhabrera, Roorkee – 15/04/2019**

On the morning of April 15, 2019, about 40 students of the Department of Business Administration eagerly embarked on a day-long visit to a manufacturing plant. The day commenced with a safety briefing conducted by the plant manager, ensuring a secure learning environment for all. The students explored the plant, gaining valuable insights into the diverse stages of the manufacturing process.

In the afternoon, they had the opportunity to meet the company's quality control manager, where they delved into the intricacies of the company's quality control procedures. The visit reached its conclusion with an interactive question-and-answer session with the knowledgeable plant manager, providing a comprehensive learning experience for the students.



**Group Picture of Quantum Students on a one day exposure cum Industrial visit at Finolex Company, Jhabrera**

## **20. Visit of Polyhouse/Nursery - 09/08/2019**

Picture a day on August 9th, 2019, when the 82 budding scholars of B. Sc. (Hons.) Agriculture embarked on an enlightening journey to A. R. Nursery organized by the Department of Agricultural Studies. Nestled within its gates were not just plants, but a wealth of knowledge waiting to be discovered.

This nursery, adorned with a state-of-the-art poly-house and shed-house, became the canvas upon which the students painted their learning. Amidst the greenery, they absorbed lessons about the intricate art of nurturing fruits and flowers. The air buzzed with curiosity as they explored the secrets of nursery development, each leaf and petal whispering tales of growth and care.



**A Glimpse from visit to AR nursery Where Agriculture Students had Hands on Experience on nurturing seeds into plants**



## **21. Visit of Agrometeorological Observatory - 31/08/2019**

On August 31, 2019, a significant visit took place at the Agrometeorological Observatory in Muzaffarabad, Dist. Saharanpur was organized by the Department of Agricultural Studies. Under the guidance of Mr. Sayam Ram, a dedicated scientist, 58 students were enlightened about the observatory's establishment and the operation of essential instruments including Sunshine Recorder, Soil Thermometer, and Rain Gauge.

The session focused on the vital role of weather patterns, emphasizing how understanding these changes can boost agricultural productivity, enhance crop growth, and elevate overall crop production.



Collection of pictures from the exposure visit where students were enlightened about the observatory's establishment and the operation of essential instruments

## Event Report

### Workshop & Conference

### 2018-2019

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#### **1. Workshop on Carving Art - 15/09/2018**

The Department of Hospitality and Tourism hosted an inspiring Carving Workshop on September 15, 2018, at the Food Production Lab. This engaging session was skillfully coordinated by Mr. Naveen Rana, and the workshop featured a guest expert, Mr. Deepak Raturi, who works at Compass Catering Services in Qatar, UAE.

During the workshop, 25 students were introduced to the intricate art of carving, employing a variety of fruits and vegetables. This creative skill is invaluable in the hospitality industry, particularly in grand banquet settings where salads are artistically adorned with shapes like birds, flowers, and cute animals. Such decorative presentations enhance the visual appeal of food, making it more enticing for diners.

The guest instructor, Mr. Raturi, hails from one of the world's largest catering companies, serving clients in challenging environments such as offshore jobs, cargo ships, cruises, and oil rigs. He shared his expertise in carving techniques, demonstrating how to craft shapes like penguins from eggplants, ducks from apples, and boats and crocodiles from bitter gourds. The workshop not only honed students' skills but also instilled in them the creativity needed to excel in the art of culinary presentation, a vital aspect of hotel management.



**Images from Culinary Carving Class for BHM students**



## **2. Workshop on Blood Sample Collection and Testing – 17/10/2018**

The Faculty of Health Sciences conducted an enriching workshop on blood sample collection and testing on October 17, 2018, welcoming students from all three branches of health sciences. The workshop featured hands-on demonstrations of blood collection methods, blood grouping, and hemoglobin tests using specialized equipment. 110 Students received detailed explanations about the working and significance of pathology tools, aligning the workshop content with their syllabus. We extend our heartfelt gratitude to IMA, Dehradun, and their dedicated staff for their invaluable support, making this workshop a highly informative and educational experience for all attendees.



**In the picture, the workshop on demonstrations of blood collection methods, blood grouping, and hemoglobin tests using specialized equipment**



### **3. Workshop on Truss Bridge Design – 22/10/2018 -23/10/2018**

In a collaborative effort between Civil Simplified and Skyfi Labs, a two-day workshop was conducted on Truss Bridge Design, held on October 22-23, 2018, specifically designed for 30 civil engineering students.

The workshop commenced with a warm welcome from Mr. Karan Babbar, the Coordinator of CED, introducing the proficient Trainer, Mr. A. Chakradhar Reddy. Throughout the workshop, students were immersed in a hands-on learning experience, exploring various aspects of Bridge Engineering.

#### **Key Highlights:**

1. **Design, Fabricate, and Test of Bridge:** Students actively participated in the practical aspects of bridge construction, learning firsthand the intricacies of fabrication and testing.
2. **Exposure to Advanced Bridge Technologies:** The workshop provided insights into cutting-edge technologies utilized in Bridge Engineering, enhancing students' knowledge of the field.
3. **Understanding Different Bridge Concepts:** Through case studies, students delved into the concepts of various bridge types, gaining a comprehensive understanding of their designs and functionalities.
4. **Competition to Measure Efficiency:** An engaging competition challenged students to assess the efficiency of the bridges they fabricated, encouraging a competitive and innovative spirit among participants.

#### **Topics Covered:**

- **Introduction to Bridge Engineering:** A foundational understanding of the field was provided, laying the groundwork for in-depth learning.
- **Design Concepts across Different Bridge Types:** Students explored the diverse design concepts integral to different bridge structures, enhancing their expertise.
- **Modeling and Analysis using Industry-grade Software:** Practical application of theoretical knowledge was emphasized, allowing students to analyze sample bridges using sophisticated software.
- **Structural Responses to Different Loads:** Students gained insights into how various loads impact the structural integrity of bridges, a crucial aspect of engineering analysis.
- **Case Studies for Enhanced Learning:** Real-world case studies were explored, facilitating a deeper comprehension of bridge design principles.

Through this immersive workshop, 30 students not only enhanced their technical skills but also developed a holistic understanding of Bridge Engineering, preparing them for future challenges in the field.



**Image from a Successful Workshop on Bridge Engineering**

#### **4. Workshop on Food Processing Unit- 16/11/2018**

On November 16, 2019, B.Sc. Agriculture students embarked on an enlightening trip to a company garden in Saharanpur, delving into the realm of food processing. Guided by experts, Mr. Madhuri Chaudhary and Mr. Arun Kumar Ji, 55 students gained valuable insights into the intricacies of food processing.

Mr. Chaudhary shared expertise in selecting raw materials for products like Jam and Jelly, emphasizing the importance of quality ingredients. Meanwhile, Mr. Arun Kumar Ji shed light on the art of food preservation, highlighting the use of natural products for this purpose. The students were also introduced to various food processing equipment, providing them with hands-on experience and a deeper understanding of the industry.

Additionally, the experts discussed the array of training programs offered by their department, designed to benefit the public. This comprehensive exposure equipped the students with practical knowledge and skills, enriching their understanding of food processing techniques and their applications in the real world.







**Collection Of Picture From Exposure And Hands-On Learning Visit To The Food Processing Unit**

## **5. Workshop on Engine Disassembly & Assembly – 17/11/2018**

The workshop held on November 17, 2018, aimed to enlighten students about the intricate components of engines. It provided a comprehensive understanding of engine construction, covering parts like Cylinder head, Piston, Crankshaft, and more.

During the workshop, Mr. Vivek Kumar provides a live demonstration involving disassembling and reassembling an engine. 78 students were guided through the functions of each part, empowering them to distinguish between stationary and moving components of internal combustion engines.

Additionally, they learned fundamental testing procedures essential to engine construction. This hands-on experience equipped students with practical knowledge, fostering a deeper appreciation for the complexity of engine systems.



**Picture from a workshop on a comprehensive understanding of engine construction, covering parts like Cylinder head, Piston, Crankshaft, and more**

## **6. Workshop on Fabrication of Water Rocket – 09/02/2019**

In the engaging 'Fabrication of Water Rocket' workshop held on February 9, 2019, 25 students delved into the world of model rockets powered by water. These innovative rockets utilize water as their propellant, expelled by compressed air. Participants explored the mechanics behind these rockets, constructed using plastic soft drink bottles.

The water rocket system consists of two main components: the launcher and the rocket itself. A typical launcher includes a supportive base and a hollow launch tube inserted into the rocket. Before launch, the bottle is filled with water, which, due to its weight, provides additional thrust when expelled alongside compressed air. The closed pressure vessel effect is achieved by the rocket's design, complete with fins for stability during flight.

This workshop not only unveiled the science behind water rockets but also allowed students to construct and launch their creations, offering an exciting hands-on experience in aerodynamics and propulsion.



**A Glimpse from the Water Rocket Workshop held in Quantum University**



## **7. Workshop on Italian Cuisine – 15/02/2019**

In the captivating 'Workshop on Italian Cuisine' organized by the Department of Hospitality and Tourism, students were immersed in the art of Italian cooking. Guided by the expertise of Mr. Deepak Raturi from Compass Catering Services W.L.L, Qatar, U.A.E., minor culinary 19 students delved into the intricacies of this highly sought-after culinary tradition.

During the workshop, students not only learned the basics of Italian cuisine but also honed their skills in food preparation, focusing on the presentation and eye appeal factor vital in the culinary world.

Mr. Raturi, a seasoned professional from a leading catering company, shared his knowledge about crafting Italian delicacies such as Vegetable Florentine Soup, Cheese Sweet Corn Balls, Crispy Veg Alfredo Pasta with Chicken, and Coffee Panna Cotta. This hands-on experience allowed students to grasp the nuances of Italian cooking, enhancing their culinary expertise and enriching their understanding of international gastronomy.



**Peek into the workshop on Italian Cuisine a Mouthwatering Learning Experience**

## **8. Workshop on TIG & MIG Welding – 16/02/2019**

Students were immersed in the world of welding, exploring the intricacies of two vital techniques: GMAW (MIG welding) and TIG welding. GMAW, also known as MIG welding, utilizes a continuously fed filler metal electrode to create a powerful arc that fuses metals together. In contrast, TIG welding relies on an electric arc between a non-consumable tungsten electrode and the workpiece, with filler metal manually fed into the weld puddle.

During an engaging session on 16/02/2019, 25 students not only learned the theoretical aspects but also gained hands-on experience by performing these welding techniques. They delved into the significance, advantages, and limitations of both processes, enriching their understanding of these fundamental welding methods.





**Collection of Pictures from the MIG Welding Hands-on Workshop**



## **9. Workshop on “Mixology” – 02/03/2019**

On March 2, 2019, the Department of Hospitality and Tourism at our institution organized an engaging Mocktail Workshop within the well-equipped Food and Beverage Service Lab. Benefiting more than 20 students from the hospitality department.

Under the guidance of Mr. Gaurav Mamgain, the workshop began with a burst of creativity in the art of mocktail crafting. Keeping up with the current trend that encourages innovation, mocktail provides a canvas for young enthusiasts to explore their creativity. They are not only innovative but also easy to recreate, making them highly appealing in the beverage industry.

During this interactive session, Mr. Mamgain showcased a diverse mocktail menu inspired by his creations. He provided an excellent platform for students to learn and develop their skills, introducing them to a variety of mocktails. Some of the noteworthy mocktails crafted during the session included:

- Fruit Punch
- Mix Fruit Orange and Ginger Punch
- Virgin Mint Cucumber Mojito
- Virgin Pinacolada
- Guava Mojito
- Papaya Passion
- Iced Lemon Tea
- Apple Fizz
- Spicy Guava Drink

This workshop not only fostered creativity but also equipped 20 students with valuable skills, enriching their understanding of beverage preparation in the hospitality industry.



**A picture says it all, A BHM student serving mocktails to the guests during the mocktail creation workshop**

## **10. Workshop on Big Data using Hadoop -27/03/2019**

The Department of Computer Science and Engineering successfully hosted a comprehensive Big Data Workshop on March 27, 2019. Renowned experts, Mr. Amitava Choudhury and Mrs. Ambika Aggarwal, both Assistant Professors at UPES Dehradun, led the session. Joined by more than 60 students, the session explored the world of Hadoop and Big Data.

They provided valuable insights into the challenges posed by Big Data and its solutions, covering topics such as Big Data Environment Architecture, Data Processing using Hadoop, Data Analysis, Big Data Storage, NoSQL, HDFS, and MongoDB.

The workshop aimed to enlighten students about the intricacies of Big Data and its vast career opportunities in the future. Through expert guidance and engaging discussions, students gained a deeper understanding of this evolving field, preparing them for the data-driven challenges of tomorrow.





The image comes from the workshop on Big Data and its vast career opportunities in the future



## **11. Design and Fabrication of Gear – 30/03/2019**

The workshop, focused on "Design and Fabrication of Gear," was led by Mr. Ashu Kumar, offering a comprehensive introduction to various gear fabrication processes. During the session, Lab technician Mr. Mange Ram skillfully operated the milling machine, emphasizing the fabrication of Spur Gear using a vertical milling machine. An estimated 21 students learned the skills of fabrication.

The vertical milling machine, a precision tool, is instrumental in shaping and fabricating metallic workpieces by removing stock. Depending on tooling and material, it can also work on plastics and other materials. The milling machine's controls may be manual, computer numerically controlled (CNC), or a combination of both. In this workshop, a manually operated milling machine was utilized. The gear-cutting operation was explained as the process of cutting equally spaced and identical gear teeth on a gear blank. This is achieved by handling it on a universal dividing head and indexing it. The choice of the cutter, whether cylindrical or end mill type, depends on tooth profile and spacing, providing 21 students with practical insights into gear-cutting techniques.



**Image shot while students are introduced to various gear fabrication processes**

## **12. Web Designing & Development Using Bootstrap and PHP – 22/04/2019**

In an enlightening session organized by the Department of Computer Science and Engineering on April 22nd, 2019, 40 students delved into the intricacies of Web Designing & Development using Bootstrap and PHP. The expert of the day, Mr. Rajat Tyagi, a seasoned Full Stack Expert, skillfully tackled the challenges associated with Web Designing & Development using PHP. With passion and expertise, he navigated through topics like the nuances of PHP, the art of crafting seamless user interfaces with Bootstrap, and the architectural marvels of Development Environments.

Students were not only introduced to the complexities of Data Processing using PHP but were also given a glimpse into the future. Mr. Tyagi painted a vivid picture of the vast career opportunities that await those venturing into the world of Development. The session was not just an informational event; it was a gateway to a world where innovation meets practicality, and creativity converges with technology.



**Images from a progressive workshop on Web Development**

### **13. Workshop on “Hotel Communication Skills” – 31/08/2019**

The Department of Hospitality and Tourism at Quantum University, Roorkee, orchestrated an insightful workshop on hotel communication skills, conducted by Mr. D.C. Vashishth, senior faculty member, on August 31, 2019.

Drawing from his extensive 20-year experience in both industry and academics, Mr. Vashishth shared valuable insights with 16 students. He emphasized the pivotal role of effective communication in the hospitality industry, underscoring its significance in building successful organizations. Through a detailed presentation, he delved into the nuances of communication, focusing on its impact on an organization's reputation and popularity. During the workshop, Mr. Vashishth not only shared his expertise but also provided practical tips to the students.

He covered essential aspects such as body language, effective listening, and the importance of these skills in the professional sphere. Additionally, he shared hotel reviews from the brands he had handled, offering valuable real-world insights. Furthermore, Mr. Vashishth candidly discussed the demanding nature of a career in hospitality. He highlighted the industry's challenges, emphasizing the need for hard work, dedication, and persistence, reminding students that success in hospitality requires substantial effort behind the scenes, beyond the glitz and glamor of the final event.



**Expert Talk on communication skills, conducted by Mr. D.C. Vashishth, Dean – Department of Hospitality and Tourism**



#### **14. Workshop on “Personal Hygiene – 07/09/2019**

The Department of Hospitality and Tourism at Quantum University, Roorkee, conducted a valuable workshop on Personal Hygiene, led by Mr. D.C. Vashishth, Senior faculty member, on September 07, 2019.

Leveraging his extensive 10-year experience in both industry and academics, Mr. Vashishth, shared crucial insights on the significance of Personal Hygiene in the hospitality industry. He underscored the pivotal role it plays in creating successful organizations. Through a detailed presentation, he emphasized the importance of Hygiene in upholding an organization's reputation and popularity.

During the workshop, Mr. Vashishth, shared his expertise with 10 students, providing practical tips and focusing particularly on Grooming, a current essential in the hospitality sector. His session not only enriched students' knowledge but also highlighted the contemporary needs of the industry, preparing them for the professional challenges ahead.



**Have a peek into the Personal Hygiene Workshop undertaken by Mr. Deepak Rawat, Assistant Professor**

## **15. Workshop on Engine Assembly-Disassembly – 31/09/2019**

To demonstrate the different parts of automobile engines to the students, the Impulse club organized a 'Workshop on Engine Assembly-Disassembly' on 31/09/2019 from 2:30 PM to 4:00 PM at the University Workshop.

A Tata Indica four-stroke engine is disassembled, and all the parts of the engine like the engine head, piston, valves, connecting rod, camshafts, intake manifold, exhaust manifold, oil sump, etc. were shown to the students along with their function in working of the engine. After gaining knowledge of different parts, the sequence of assembly operations is demonstrated and the engine is assembled.

More than 50 students of Quantum University participated in this workshop. These kinds of workshops are very helpful for the students as they get a platform to learn about the practical application of Engineering and contribute their part in the evolving world of technology as well as discover new avenues for their careers.

Following the disassembly, students were guided through the sequential operations of reassembling the engine. Over 50 enthusiastic Quantum University students actively participated in this engaging workshop. These hands-on sessions are instrumental, offering students a practical understanding of engineering concepts and opening new pathways for their future careers in the ever-evolving world of technology.



**Glance at the picture from a Workshop on Engine Assembly-Disassembly**