Computer Science Department
Bharati College

Academic Audit Report

(2023-24)

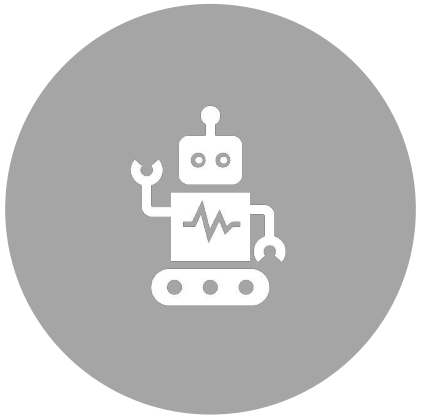
Introduction

The introduction of Computer Science course to BA Programme students with the incorporation of Generic Elective courses for Hons and Programme students are significant developments in the field of higher education. These initiatives aim to cater to a diverse range of academic interests and career aspirations, providing students with opportunities to broaden their horizons and engage in interdisciplinary learning. By incorporating computer science courses and interdisciplinary electives, students can gain a well-rounded education that prepares them for the demands of the modern world.

Vision and Mission of the Department



TO CONTRIBUTE EFFECTIVELY TO THE IMPORTANT NATIONAL ENDEAVOR TO PRODUCE QUALITY HUMAN RESOURCES USING INFORMATION TECHNOLOGY TOOLS.



TO TRAIN THE STUDENTS IN RECENT TECHNOLOGY IN DATA SCIENCE USING MACHINE LEARNING TECHNIQUES, ARTIFICIAL INTELLIGENCE AND INTERNET OF THINGS



TO TRAIN THE STUDENTS IN THE FIELD OF CYBER SECURITY, WEB DEVELOPMENT AND DATABASE ADMINISTRATOR.

Students Details- 2023-24

Name Of Program	Intake Capacity	Enrolment	From the state where University is Located	From Other State of India	Number of Student Graduating	Student Progression to Higher Studies
B.A Prog (Computer Application + Economics)	21	15	07	08	19	20
B.A Prog. (Computer Application + Political Science)	23	18	09	09	22	

Students Details- 2024-25

Name Of Program	Intake Capacity	Enrollment	From the state where University is Located	From Other State of India
B.A Prog (Computer Application + Economics)	21	14	07	07
B.A Prog. (Computer Application + Political Science)	23	11	04	07

Infrastructure Details

Number of Classrooms with ICT Facilities	Number of Lab with ICT Facilities	No. of Classroom
1	1	1

Number of computers available for students : 20

Student - Teacher Details

Success Rate	Percentage
2023-2024	98

Year	Teacher :Student Ratio
2023-2024	1:98

Details of the Department Members

S. No.	Name	Designation	Qualification	Specialization
1	Dr. Aruna Jain	Associate Professor	Ph. D	Watermarking
2	Dr. Sarita Kadian	Assistant Professor	Ph. D	Image Processing Authentication
3	Dr. Vinesh Kumar	Assistant Professor	Ph. D	Cognitive Radio Networks, Opportunistic Networks, Cognitive Radio based smart Grids, Smart cities
4	Dr. Yajuvendra Pratap Singh	Assistant Professor	Ph. D	Deep Learning
5	Ms. Sheetal Mavi	Assistant Professor	Pursuing Ph. D	Artificial Intelligence
6	Ms. Chingmuankim Naulak	Assistant Professor	Pursuing Ph. D	Data Science NLP
7	Ms. Preeti Kapahi	Sr. Scientific Assistant	MCA	

Department of Computer Science	H- Index	3.3

Name of Faculty	H-Index	Vidwan-ID
Dr. Aruna Jain	2	--
Dr. Sarita Kadian	2	559993
Dr. Vinesh Kumar	9	542263
Dr. Yajuvendra Pratap Singh	4	615548
Ms. Sheetal Mavi	2	568791
Ms. Chingmuankim	1	--

Research Publication- 2023-24

S. No.	Year	Title Of Paper	Name Of Author(s)	Name Of Journals	Year of Publication with Volume and Page numbers	ISBN/ISSN	Indicate UGC Approved Journal	National/Inter national Journal
1	2023-24	Insight on the Flow Physics of Shock-driven Elliptical Gas Inhomogeneity with Different Atwood Numbers	Joint Author Dr. Vinesh Kumar	International Journal of Mathematical, Engineering and Management Sciences	2024 9 1-22	2455-7749	Yes Scopus Web of Science	International
2	2023-24	Survey on securing wireless networks through a blockchain-based framework	Joint Author Dr. Vinesh Kumar	Journal of High Speed Networks	2024 30(4) 657-677	0926-6801	Yes Scopus Web of Science ESCI	International

Research Publication- 2023-24

S. No.	Year	Title Of Paper	Name Of Author(s)	Name Of Journals	Year of Publication with Volume and Page numbers	ISBN/ISSN	Indicate UGC Approved Journal	National/Inter national Journal
3	2023-24	A comparative analysis and classification of cancerous brain tumors detection based on classical machine learning and deep transfer learning models	First/Principal/ Corresponding author (If more than 2 authors) Dr Yajuvendra Pratap Singh	Multimedia Tools and Applications	2023-24 83 39537-3956	ISSN 1573-7721	SCI/SCIE	International
4	2023-24	A Comparative Study of Early Stage Alzheimer's Disease Classification using various Transfer Learning CNN Frameworks	First/Principal/ Corresponding author (If more than 2 authors) Dr Yajuvendra Pratap Singh	Network: Computation in Neural System	2023-24 35 1-29	0954-898X	SCI/SCIE	International

Research Publication- 2023-24

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6	2023 -24	Advancements in Machine Learning and Artificial Intelligence in Polymer Science: A Comprehensive Review	First Author Ms. Sheetal Mavi Co-author Dr. Sarita Kadian	Macromolecular Symposia	2024	ISSN:1521-3900	Scopus	International

Research Publication- 2023-24

S. No.	Year	Title of Paper	Name of Author(s)	Name of Journals	Year of Publication with Volume and Page numbers	ISBN/ISSN	Indicate UGC Approved Journal	National/Inter national Journal
7	2023 -24	Implementation of AI Based Model for Identification of Different Soil Types Using Tensorflow	First Author Ms. Sheetal Mavi	Macromolecular Symposia	2024	ISSN:1521-3900	Scopus	International

Book/Chapters - 2023-24

S. No.	Name of the teacher	Title of the book/ chapters published	Title of the paper	Title of the proceedings of the conference/Publisher of the Book	Name of the conference	National / international	Year of publication	ISBN/ISSN number of the proceeding
1	Dr Vinesh Kumar	Lecture Notes in Data Engineering and Communication Technologies (LNDECT)	Game Theory-Based Efficient Message Forwarding Scheme for Opportunistic Networks	Advanced Information Networking and Applications.	AINA 2024	International	2024	
2	Ms. Sheetal Mavi	Digital Marketing	Digital Marketing	School of Open Learning, University of Delhi		National	2024	
3	Ms. Sheetal Mavi	Social Media Marketing	Social Media marketing	School of Open Learning, University of Delhi		National	2024	

PATENTS

Name Of The Teacher	Title of the patent published	National / international	Year of publication	ISBN/ISSN number of the proceeding	Name of the publisher
Ms. Sheetal Mavi	**Integrated framework for software reliability prediction and analysis (Indian Patent)**	International	2024	Application No. 202411057886 A	Indian Patent Office. https://ipindia.gov.in
Ms. Sheetal Mavi	**Artificial intelligence based underwater drone**	International	2024	Indian Design No. 407316-001	Controller General of Patents, Designs & Trade Marks, India.

Mentor-Mentee List

Name of Mentor	Number of Mentee 2023-24	Number of Mentee 2024-25
Dr. Aruna Jain	6	6
Dr. Sarita Kadian	16	16
Dr. Vinesh Kumar	15	15
Ms. Sheetal Mavi	20	20
Dr. Yajuvendra Pratap Singh	12	12
Ms. Chingmuankim	8	8

Seminar 2023-24

S. No.	Name of Convener / Coordinator	Title of seminar/course	Sponsoring Agency	Duration with dates	No. of internal and external participants	Proceedings published Yes/No
1	Technophiles (Department of Computer Science)	Merch Design Competition	The Touch of Beads	17 March 2024 – 17 March 2024 (1 day)	70	No
2	Technophiles (Department of Computer Science)	Webinar on AR/VR	Jewels Obsession	23 March 2024 – 23 March 2024 (1 day)	110	No

Seminar 2023-24

S. No.	Name of Convener / Coordinator	Title of seminar/course	Sponsoring Agency	Duration with dates	No. of internal and external participants	Proceedings published Yes/No
3	Technophiles (Department of Computer Science)	Nirmaan Fest	Elewayte, Apna Adda, True Knock Tech, Interview Buddy, Fadeout, Food of Heartz, The Touch of Beeds, Students Circle, Ensemble, Snowcone, DU Fest Updates, DIPS Academy, DU CS Official, Hack2skill	25 April 2024 – 26 April 2024 (2 days)	300	No
4	Technophiles (Department of Computer Science)	Treasure Hunt Competition	DU India	28 July 2024 – 28 July 2024 (1 day)	150	No

Seminar 2023-24

S. No.	Name of Convener / Coordinator	Title of seminar/course	Sponsoring Agency	Duration with dates	No. of internal and external participants	Proceedings published Yes/No
5	Technophiles (Department of Computer Science)	Podcast on The Social Media Effect	Apna Adda, The Education Tree	30 March 2024 – 30 March 2024 (1 day)	1000	Technophiles (Department of Computer Science)
6	Technophiles (Department of Computer Science)	Podcast on Unleash the Power of Dev Tools	Apna Adda, The Education Tree	2 April 2024 – 2 April 2024 (1 day)	1000	Technophiles (Department of Computer Science)

Seminar 2023-24

S. No.	Name of Convener / Coordinator	Title of seminar/course	Sponsoring Agency	Duration with dates	No. of internal and external participants	Proceedings published Yes/No
7	Technophiles (Department of Computer Science)	Comment Clash Competition	Fadeout	5 April 2024 – 12 April 2024 (8 days)	40	No
8	Technophiles (Department of Computer Science)	Seminar on Data Science and Data Analysis	Hack2skill, DU CS Official, DIPS Academy, DU Fest Updates, Interview Buddy	25 April 2024 – 25 April 2024 (1 day)	150	No

Seminar 2024-25

S. No.	Name of Convener / Coordinator	Title of seminar/course	Sponsoring Agency	Duration with dates	No. of internal and external participants	Proceedings published Yes/No
1	Technophiles (Department of Computer Science)	Podcast on Women in STEM	DU Connection, Competitions Generator	5 August 2024 – 5 August 2024 (1 day)	1000	No
2	Technophiles (Department of Computer Science)	Podcast on Preparing for Industry: Comparing Skills and Processes	DU Connection, Competitions Generator	5 August 2024 – 5 August 2024 (1 day)	1000	No

Seminar 2024-25

S. No.	Name of Convener / Coordinator	Title of seminar/course	Sponsoring Agency	Duration with dates	No. of internal and external participants	Proceedings published Yes/No
3	Technophiles (Department of Computer Science)	Podcast on Program Management & Developer Relations	DU Fest Vibe, DU Fest, DU Se Hai	8 September 2024 – 8 September 2024 (1 day)	1000	No
4	Technophiles (Department of Computer Science)	Podcast on Gen AI Developer Roadmap	DU Fest Vibe, DU Fest, DU Se Hai	8 September 2024 – 8 September 2024 (1 day)	1000	No

Seminar 2024-25

S. No.	Name of Convener / Coordinator	Title of seminar/course	Sponsoring Agency	Duration with dates	No. of internal and external participants	Proceedings published Yes/No
5	Technophiles (Department of Computer Science)	Brand Collaboration – PeeSafe	PeeSafe	25 November 2024 – 25 November 2024 (1 day)	60	No
6	Technophiles (Department of Computer Science)	Tech Talks: Podcast Season 4	DU Hyped, Trolls DU, DU Ke Students	27 January 2025 – 27 January 2025 (1 day)	1000	No

Seminar 2024-25

S. No.	Name of Convener / Coordinator	Title of seminar/course	Sponsoring Agency	Duration with dates	No. of internal and external participants	Proceedings published Yes/No
7	Technophiles (Department of Computer Science)	ThinkLocal Business Solutions Challenge	Voxago, DU Prime, Trips 24x7, Eve Placement, Humari Bagiya, Nandini Homeware, Pixelpeps, Unstop, Hypedin, Yumsum	23 October 2024 – 23 October 2024 (1 day)	70	No
8	Technophiles (Department of Computer Science)	TechX @ Microsoft Gurugram	Microsoft Azure, Code Without Barriers, Azure Developer Community, Reskill, Essentially U, Commudle, Tech Pro Creator, GDSC ADGIPS, Kotlin Noida User Group, CS Sattva, The Breaking Prod, Sun Marketing	23 November 2024 – 23 November 2024 (1 day)	300	No

Seminar 2024-25

S. No.	Name of Convener / Coordinator	Title of seminar/course	Sponsoring Agency	Duration with dates	No. of internal and external participants	Proceedings published Yes/No
9	Technophiles (Department of Computer Science)	Skill Series Workshop by IMS Proschool – 2.0	IMS Proschool	8 February 2025 – 9 February 2025 (2 days)	250	No
10	Technophiles (Department of Computer Science)	Skill Series Workshop by IMS Proschool – 3.0	IMS Proschool	22 March 2025 – 29 March 2025 (8 days)	250	No

Strength Of the Department



Faculty has a strong base in the fields of - Programming, Website Designing, Data Analysis etc. as needed for undergraduate courses.



Faculty Members are familiar with the software needed for our students as a part of their curriculum, in all semesters.



Access to Modern facilities, including computer labs equipped with latest software and hardware, is initial students to gain hands-on experience and practical skills.



A rich collection of books in the college library.

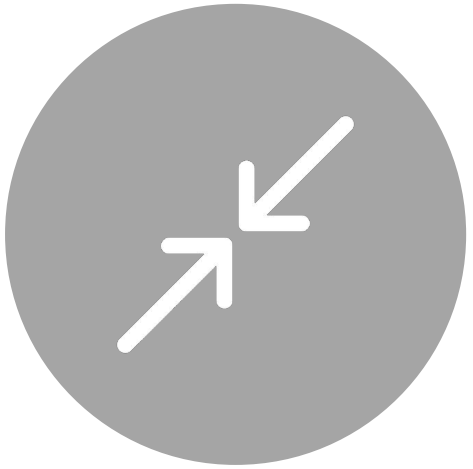
Strength Of the Department

- A Computer Science Department values diversity and easy to create an inclusive environment where students from all backgrounds feel welcome and supported.
- Department provides a supportive environment to provide academic advising, mentoring and career counseling of the students.
- Active engagement with industry partners through internships.
- Continuous assessment and feedback mechanisms to monitor student progress and ensure program effectiveness, with regular reviews and improvements based on findings and stakeholder input.

Weaknesses of the Department



LESS WORK DONE ON COUNSELLING OF STUDENTS FOR SOFTWARE INDUSTRY ORIENTATION.



LESS INFRASTRUCTURE.

Opportunities

- The Courses - Python Programming, DBMS, Computer Architecture, Data Analysis, Operating System, Website Designing etc. strengthen job prospects of students.
- The Department ensures students participation in various internship programmes conducted by JNU, IIT, IIITD and other good institutes.
- The Department aims at preparing students for technical skill based job opportunities

Challenges

Develop online/interactive contents for the students.

Bringing ourselves and students into research projects.

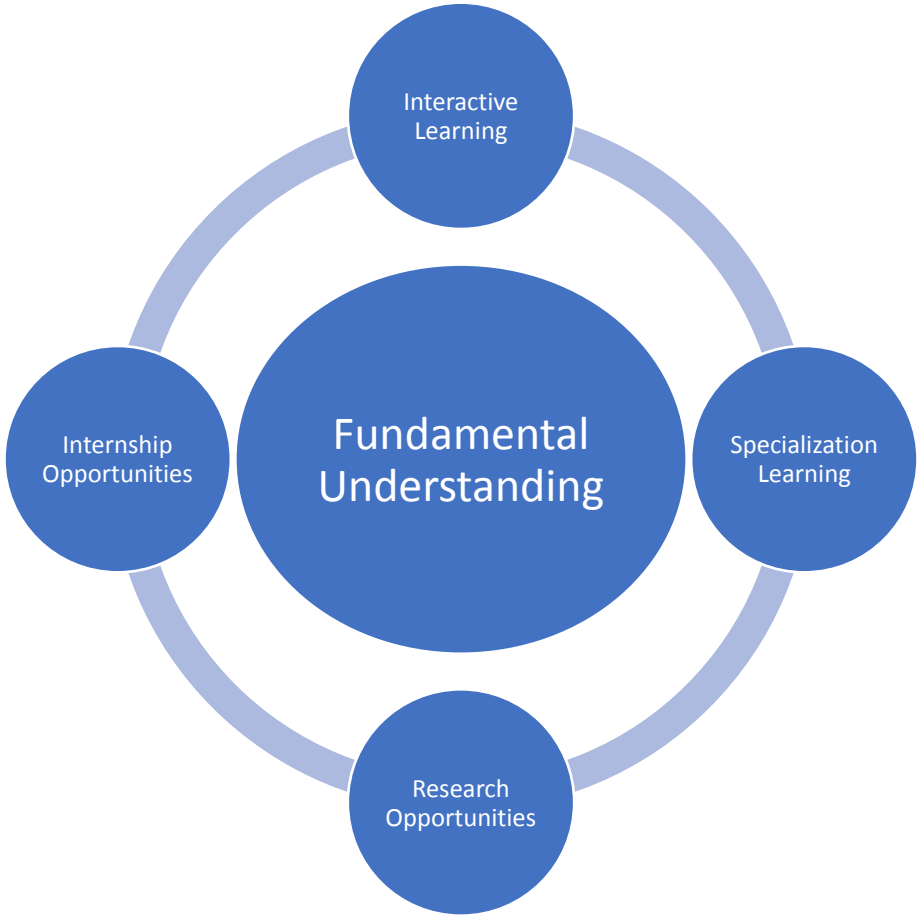
To guide and motivate our undergraduates to do live projects.

Name	Course	Year	Progression	University
Anisha Sinha	BA Prog	2022-23	LLB-Legal Studies	
Aditi Pattnaik	BA Prog	2022-23	MA in Economic	University of Mumbai
Damini Hoon	BA Prog	2022-23	MBA	IIM Jammu
Sejal Mehta	BA Prog	2022-23	PGDCA(diploma in data Analytics)	GGSIPU
Shivani Dhoundiyal	BA Prog	2022-23	B.Ed	
Shivani Singh	BA Prog	2022-23	M.Sc. (Data Science)	SNDT, Mumbai

Name	Course	Year	Company	Position
Manisha Sharma	BA Prog	2019-20	Supreme Court of India	Junior Court Assistant
Monalisa Patnaik	BA Prog	2019-20	IFFCO MC Crop Science Pvt Ltd	Assistant Finance
Ananya Gaur	BA Prog	2022-23	CTech Engineers Pvt. Ltd.	Business Operation Manager
Divanshi Sabharwal	BA Prog	2022-23	Total solutions group	Internship
Bhavna Gupta	BA Prog	2022-23	Accenture	New Associates

Name	Course	Year	Progression	University
Khushi Rajpal	BA Prog	2022-23	MBA(Finance and Business Analytics)	Bharti Vidyapeeth University Institute of Management and Research
Srishti Gandhi	BA Prog	2022-23	PGDM	Birla Institute of Management Technology
Vinita Bhardwaj	BA Prog	2022-23	LLB	National Forensic Science University, Gandhinagar
Suhani Agarwal	BA Prog	2023-24	MBA	Sharda University
Subhangi Basantia	BA Prog	2023-24	Information Security	IGNOU
Shweta Sharma	BA Prog	2023-24	M.Ed	GGSIPU

Road Map


Interactive Learning
Internship Opportunities
Fundamental Understanding
Specialization Learning
Research Opportunities