

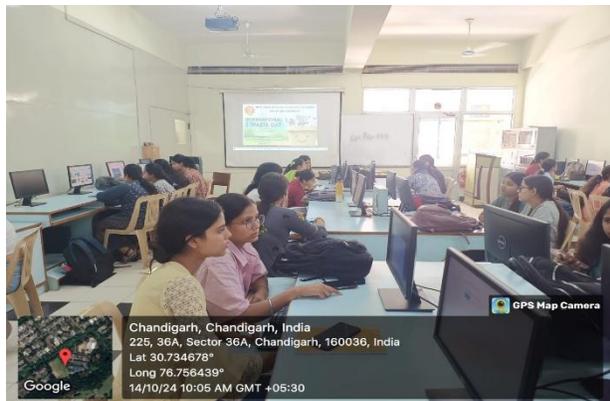
**Report
of
Department of Computer Science & Applications
(2024-25)**



**Mehr Chand Mahajan
DAV College for Women
Sector-36/A, Chandigarh**

www.mcmdavcw-chd.edu
0172- 2603355, 0172- 2624921

A session on “Mastering Analytical Aptitude” was held on 30th September 2024 by Mr. Sudhir Grover and Arpana Grover of Infomaths Studies Pvt Ltd. Its aim was to enhance logical thinking, problem-solving and critical reasoning skills needed for competitive exams and provide tips and shortcuts for quick analysis and calculation.



An E-Poster Making Competition was held on Theme "E-Waste: Reduce, Reuse, Recycle" on 14th October 2024 for BCA1 students. Jaspreet Kaur and Harleen Kaur won the First prize. Second prize was awarded to Aanchal and Gungun, and third prize went to Jashan and Anchal.

An orientation session on 10th February 2025 for “Career Prospectus and Higher Education Opportunities after Graduation Program” was conducted by Dr. Arpana Grover, Director, Infomaths Studies Pvt Ltd as resource person. Around 102 students attended the session. The aim was to provide insights into industry trends and the demand for specific skills, resume building, interview preparation and job search strategies. Students' queries and concerns regarding career planning were well addressed by the speaker.

A two-day skill-based and DST&RE sponsored workshop on 'Graphics Designing' was held on 27-28th February. The main aim of the workshop was to give industry-oriented hands-on training to students in designing graphics-based documents like brochures and advertisements. The resource persons were Mrs. Jasleen Kaur and Mr. Mandeep Singh from Winsoft Computers, Mohali. Around 30 students participated enthusiastically.

A field visit was organized to the National Institute of Electronics and Information Technology (NIELIT) Ropar, Punjab, India on 15th February 2025 for attending the 3rd International Conference



on Communication, Electronics and Digital Technologies (NICEDT-2025) on the 14th and 15th of February 2025. It had 8 tracks on various IT and Electronic technologies. This International conference was attended by participants from industries, academia, and other sectors from India and abroad. There were various technology-related stalls for getting updated about the latest know-how used in the industry. The teacher coordinators-Dr Indu Arora, Dr Deepti Sharda, Dr Ritika Bansal, Ms. Ashita Jain accompanied around 47 students of DCSA. Teachers and one of the students

not only participated but presented their research papers at the conference. Students also attended the panel discussion of Industry experts during the ongoing conference on how AI is impacting Job scenario and the areas where they should focus for better employability. Students were given exposure to their latest programs, equipment used in labs related to Augmented reality, Multimedia, software development and Artificial Intelligence by the faculty members. Students were demonstrated about their ongoing projects and the working of 3-D printers.



A field/educational visit to Central Scientific Instruments Organization (CSIO), Sector-30, Chandigarh was organized on 28 February 2025 to mark the celebration of Science Day. CSIO is a premier national laboratory dedicated to research, design and development of scientific and industrial instruments. Around 29 students were accompanied by three teacher coordinators, namely Dr. Mandeep K. Chawla, Dr. Deeksha Gupta and Dr. Navdeep Kaur. This visit provided an opportunity to gain exposure to the latest technologies, research areas, practical working environment and industrial practices. Students visited state-of-the-art laboratories, namely Mechatronics Lab, Automation Studio, Advanced robotics lab and Imagitronics lab to name a few. Professors and research scholars associated with the labs demonstrated the working of equipment and projects to the visiting students in the area of drones and robotics, AI and deep learning-based object localization, biomedical instrumentation, 3-D printing and medical aided equipment. The visit was an enriching experience for all students. It provided valuable practical insights into real-world applications of their academic learning. Students actively participated in demonstrations, observed live processes, and gained hands-on exposure to modern technology and work environments. Students expressed their appreciation for the visit, highlighting how it enhanced their understanding of career opportunities and industry expectations. The interactive sessions with experts were particularly inspiring, motivating students to align their skills with industry needs.



A field visit to National Survey of India, Sector 32, Chandigarh was organized for celebrating National Science Day on 28th February 2025. Dr Indu Arora, Dr Deepti Sharda, Dr Ritika Bansal and Dr Meenu Singla accompanied 24 Students of BCA, BBA and BSc. The field visit to this place was an enlightening experience that provided a comprehensive understanding of the mapping and surveying processes undertaken by the department. The visit included insights into various technologies and schemes, such as drone-based terrain mapping, the Swamitva Yojana, Laal Dora mapping, Geographic Information Systems (GIS), and the National Hydrological Project.



DST&RE sponsored iTech Fiesta 2025, an Inter-College IT Fest, under the aegis of MCM Vigyan Manch was organized on 05 March 2025. The Theme of the fest was “Artificial Intelligence: Applications, Ethics and Responsibilities”. It was aimed at offering a platform for students to self-actualize, explore and showcase their technical and extra-curricular skills. Dr. Anuj Sharma, Chairperson, DCSA, Panjab University (PU) was the chief guest for the inauguration session while Dr. Sonal Chawla, Professor, DCSA, PU was the chief guest for the prize distribution event. The fest witnessed enthusiastic participation of 154 students from 13 colleges across the Tricity. Participants competed in various stimulating competitions that tested the IT and programming skills of participants. Eight events were organized namely, IT Quiz, Web Designing, Debugging, e-Collage Making, Research-based Poster Presentation, e-Waste Modelling, Movie Making and IT-based Rangoli. The fest also included cultural activities by the students of DCSA.



A total of 11 teams enthusiastically participated in the debugging event. First prize went to Amanpreet Kaur Garcha and Sheetal of MCM DAV College for Women, Chandigarh. Second prize went to Saloni and Monika of PGGC for Girls, Sector 42, Chandigarh and third prize was awarded to Nupur and Rajbir Singh of DCSA, Panjab University.



A total of 11 teams participated in IT Quiz. First prize was awarded to Jaskaran Singh and Shivam of DCSA, Panjab University, Second prize to Simran and Moksh Mehra of Chandigarh University and Third prize to Udayveer Singh and Anmol Kanojia of S.D. College, Chandigarh.



A total of 9 out of 11 registered teams participated in web Designing. First prize went to Gautam Bhatia and Shubham Bisht of SGGs, Chandigarh. Second prize went to Richa Sharma and Arshdeep Kaur of DCSA, Panjab University. Third prize went to Rahul and Satyam of CCET, Chandigarh



As part of iTech Fiesta 2025, an E-Waste Modelling Activity was organized to promote sustainability, innovation, and awareness regarding responsible e-waste management. The activity featured several creative models that highlighted the potential for repurposing electronic waste. A functional robot was crafted using discarded electronic components such as circuit boards, wires, fan, LEDS and hardware parts, showcasing innovative reuse. A waste segregation model demonstrated an effective system for categorizing waste into biodegradable, non-biodegradable, and recyclable segments, emphasizing the importance of proper waste management. Another highlight was an interactive waste detection model that identified the type of waste and provided disposal instructions in Hindi, guiding users to place items in the appropriate colored dustbin. Additionally, decorative pieces were crafted from e-waste materials, demonstrating creative reuse possibilities. First Prize went to Anantveer Singh and Sehajpreet of Chandigarh



Group of Colleges, Landran. Second prize went to Ramandeep Kaur and Jatinder Kaur of MCM DAV College for Women, Chandigarh. Third prize was awarded to Chetna and Ishita of SGGGS, Chandigarh.

A total of 9 teams participated in the Rangoli Making event at iTech Fiesta 2025. The judgement was based on the criteria of selection of the design, neatness, clarity, color combinations and creativity by the participant to make their designs more presentable. First prize went to Gunjan Rani and Nargis of MCM DAV College for Women, Chandigarh. Second prize went to Vansh and Vanshaj Thakur of DAV College, Chandigarh. Third prize went to Harmanpreet Kaur and Jashanpreet Kaur of PGGC for Girls, Sector 42, Chandigarh.



A total of 10 teams participated in the E-collage making competition as part of iTech Fiesta 2025.



Participants created attractive and impressive collages representing the Applications and Ethics of Artificial Intelligence. First prize went to Kunal and Divya Syal of DAV College, Chandigarh. Second prize went to Budhram and Ansh Chopra of

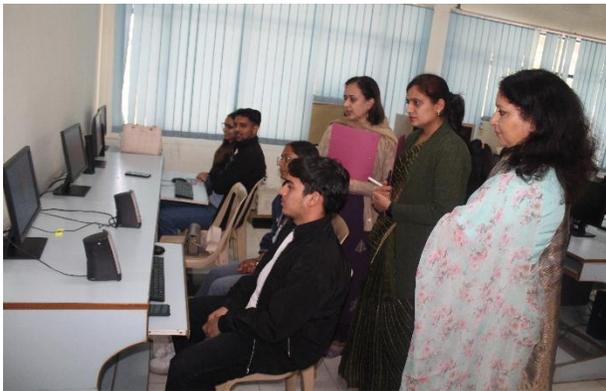
Chandigarh University. Third prize went to Jaspal Kaur and Deepika Singhmar of PGGC for Girls, Sector 42, Chandigarh.

A Research-based Poster Presentation competition was also organized as part of its annual IT-Fest. A total of 10 teams participated in the event, and submitted



posters printed on chart/flex banner/ sun board sheet/photo print. The overall theme spanned across various topics such as Applications of AI in education, warfare and security, mathematical expression recognition, Meta AI, Sentiment analysis, Multilingual support and emotions analysis. All the teams presented their posters in front of judges, along with a brief overview. The first prize was awarded to Nancy and Sayak of DCSA, PU, Chandigarh. Second and third prizes went to Nishka Malasi & Harnoor Kaur and Nisha Adhikari & Shubhra of MCM DAV respectively.

In Movie Making contest, the participants were given the task of creating a one-minute movie that demonstrates the role of AI in healthcare. The permitted tools included Windows Movie Maker, Movavi Video editor and opensource software like Figma and Canva. A total of 9 registered teams participated in the contest. First prize went to Sachin and Angellina Gill of DCSA, Panjab University, second prize went to Parneet Thakur and Manan Gupta of Chitkara University and third prize went to Prabhjot Singhand Mohit Dutta of Chandigarh University.

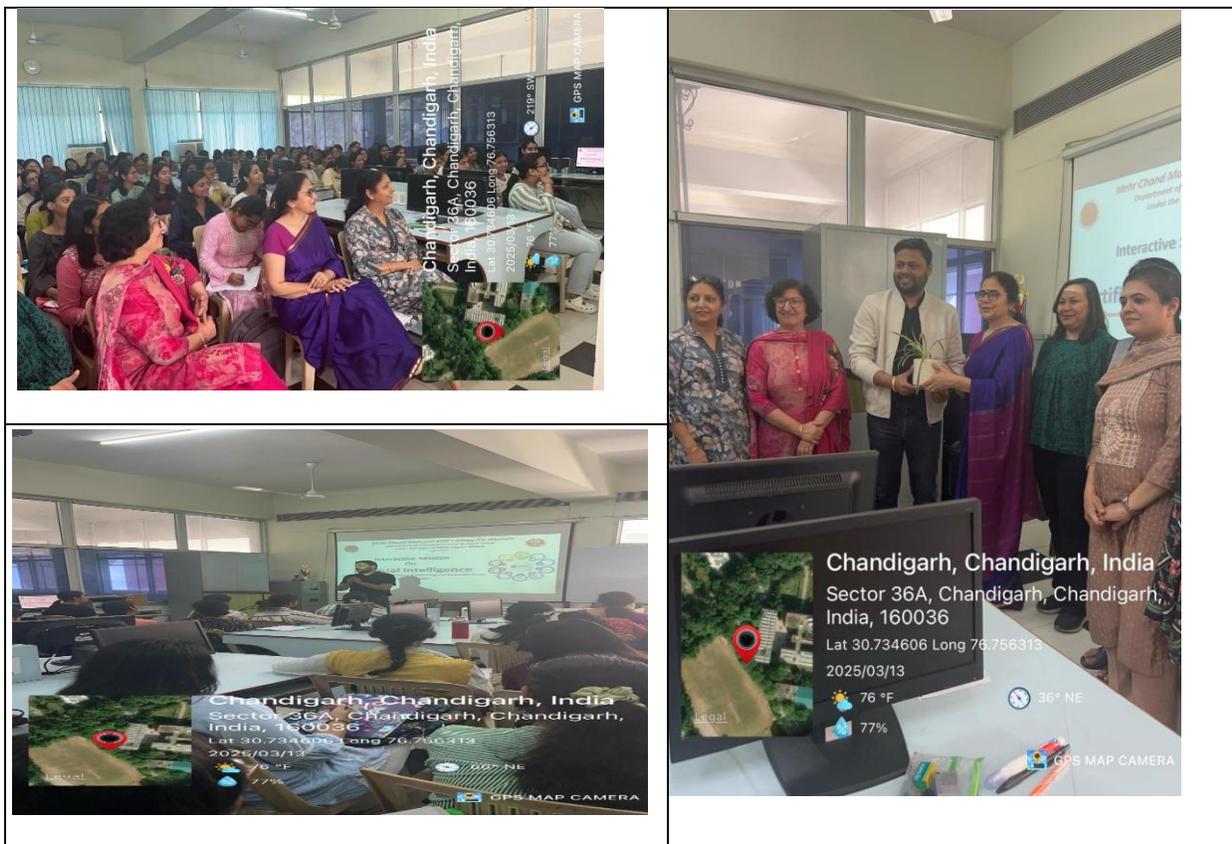


The cultural extravaganza commenced with the soulful rendition of Ganesh Vandana at the inauguration ceremony followed by melodic song. The energetic beats of Bhangra, traditional Haryanvi Dance and dazzling showcase of Bollywood dance performances etc. made the show a remarkable success. The event concluded with the distribution of prizes for academic achievements and outstanding performances in various competitions held throughout the fest.





DST&RE sponsored an Interactive Session on “Artificial Intelligence” was held on 13 March 2025 in Room No 124. The resource person of the event was Mr. Om Prakash Kouniza from Alar Solutions LLP, Mohali. Around 84 students attended the session. The main objective was to introduce students to the basics of Artificial Intelligence, explore the real-world applications of AI across different domains, discuss the ethical considerations and challenges associated with AI, and encourage students to pursue careers and research in AI-related fields. Overall, the session was a valuable learning experience, fostering enthusiasm and awareness about the potential of Artificial Intelligence.



BOS Members

Dr. Mandeep K. Chawla : PU Academic BoS (PG)

Dr Deeksha Gupta : PU Academic BoS (UIET-IT)

Reviewers

Dr. Indu Arora and Dr Mandeep Chawla were Reviewer in 3rd NIELIT's International Conference on Communication, Electronics and Digital Technologies (NICEDT-2025) organized by NIELIT, Ministry of Electronics and Information Technology, GOI on 14-15 February 2025 at Ropar, Punjab, India.

Publications

- Dr Indu Arora, Book: Programming with Python, National, 2024, ISBN: 978-93-6440-026-8, Kalyani Publisher.
- Dr Indu Arora, co-authored “Predictive VM placement algorithm for resource optimization: leveraging deep learning forecasting and resource relationship modeling”, International

- Mrs. Vandana Syal, Book: Desktop Publishing Using GIMP, National, 2025, Kalyani Publisher
- Mrs Punam, Book Chapter: “Lecture Notes in Networks and Systems (LNNS,volume 1197), titled” A Systematic Survey of Datasets Used in Face Generation Using Deep Learning”, International Conference on ICT for Sustainable Development, ICT Analysis and Applications, 2025, ISBN:2367-3370, Springer Nature
- Dr. Mandeep K. Chawla, “Innovative Management Strategies in Business: A Path Towards Sustainability (2024)”, Book Chapter: Employing Data Analytics to Boost Customer Experience and Purchase Choices, National, 2024, 978-81-97001-08-6, Gyankosh Publishers

Ongoing Research Projects

- Granted by ICMR, titled “NINJA- Non-invasive Neonate Jaundice Estimation using Artificial Intelligence”, PI- Dr. Navdeep Kaur, Co-PI- Dr. Mandeep K Chawla, started in 2024. It is for duration of 3 years (Feb 2024- Feb 2027)
- Granted as In-house College project, titled “Comparative Analysis of the impact of English-Only and Bilingual (English and Hindi) Mediums of Instruction of Student Learning in Programming and Operating System Concepts”,PI-Dr Deeksha Gupta, Co-PI- Dr. Deepti Sharda, Dr. Ritika Bansal and Dr. Navdeep Kaur, started in 2024. It is for one year duration.

Participation of Students in Inter College/University IT Fests

- DCSA, Panjab University, Chandigarh organized an Inter-College Tech Fest “Tech Utsav 2k25” on April 4, 2025 in which Mehakmeet Kaur and Akriti of BSc-II stood 1st in PowerPoint presentation, Rayna Nayyar and Himanshi Devgun of BCA-II secured the 2nd position in Debugging, Ashmeet Kaur and Jyotsna Sabharwal of BCA-II secured the 2nd position in Web Designing and Tamanna of BCA-II secured the 2nd position in Typing.
- PGGC for Girls, Sector 11, Chandigarh organized an IT Fest “TechZeal-2025” on 2 April 2025 in which Geetanjali and Ashmeet Kaur of BCA-II secured the 2nd position and Pari and Shweta of BCA-I secured the 3rd position in IT Quiz.



- SGGS, Sector 26, Chandigarh organized an Inter-College IT fest “TECHBEATS 2K25” on 12 March 2025 in which Palak and Tanvi Thakur of BCA-I secured the 1st position in E-Rangoli, Hargun and Geetanjali of BCA-II secured the 2nd position in collage making and Rayna Nayyar and Himanshi Devgun of BCA-II secured the 3rd position in Debugging.

- PGGC, Sector 46 organized an Inter-College IT fest

“TECHRITI” on 21 February 2025 in which Jeevika Sharma and Prachi Gumber of BCA-III secured 1st position in Face Painting.

- PGGC for Girls, Sector 42 organized an Inter-college IT fest “OSMIUM.... Whetstone of talent” on 6 February 2025, where Dolma and Jeevika of BCA-III secured the 1st position in Face Painting, Geetanjali of BCA-II secured the 2nd position in Flip Talk and Rayna and Himanshi of BCA-II secured the 2nd position in IT-Quiz.
- PGGC, Sector 11, Chandigarh organized an Inter-College IT fest “BIZZTECH 2K25” on 4 February 2025 and a total of 27 participants took part in different events.

Toppers in PU Examinations (23-24)

Session	Class	Roll No.	Name	Position	Marks	Total
Dec, 2023	BCA Sem1	23051283	Rayna Nayyar	Stood 2 nd in PU	372	400
Dec, 2023	PGDCA Sem1	40200	Vanshika	Stood 3rd in PU	397	450
Dec, 2023	PGDCA Sem1	40171	Ambika Kumari	Stood 4 th in PU	396	450
May 2024	PGDCA Sem2	37922	Vanshika	Stood 5 th in PU	893	1000
May 2024	PGDCA Sem2	37901	Ambika Kumari	Stood 3rd in PU	902	1000
May 2024	PGDCA Sem2	37922	Vanshika	Stood 5th in PU	893	1000