

DEPARTMENT NEWSLETTER

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, SCE, DEHRADUN

JAN-2024 TO JUNE-2024



NEURAL NEWS

DIRECTOR'S MESSAGE

DEAR STUDENTS,

The world of technology is transforming at an unprecedented pace, and as future engineers, you hold the power to drive this change. Excellence comes through dedication, continuous learning, and innovation. Focus on developing problem-solving skills, industry-relevant expertise, and a mindset of lifelong learning. Utilize the opportunities provided by the institution to enhance your knowledge and practical skills. Stay determined, work hard, and strive to make a meaningful impact in the field of Computer Science.



PROF. (DR.) PRAHLAD SINGH

HOD/COD'S MESSAGE

DEAR READERS,

I am pleased to share the latest edition of our Computer Science Department newsletter. This platform highlights our students' and faculty's achievements, innovations, and collaborative efforts.

Our department continues to foster excellence through quality education, hands-on learning, and a strong focus on research and industry relevance. I appreciate the dedication of our academic community and the editorial team for bringing this edition together.

Let's continue to inspire, innovate, and grow together.



MR. SARTAJ KHAN





DR. VIJAYLAKSHMI SAJWAN

EDITORIAL BOARD MESSAGE

DEAR READERS,

Along with all of the other routine activities and accomplishments that are detailed in its columns, this edition of the house journal provides you with thorough coverage of all of the significant events that have taken place inside the department. Through a combination of rigorous academic study, the thrill of discovery, and a variety of intellectual stimulation, the Department is dedicated to providing its students with an education that is among the best in the world. Within the scope of this issue, a summary of all the activities scheduled for January 2024 - June, 2024 issue is presented. The active participation of students in activities related to other than academics, such as innovation activities that encourage the student to explore opportunities and understand entrepreneurial skills, including alumni entrepreneur interactions, is one of the highlights. Other highlights include the coverage of the staff and faculty in activities such as Faculty Development Programs, Workshops, Guest lecturers, Hackathons, and ideations, among other things.

EDITORIAL BOARD STUDENT MEMBER



AYUSH KUMAR



SUNIL SISODIA



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VISION AND MISSION OF THE DEPARTMENT

• VISION •

To cultivate **engineers** with a worldwide employability, a strong entrepreneurial aptitude, a dedication to **research**, and a sense of **social responsibility**.

• MISSION •

M1: To create top IT engineers with industry-aligned education.

M2: To boost the technical skills of students as well as faculty.

M3: To inspire students to pursue higher education and launch entrepreneurial ventures.

M4: Provide exposure of latest tools and technologies in the area of Engineering and technology.

• ABOUT THE DEPARTMENT •

The Computer Science & Engineering Department was established in the year 2008 and has graduated many qualified engineers, working at very well-known organizations in India and abroad. The Department currently offers a Bachelor's Degree in Computer Engineering, Bachelor's Degree in Artificial Intelligence and Machine Learning (AIML) and Data Science. In addition to core courses, electives are provided in various Computer Science cutting-edge subjects that generate opportunities for absorption in frontier fields of Computing. Students are involved in diverse technical events and cognitive activities to explore their creativity as well as problem-solving skills. This accredited course fulfills the growing needs of the industry and would equip students with an in-depth understanding of the principles of Computer Science. The Computer Science and Engineering department at the Shivalik College possesses a unique center- the Shivalik Computation and Automation Society (SCAS). Also, it has collaboration with ICT Academy which provides real-life practical learning methodologies. A well-designed system to assess every student's performance. Value Added courses, Case Studies & Projects, Seminars, Student Development Programs, and Induction Programs delivered on cutting-edge technology impart hands-on experience and skill enhancement in students. Students are advised and assisted in their project work and Industry-relevant course material is provided.



FACULTIES ACHIEVEMENTS



Ms. Priyanka Garg, Assistant Professor in the Department of Computer Science and Engineering, presented her research paper titled 'In-Depth Analysis of Recent Models for Lumpy Skin Disease Virus & Stage Detection: A Comparative Study' at the prestigious International Conference on Emerging Trends in Expert Applications & Security (ICE-TEAS 2024), held from March 15-17, 2024, at JECRC, Jaipur.



Ms. Priyanka Garg, Assistant Professor in the Department of Computer Science and Engineering, actively participated in a 10-hour Faculty Development Program on 'Idea Generation Methods', organized by ICT Academy. The live online FDP was conducted from May 13 to May 17, 2024, and was hosted by Shivalik College of Engineering, Dehradun.



Dr. Rajiv Kumar, Dr. Vijaylakshmi Sajwan, Pradeep Chauhan, Priyanka Garg, Aakanksha Pundir, and Himanshu Suyal, Professors in the Department of Computer Science and Engineering, have published a patent on a Smart Device for Interactive Online Learning.



Mr. Pradeep Chauhan, Assistant Professor in the Department of Computer Science and Engineering, successfully participated in a 10-hour Faculty Development Program on Idea Generation Methods (Online Live FDP), organized by ICT Academy.



DEPARTMENT ACTIVITIES



The Department of Computer Science and Engineering organized a Value-Added Course for B.Tech second-year students on the topic "Challenges and Best Practices in Deploying Machine Learning Models" from 22nd January to 27th January.

This course aimed to bridge the gap between machine learning development and real-world deployment. It equipped participants with the skills to address common deployment challenges and optimize model performance at scale. Learners gained insights into ensuring model interpretability, managing production data pipelines, and maintaining model reliability through continuous monitoring. The course emphasized ethical, secure, and privacy-aware deployment practices. Participants explored practical toolkits and studied real-world deployment case studies. By the end of the course, learners were prepared to deploy robust, explainable, and scalable machine learning models in diverse operational environments, staying updated with future trends and industry demands.

A total of 62 students enrolled in the course.



The Department of Computer Science and Engineering organized a Value-Added Course for B.Tech second-year students on the topic "Advanced Data Analytics and Machine Learning in Real-World Scenarios", held from 22nd January to 27th January 2024.

This course was designed to equip participants with advanced knowledge and practical skills in data analytics and machine learning. It focused on multivariate analysis, time series forecasting, and real-time data processing for actionable insights. Learners explored advanced machine learning algorithms, including deep learning and reinforcement learning, with a strong emphasis on optimization and interpretability. A total of 63 students registered for the course and attended the sessions.



The Department of Computer Science and Engineering organized a value-added course for B.Tech second-year students on "Advanced Threat Detection and Incident Response", conducted from 22nd January to 27th January 2024. This course aimed to provide participants with advanced skills in detecting, responding to, and managing cybersecurity threats. It covered behavioral analysis, anomaly detection, and threat intelligence for identifying sophisticated attacks. Learners gained hands-on experience in developing and executing a comprehensive incident response plan based on the PICER framework. A total of 33 students attended the course.

DEPARTMENT ACTIVITIES



The Department of Computer Science and Engineering organized a Guest Lecture by BP India on 9th March 2024 at the Shivalik College of Engineering campus for B.Tech CSE students of the 2025 and 2026 batches. Mr. Subramaniam S served as the esteemed guest speaker for the event. The objective of the lecture was to engage with students and provide guidance on entering the corporate industry, along with insights into available internship opportunities.



The Department of Computer Science and Engineering organized a 15-day AWS Cloud Training program for B.Tech fourth-semester students from 6th December to 23rd December 2023. The objective of this training was to provide students with a comprehensive understanding of cloud computing concepts, hands-on experience with AWS services, and the skills required to design, deploy, and manage scalable, secure, and cost-effective cloud solutions.



The Department of Computer Science and Engineering organized a two-day workshop for B.Tech third-year students on "Data Science and Visualization using Python and Power BI", held from 8th to 9th February 2024. The workshop focused on data preprocessing, exploratory data analysis (EDA), statistical insights, and visual storytelling. It covered tools such as Matplotlib, Seaborn, and Power BI to help students effectively interpret and communicate data through compelling visualizations.

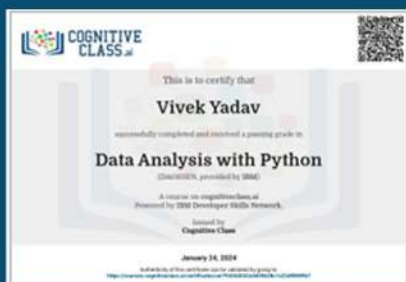
STUDENTS ACHIEVEMENTS



Abdul Wahid, a B.Tech second-year student, has successfully completed a 15.5-hour Udemy course titled "Data Analyst Skill Path: Excel, SQL & ML with Python in Hindi." This certification highlights his commitment to enhancing his skills in data analytics and machine learning.



Gagan Kaushik, a B.Tech second-year student, has completed the "Foundations of Cybersecurity" online course offered by Google through Coursera. This certification reflects his initiative to build a strong foundation in cybersecurity, aligning with current industry demands.



Vivek Yadav, a B.Tech second-year student, successfully completed the "Data Analysis with Python" course offered by IBM through Cognitive Class. This certification reflects his commitment to enhancing the analytical and programming skills essential in the field of data science.



Tanu Chauhan, B.Tech Second year student, completed the "Postman API Fundamentals Student Expert Certification" course offered by Lets Upgrade. This certification reflects his commitment to enhancing analytical and programming skills essential in data science.



Sudhanshu Kumar, a B.Tech second-year student, has successfully completed the 'Data Analysis with Python' course offered by IBM through Cognitive Class. This certification highlights his dedication to building strong analytical and programming skills aligned with current industry standards.



Supriya Kumari, a B.Tech Second-year student, has successfully completed a course on 'Introduction to JavaScript' from Mind Luster. This certification reflects her dedication to strengthening her foundational web development skills and staying aligned with modern programming trends.

STUDENTS ACHIEVEMENTS



Priyanshu Kumar, B.Tech second-year student, has completed a course on 'MongoDB Python Developer Path' from Mind Luster. This certification reflects his dedication to strengthening his foundational database skills and staying aligned with modern programming trends



Akshat Rawat, a second-year B.Tech student, completed a one-month internship in Web Development from 1st March to 31st March 2024, with outstanding remarks at Prodigy Infotech.



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FACULTIES ACHIEVEMENTS



Dr. Prithviraj Singh Solanki and Dr. Vijaylakshmi Sajwan, faculty members from the CSE Department, have published a book titled 'The Ultimate Java Handbook: Learn, Code, and Succeed'. This book transforms readers from Java novices to expert developers through comprehensive content, practical exercises, and solutions. It is available online on Amazon.



Ms. Priyanka attended the FDP on "Bridging Academia & Industry: Modern Practices in CS Education" from 24 Jun to 28 Jun 2024 at Amity University, Uttar Pradesh.



Dr. Vijaylakshmi Sajwan has been appointed as a Programme Committee Member and Reviewer for the 3rd International Conference on Data-Driven Computing and Intelligent Systems (ADCIS 2024), to be held on September 20–21, 2024.

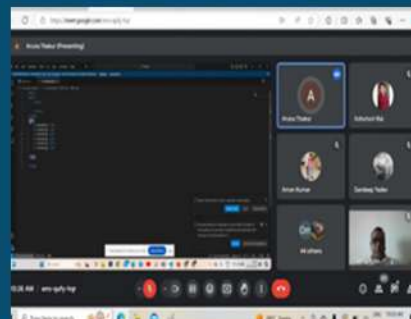
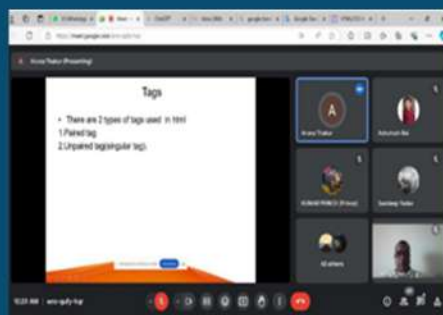


Dr. Rajiv Kumar completed the orientation program on "How to Get Ready for NAAC Binary Accreditation System", conducted by the Accreditation Ranking and Certification Network of India (ARC India) and CI Med.

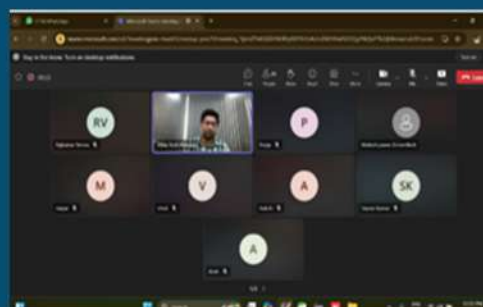
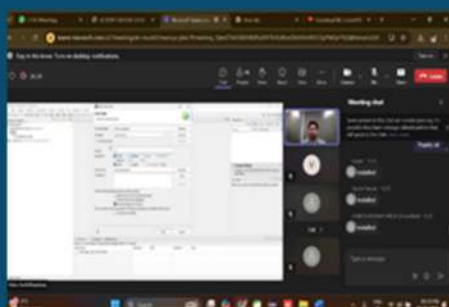


Ms. Surbhi Bhardwaj, Assistant Professor in the CSE Department, has completed an online course titled 'Python Programming 101: Beginner's Guide'.

DEPARTMENT'S ACTIVITIES



Dept of Computer Science and Engineering organized an online workshop on HTML/CSS on 21/09/2024. The student learned the fundamentals of web development, including HTML structure and CSS styling. They gained hands-on experience through coding exercises, practiced responsive design techniques, and explored advanced CSS concepts like flexbox and grid layout. By working on mini-projects, they applied their skills and received feedback to address questions and challenges.



The Department of Computer Science and Engineering organized an online workshop on "Introduction to Full Stack Web Development" on 28th September 2024 for B.Tech CSE third-semester students. During the workshop, students learned about Java, including how to install JDK 17 and run a sample Java program using Eclipse IDE.



The Department of Computer Science & Engineering organized an industrial visit for B.Tech third-year students to Rubico IT Pvt. Ltd. on 29th November 2024. The primary objective of this visit was to expose students to the latest industry trends and career development strategies.



The Department of Computer Science and Engineering organized a workshop on "Cloud Computing: Azure Cloud Services" for B.Tech second-year and third-year students. This industry-oriented workshop provided participants with a comprehensive understanding of cloud computing, with a focus on Microsoft Azure.

STUDENTS ACHIEVEMENTS



Anshul Bhatt, a second-year B.Tech student, successfully completed an online program on Data Science organized by iNeuron



Akshat Rawat, a second-year B.Tech student, participated in a one-day workshop on Cloud Computing organized by Ceekh Eduniv Pvt. Ltd.



Tanisha Dhasmana, a third-year B.Tech CSE student, completed an online course on Data Analytics and Visualization Job Simulation on 9th July 2024



Akshat Rawat, a second-year B.Tech CSE student, participated in the value-added course on Applied Machine Learning for Predictive Analytics conducted by the Department of Computer Science and Engineering.



Anshul Bhatt, a second-year B.Tech CSE student, participated in the IEEE Xtreme 15.0 programming competition held on 23rd October 2024.



Kabir Chand, a second-year B.Tech CSE student, earned a certificate for completing an online Cybersecurity Job Simulation course.



Ashwini Vats, a second-year B.Tech CSE student, successfully completed a certification course on 'Data Science and Big Data Analytics' from 22nd July to 2nd August 2024.



Sandeep Kumar Yadav, a second-year B.Tech CSE student, received an internship in Data Science from 15th July 2024 to 15th August 2024.

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