

# Computer Science Department Bharati College

Academic Audit Report-2021-23

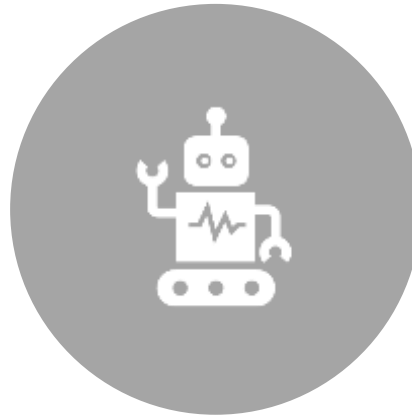
# Introduction

The introduction of Computer Applications to BA program students and the incorporation of Generic Elective courses for Hons 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.

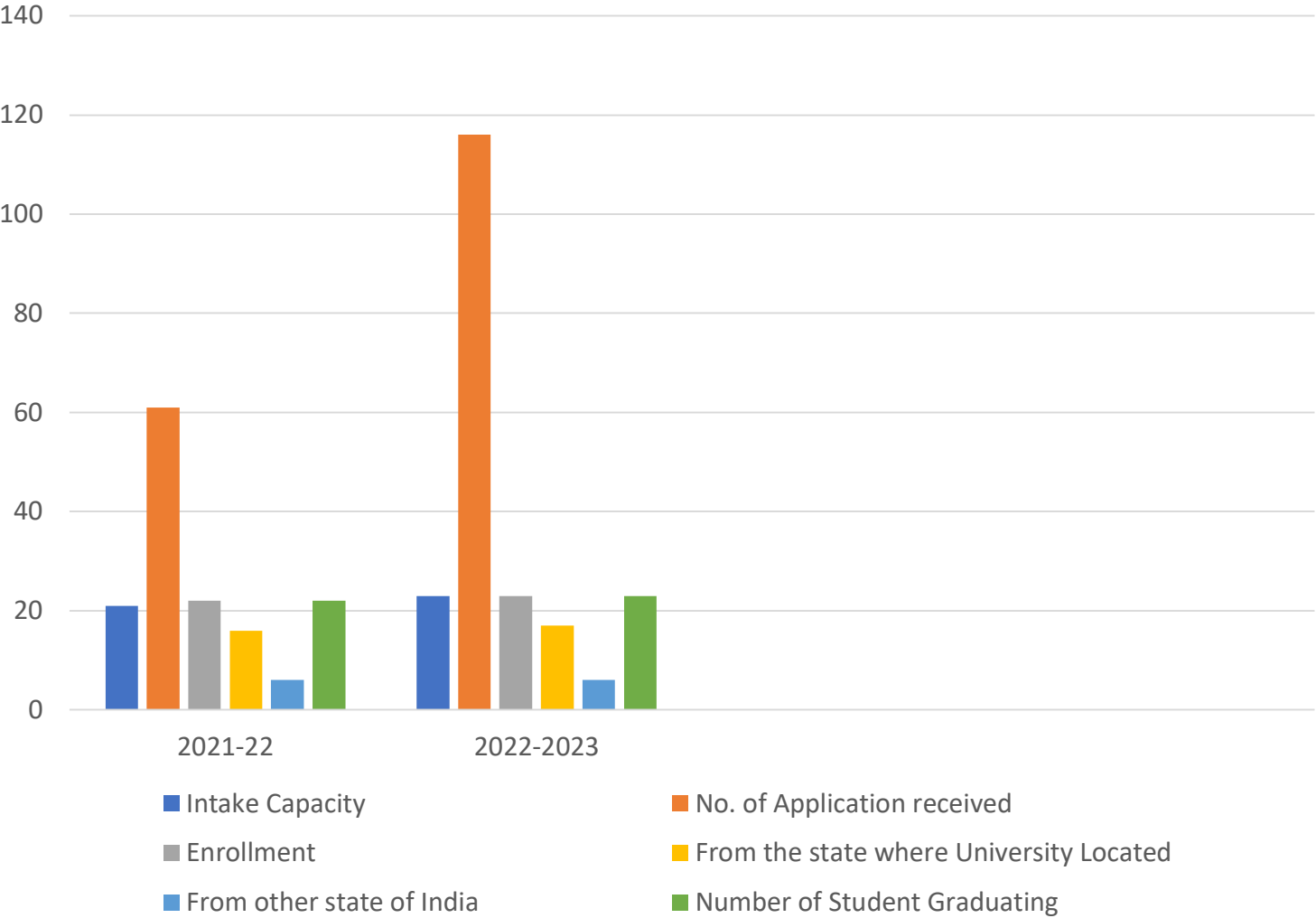
# Students Details- 2021-22

Name Of Program	Intake Capacity	No. Of Application Received	Enrollment	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	61	22	16	6	22	20
B.A Prog. (Computer Application + Political Science)	23	116	23	17	6	23	

# Students Detail- 2022-2023

Name Of Program	Intake Capacity	No. Of Application Received	Enrollment	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	40	19	11	8	19	10
B.A Prog. (Computer Application + Political Science)	23	49	15	8	7	15	

Students Details- 2021-22 & 2022-23



# Infrastructure Details

Number of Classrooms with ICT Facilities	Number of Lab with ICT Facilities
2	1
Number of computers available for students : 29	

# Student Teacher Details

Success Rate	Percentage
2021-2022	100%
2022-2023	100%

Year	Teacher :Student Ratio
2021-2022	1:26
2022-2023	1:22



# Faculty Details

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	
6	Ms. Chingmuankim Naulak	Assistant Professor	Pursuing Ph. D	Data Science NLP
7	Ms. Preeti Kapahi	Sr. Scientific Assistant	MCA	

# Research Publication- 2021-23

S. N o.	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/International Journal
1	2021	A Family of Theta-Function Identities Involving $R_\alpha$ and $R_m$ - Functions Related to Jacobi's Triple-Product Identity	Vinesh Kumar and other Authors	Palestine Journal of Mathematics	2022 <a href="#">Vol 11(2)</a> pp-177-186	2219-5688	Yes, Scopus Indexed also	International
2	2022	Channel Allocation in Cognitive Radio Networks: A Game-Theoretic Approach	Vinesh Kumar	International Conference on Network-Based Information Systems	2022	978-3-031-14314-4	Springer	International

# Research Publication- 2021-23

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/International Journal
3	2022	A Comparative Study of Deep Learning Algorithms for Epileptic Seizure Classification.	Dr. Yajuvendra Pratap Singh	Computing, Communication, Security and Intelligent Systems	pp. 1-6. IEEE, 2022.	pp. 1-6. IEEE, 2022.	IEEE Conference	International
4	2022	Brain Tumor Classification Using Deep Transfer Learning CNN Models	Dr. Yajuvendra Pratap Singh	4th International Conference on Inventive Research in Computing Applications	pp. 891-897. IEEE, 2022.	pp. 891-897. IEEE, 2022.	IEEE Conference	International

# Research Publication- 2021-23

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/International Journal
5	2022	AI powered Language Teaching Bot using DialogFlow	Chingmuankim and Rajni Jindal	International Conference on ICT Analysis and Applications	978-981-16-5655-2, 2022	978-981-16-5655-2	Springer, Singapore	International
6	2022	An Approach to Color Image Compression using Discrete Wavelet Transform	Aruna Jain and other Authors	GORTERIA	Volume 34, Issue 3 pp-108-115	0017-2494.	Peer Reviewed	Natioanl

# Research Publication- 2021-23

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/International Journal
7	2022	Digital Watermarking Technology – A Review Volume	Aruna Jain and other Authors	GORTERIA	Volume 34, Issue 2 pp-165-170	0017-2494.	Peer Reviewed	Natioanal
8	2022	Improve Query Performance of Data Warehouse with MYSQL Query Cache	Aruna Jain and other Authors	GORTERIA	Volume 34, Issue 2 pp-136-143	0017-2494.	Peer Reviewed	Natioanl
9	2023	Classification and Analysis of Textual data using Naive Bayes with TF-IDF	Chingmuankim and Rajni Jindal	2022 4th International Conference on Electrical, Control and Instrumentation Engineering (ICECIE)	978-1-6654-8076-5, 2023	978-1-6654-8076-5	IEEE Conference, Malaysia	International

# 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	ARTIFICIAL INTELLIGENCE-DRIVEN SUPPLY MANAGEMENT SYSTEM	International	May 2023	202311018915, The Patent Office Journal No. 19/2023	Govt of India

## Mentor- Mentee List

Name of Mentor	Number of Mentee 2021-22	Number of Mentee 2022-23
Dr. Aruna Jain	16	16
Dr. Sarita Kadian	15	15
Dr. Vinesh Kumar	15	15

# Seminar 2022-23

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	Aruna Jain Sartia Kadian Vinesh Kuma	Workshop/ Training on Python Programming for Artificial Intelligence and Machine Learning	Bharati College	01-02-2023	111	No
2	Aruna Jain Sartia Kadian Vinesh Kuma	Workshop on Information Security and Cyber Attacks	Bharati College	20-02-2023	85	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.

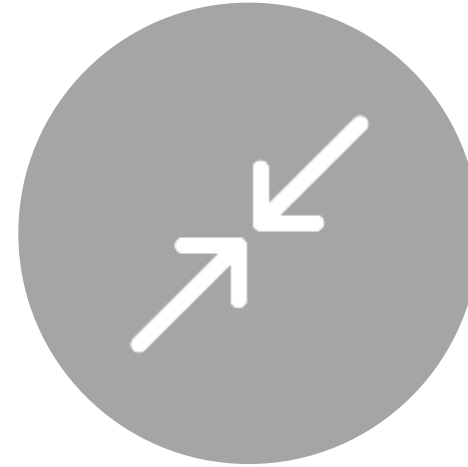
# Strength Of the Department

- 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	Company	Position
Sneha Mongia	BA Prog	2021-2022	MS Solutions	Graphic Designer
Tisha Rathore	BA Prog	2021-2022	MS Solutions	Graphic Designer
Muskan Gupta	BA Prog	2021-2022	Task Tracker Suite	Sr. Motion Designer
Simran Puri	BA Prog	2021-2022	Spinon web	Cyber Security service provider
Preeti Sharma	BA Prog	2021-2022	Rama Krishana Jeweller	Graphic Designer
Juicy	BA Prog	2021-2022		Technical Support Engineer

Name				
Bhavna Gupta	BA Prog	2022-2023	Accenture Pvt Ltd	Insurance Operations Associates
Shivani Aggarwal	BA Prog	2022-2023	Accenture Pvt Ltd	Insurance Operations Associates
Ms. Ragini	BA Prog	2023-2023	Concentrix	Web Developer

# Road Map

