

गुरु घासीदास विश्वविद्यालय, बिलासपुर Guru Ghasidas Vishwavidyalaya, Bilaspur

A Central University established by the Central University Act 2009 No. 25 of 2009

INFORMATION BROCHURE



School of Studies of Engineering and Technology

COMPUTER SCIENCE AND ENGINEERING

2024-2025

RANKING



48 th

Amongst Top Universities of India

(Both Government and Private Universities)

Guru Ghasidas Vishwavidyalaya (GGV) has earned a place among **India's top 50 universities** in The Times Higher Education World University Rankings. This achievement is attributed to our Vice-Chancellor **Professor Alok Kumar Chakrawal's leadership.**

It is GGV's first international ranking, placing it in the **1001-1200 bracket globally**. Our success is linked to implementing the **National Education Policy-2020** and fostering a positive academic environment.

The university focuses on holistic student development through skill programs, collaborations, and startup initiatives, leading to **250+ patents** and **15+ startups.**

Professor Chakrawal's commitment has elevated GGV's international academic standing. The Times University Rankings involve 1799 universities worldwide, emphasising the university's dedication to progress.





Table of Contents

- **01.** FROM THE DESK OF THE HON'BLE VICE CHANCELLOR
- 02. FROM THE DESK OF THE REGISTRAR
- 03. FROM THE DESK OF THE DEAN
- **04.** FROM THE DESK OF THE HEAD OF THE DEPARTMENT
- **05.** ABOUT THE VISHWAVIDYALAYA
- **06.** ABOUT THE DEPARTMENT CSE
- **07.** VISION & MISSION
- **08.** FACULTY DETAILS
- 10. RECENT RESEARCH PAPERS
- 11. GPU WORKSTATION
- 12. LABORATORIES
- 14. SOCIAL CONTRIBUTION
- 16. ACHIEVEMENTS
- 17. PLACEMENTS
- 18. STUDENTS LIFE
- 19. EQUILIBRIO
- 20. TECHNICAL CLUBS
- **22.** NOTABLE ALUMNI
- 24. RECRUITERS
- **25.** END

PROF. ALOK KUMAR CHAKRAWAL

VICE CHANCELLOR,

GURU GHASIDAS VISHWAVIDYALAYA



Message from the Hon'ble Vice Chancellor

Guru Ghasidas Vishwavidyalaya is a Central University of Chhattisgarh which bears the principal charge of providing job-oriented education, taking care of the educational aspirations, propagation of quality education, and enlightenment of the people of local society and remote areas.

We shall comprehensively make efforts to grow this University, named after the great saint Baba Guru Ghasidas, like a banyan tree of higher learning at national and international level. As we navigate the exciting path ahead, the CSE department is poised to introduce cutting-edge programs, collaborative research endeavours, and industry partnerships that will position our graduates at the forefront of technological advancements.



PROF. MANISH SHRIVASTAVA

REGISTRAR
GURU GHASIDAS VISHWAVIDYALAYA

Message from the Registrar

It is with great pleasure and pride that I extend my warmest greetings to the distinguished faculty, bright students, and esteemed stakeholders of the Department of Computer Science and Engineering. This department is not just a hub of learning; it is a dynamic centre of innovation, excellence, and forward-thinking. In the rapidly evolving landscape of technology, the Department of Computer Science and Engineering stands as a beacon of academic prowess, contributing significantly to the intellectual capital of our institution.

I am honoured to share a few words about the future aspects of our beloved department. The vision for the future encompasses a commitment to pushing the boundaries of knowledge, fostering a culture of research and development, and preparing our students to be leaders in the ever-changing field of computer science and engineering.

PROF. SHARAD CHANDRA SRIVASTAVA

DEAN

SCHOOL OF STUDIES IN ENGINEERING &

TECHNOLOGY

GURU GHASIDAS VISHWAVIDYALAYA



Message from the Dean

The students of B.Tech, School of Studies in Engineering and Technology, Guru Ghasidas Vishwavidyalaya, Bilaspur are ready to build their encroach upon the professional arena. With uncompromising academic percentages, many bright students from GGV are nurtured as thoughtful techies because of their enthusiasm for the practical applicability of technology, especially computing.

If required, they are eager to do things abundant beyond. I am delighted to present this vibrant batch of students at our computer science and engineering department who are capable of achieving new heights. Our CSE department ensures the overall development of the students and I can ensure that the department and its students perform with excellence in any activity assigned to them with their utmost enthusiasm and sincerity.



PROF. ALOK KUMAR SINGH KUSHWAHA

HEAD OF COMPUTER SCIENCE

& ENGINEERING DEPARTMENT
GURU GHASIDAS VISHWAVIDYALAYA.

Message from the Head of the Department

I encourage all stakeholders, both current and prospective, to take pride in being associated with a department that not only excels in the present but is dedicated to shaping the future. The journey ahead is promising, and together, we shall continue to elevate the standards of excellence in education, research, and innovation.

I extend my best wishes to the Department of Computer Science and Engineering for continued success and growth. May our collective efforts pave the way for a future where the department remains a global leader in shaping the next generation of tech innovators.



About the Vishwavidyalaya

Guru Ghasidas Vishwavidyalaya is a Central University of India, located in city Bilaspur of State C.G., established under Central Universities Act 2009, No. 25 of 2009. Formerly called Guru Ghasidas University (GGU), established by an Act of the State Legislative Assembly, was formally inaugurated on June 16, 1983. GGU is an active member of the Association of Indian Universities and Association of Commonwealth Universities. Situated in a socially and economically challenged area, the university is appropriately named to honor the great Satnami Saint Guru Ghasidas (born in the 17th century), who championed the cause of the downtrodden and waged a relentless struggle against all forms of social evils and injustice prevailing in the society.

About The Computer Science and Engineering Department

The department of Computer Science & Engineering was established in 1997. With a consignment to providing quality higher education. With the understanding, knowledge, and practical ability to participate in a long 'revolution'.

The knowledge will empower you to surmise and foresee the great changes and challenges that Computer Science & Engineering offers to the world, now and in the future. Besides teaching there is also a doubt removal session. Specialized laboratories with high-performing computers such as Networking Lab, Advance Programming Lab, Database, and Project Lab. These provide opportunities for leading projects by students under the joint supervision of the faculty and authorities from the industry.

The department has been involved in providing training in sectors like DRDO(Delhi), Microsoft(Hyderabad), CMC (Kolkata), Orbit IT(Hyderabad), SECL, BSNL, Indian Railways, Bokaro Steel Plant & Bhilai Steel Plant (SAIL), Software Tech & ISM(Bangalore). Our graduates are working around the prestigious organizations majorly Microsoft, Google, Intel, Samsung Infosys, Wipro, IBM, TCS, Mahindra BT, Philips, PayPal, and many more.

For better research work, the department has One GPU Enable Workstation (Processor: Intel Xeon Silver 41110, 64 GB RAM, GPU: NVIDIA Quadro RTX 5000 with 16 GB RAM)



VISION

To create the most conducive environment for quality academic excellence, innovation, creativity, latest knowledge, and international competency for handling global challenges.

MISSION

Our mission is to produce technically sound, diverse, and responsible engineers to meet national - international standards in research, academics, and IT solutions with a grip on innovative thinking and social and ethical responsibilities.

OBJECTIVES

- To build decision-making, design skills.
- To develop research and innovative thinking.
- To promote students for higher studies and life learning thinking.
- To make students work purposefully in IT industries.

OUR FACULTIES



Dr. Alok Kumar Singh Kushwaha Professor



Dr. Upasana SinhaAssociate Professor



Dr. Kapil Kumar NagwanshiAssociate Professor



Dr. Suraj SharmaAssociate Professor



Dr. Manish ShrivastavaAssociate Professor



Dr. Amit Kumar ChandananAssociate Professor



Dr. Devendra Kumar Singh Assistant Professor



Dr. Nishant BeharAssistant Professor



Mr. Vaibhav Kant Singh Assistant Professor

OUR FACULTIES



Mrs. Nishi Yadav Assistant Professor



Mrs. Raksha Pandey
Assistant Professor



Mr. Amit BaghelAssistant Professor



Mr. Satish Kumar Negi

Assistant Professor



Mr. Pushpendra Kumar Chandra Assistant Professor



Mr. Manjeet Jaiswal



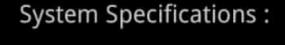
Dr. Princy MatlaniAssistant Professor

RECENT RESEARCH PAPERS

- Dr. Alok Kumar Singh Kushwaha published his research paper entitled "The power of deep learning for intelligent tumor classification systems: A review."
- Dr. Kapil Kumar Nagwanshi published his research paper entitled "Human footprint biometrics for personal identification using artificial neural network."
- Dr. Suraj Sharma, published his research paper entitled "A Novel Modified and Optimized Meta-Heuristic Load-Balancing Technique for Cloud Computing System."
- Dr. Upasana Sinha published her research paper entitled "Computer succoured vaticination of multi-object detection and histogram enhancement in low vision in IJBM."
- Dr. Amit Kumar Chandan published his research paper entitled "A Wavelet Features and Machine Learning Founded Error Analysis of Sound and Trembling Signal."
- Dr. Devendra Kumar Singh published his research paper entitled "A Collection of ML Algorithms for Detection of Thyroid: A Computer Based Approach to Handle the Critical Medical Issue."
- Dr. Nishant Behar published his research paper entitled "A Collection of ML Algorithms for Detection of Thyroid: A Computer Based Approach to Handle the Critical Medical Issue."
- Mrs.Nishi Yadav published her research paper entitled "UASN-3D: An energy efficient localization based on LEACH-BR algorithm (EELBL-BR)."
- Mrs. Raksha Pandey published her research paper entitled "VIDEO INTER-FRAME FORGERY DETECTION USING MACHINE LEARNING."
- Mr. Vaibhav Kant Singh published his research paper entitled "Colorization of Old Gray Scale Images and Videos Using Deep Learning".
- Mr. Aditya Singh Chauhan, Ayush Singh, Raja Thakur of Batch 2025 published their research paper entitled "Homomorphic Encryption: Hand inside the gloves" in IEEE
- Mr. Thammina Kiran of batch 2022 presented a Paper in "Covid Challenges of Energy and Environment Management for Sustainable Growth of Process Industries" on September 10th and 11th 2021 online.
- Mr. Rishabh Upadhyay, Final Year, published his research paper entitled "Energy Transition and Wind Energy" in IRJET.

GPU WORKSTATION

Dive into the world of high-performance computing with our GPU Workstation. This specialized setup integrates state-of-the-art graphics processing units, unlocking a realm of possibilities for students and researchers. Whether you're delving into complex simulations, exploring deep learning, or pushing the boundaries of scientific computing, our GPU Workstation provides the computational muscle to elevate your projects. Step into the future of accelerated computing and unleash your creativity in this dynamic hub of innovation.



System NO: 001

OS: Windows 10 Pro for workstation (20H2)

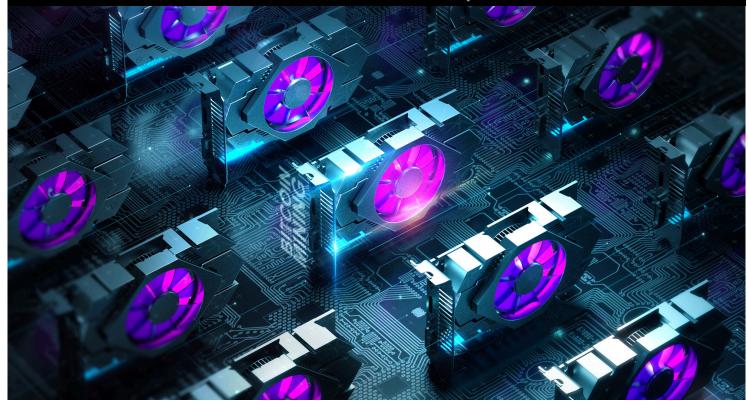
Processor: Intel(R) Xenon(R) Silver 4110 CPU @2.10 GHz

2.10GHz (2 Processors)

RAM: 64GB

System Type: 64-bit Operating System, x64-based processor

Pen and Touch: No Pen or Touch Input is available



OUR LABORATORIES

Advanced Programming Lab

Explore the realms of cutting-edge coding techniques and software development in our Advanced Programming Lab. Students delve into complex algorithms, data structures, and emerging programming languages, fostering a dynamic learning environment where innovation and problem-solving thrive.



DBMS (Database Management System) Lab

Uncover the power of organized data in the DBMS Lab. From designing efficient databases to mastering SQL queries, students gain hands-on experience managing and manipulating data. This lab equips them with essential skills for modern database administration and development.



OUR LABORATORIES

IoT Lab (Internet of Things)

Immerse yourself in the world of interconnected devices and smart technologies in the IoT Lab. Students experiment with sensors, actuators, and microcontrollers to create innovative IoT solutions. This lab serves as a hub for exploring the endless possibilities of a connected and intelligent future.





SOCIAL CONTRIBUTION

Sowing Seeds of Sustainability: CSE Department's Green Initiative

In a concerted effort to extend our impact beyond the digital landscape, the Computer Science and Engineering department has undertaken a significant initiative—planting 1000 trees. Recognizing the critical role of environmental conservation, our department has actively contributed to the betterment of society through this green endeavour.

This thoughtful initiative not only reflects our commitment to academic excellence but also underscores our responsibility towards the environment. By planting 1000 trees, we aim to mitigate the effects of deforestation, enhance biodiversity, and contribute to creating a sustainable and green campus.

The project is a testament to the department's awareness of its role in society and its dedication to holistic education. It not only instills a sense of environmental responsibility in our students but also serves as a reminder that our impact extends far beyond the lines of code. As these saplings take root and grow, they symbolise the collective efforts of the Computer Science and Engineering department towards creating a healthier and more sustainable future. We look forward to seeing these trees flourish and stand tall as a living testament to our commitment to environmental stewardship. Kudos to the entire department for sowing the seeds of positive change!



SOCIAL CONTRIBUTION

Students Dedicate 30 Days to "Swabhiman Thali" Initiative

Beyond the realms of coding and algorithms, the students of our Computer Science and Engineering department have showcased their compassionate side by dedicating 30 days to the "Swabhiman Thali" initiative. This noble endeavour exemplifies the spirit of community service and social responsibility instilled within our student body.

"Swabhiman Thali," a program aimed at ensuring dignified meals for those in need, witnessed the unwavering dedication of our CSE students. Through rigorous efforts and a commitment to making a positive impact, our students actively participated in the initiative, demonstrating the department's ethos of contributing to the welfare of society.

Their selfless contribution not only reflects the values instilled by our department but also emphasizes the importance of empathy in the journey of holistic education. As our students rigorously worked towards supporting "Swabhiman Thali," they not only provided meals but also fostered a sense of dignity and respect for those they served.

This collective effort is a testament to the benevolence and social consciousness that defines the character of our CSE students. We are immensely proud of their commitment to creating a positive impact, one meal at a time. Here's to the spirit of giving and the enduring legacy of compassion within the Computer Science and Engineering department!



ACHIEVEMENTS

GATE/GRE/TOEFL/IELTS/HACKATHON

ACHIEVEMENTS

GATE

OAIL

GATE Excellence

Rishabh Gupta clinched an impressive 2nd All India Rank in GATE-2018, continuing his journey to success with an M.Tech pursuit at IISc Bangalore, eventually flourishing into a skilled Data Scientist at Flipkart.

Further GATE Excellence **58+** students qualified for GATE 2023 with notable ranks.

Were able to secure prestigious universities including **IISc**

Bangalore, MNIT Bhopal and NIT Rourkela and many more.

GRE IELTS ETS TOEFL

We're delighted to announce the outstanding achievements of our students in international exams:

10 students highlighting their

GRE exam, strong aptitude and determination for higher education abroad.

One of our brilliant students has triumphed in the **TOEFL** exam, demonstrating outstanding language proficiency. And one of our students secured 6.5/9 in the **IELTS** exam.

EXTRA ACHIEVEMENTS

PRANAV RAJVEER AND SAI LAKSHMI EMERGED AS TOP PERFORMERS IN THE SAMSUNG SOLVE FOR TOMORROW HACKATHON AMONG 20,000+ PARTICIPANTS.





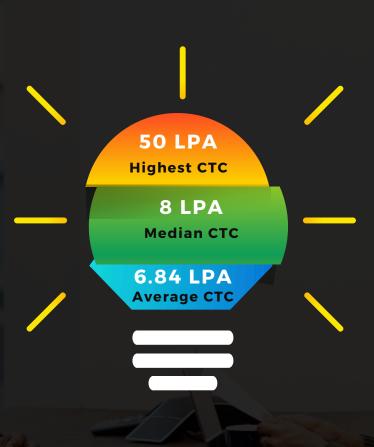
OUR SIX STUDENTS, ADITYA SINGH CHAUHAN, AYUSH
SINGH, RAJA THAKUR, D LAKSHMI PRASANNA, UDAYA KUMAR
& GIRI RAJA SEKHAR WERE SELECTED FOR THE GRAND FINALE
OF SMART INDIA HACKATHON.







PLACEMENT STATISTICS



A WISE MAN WILL MAKE MORE OPPORTUNITIES THAN HE FINDS



Breaking barriers, a CSE student clinched a remarkable 50 LPA package at Trango Tech. This success echoes our commitment to excellence and the student's dedication. Cheers to this achievement, a testament to the caliber of our department.

Here's to more triumphs ahead!

VADEPALLY DEVIPRIYA

Amogh Pete and Himanshu Gupta triumphed in the American Express Hackathon, securing internships and Pre-Placement Offers. Celebrate their success and explore rewarding opportunities at American Express, a global leader in financial services.

AMOGH PETE | HIMANSHU GUPTA

STUDENT LIFE

Guru Ghasidas Vishwavidyalaya provides an environment that nurtures leaders in addition to sound engineers. Students with tight academic schedule, they manage to indulge in various extra-curricular activities. Students participate in inter-hostel competitions, sports tournaments, and various hackathons. Students control facilities like organisisng and conducting some events. These activities provide holistic improvement platforms for students to sharpen their technical and managerial skills, which are imperative for everyone to excel in the workplace.

Students do well in their co-curricular as well, getting certification from NPTEL, Coursera, and other teaching platform. Many participate in hackathons and case competitions and bring glory to the University. They participate at university level in debate and speech competitions to improve their communication skills.

CLUBS & SOCIETIES

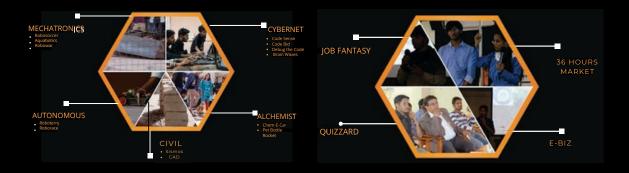
Creativity is inculcated in team members of clubs of GGV right from the start, helping them find creative solutions to real-world problems. Timely meetings throughout the year and students' active participation are the most remarkable characteristic of GGV clubs. University students outdo their peers at various Inter-college festivals. Students are self-driven to leave a mark on big stages, and this passion keeps the spirit of university alive and kicking. The sheer variety of activities that students are involved with is evident from the number of student clubs - dramatics, filmmaking, dance, music (western and Indian), photography, fine arts, debating, and others.





"EQUILIBRIO" is a National Level Technical Fest of the Central University of Chhattisgarh

Every year talented students of School of Studies of Engineering and Technology, Guru Ghasidas Vishwavidyalaya organize "Equilibrio". Equilibrio is an annual techno cultural fest of SOSET,GGV which provides a platform to our brilliant students to showcase their sound technical and management skills. Since its inception in 2013, Equilibrio has emerged as a prime curator of creative minds, initiated to serve as a perfect launchpad for technocrats to showcase their technical skills and inventiveness.



Equilibrio includes educative and training events such as workshops, motivating guest talks as well as fun competitive events such as Robo wars, chemical fuel car race where all students get a chance to shine. Cultural Events such as EDM Night and Exhibitions are also present. It not only provides fun and enjoyable moments to its participants but also provide an opportunity to work towards a social cause by providing technical solutions towards its rectification. With students from other departments of GGV as well as other universities also taking interest in Equilibrio, number of participants is growing steadily with every passing year.

TECHNICAL CLUB



Google Developer Student Clubs Guru Ghasidas Vishwavidyalaya

Google Developer Student Clubs (GDSC) at Guru Ghasidas Vishwavidyalaya is a community group for university students interested in learning new technologies and developing innovative products. Students part of GDSC grow their knowledge in a peer-topeer learning environment and build solutions for their community.

Students meet developers with diverse backgrounds and different majors at the university and work as a team. They learn about a range of technical topics and gain new skills through hands-on workshops, events, talks, and project-building activities - both online and in-person. Our students apply these new learnings to build great solutions for local problems. All these help them to advance their skills, career, and network.

This year GDSC GGV conducted more than 10 events with the participation of more than 1000 students. Some of the notable are Compose Camp, Induction Program, Google Career Cloud Practitioner (GCCP), Say Hello to Google Cloud, Info Session on Solution Challenge, Flutter Forward, a hackathon named Solasta, Google Solution Challenge.





The club works under the supervision of faculty advisor **Dr. Alok Kumar Singh Kushwaha**, HOD, Department of Computer

Science & Engineering. Google selects a student as GDSC Lead every year after an intensive selection process. **Ms. Pragna Reddy**, a student of Computer Science & Engineering is the GDSC Lead for 2023-24 session of GDSC GGV.

The core team is of **9 members** who work for the proper functioning of the club. **60 other team members** serve in one of the following mentioned clubs:

- 1. Artificial Intelligence and Machine Learning Club
- 2. Competitive Programming Club
- 3. Android and Web Development Club
- 4. Cyber Security Club
- 5. Cloud Computing and DevOps Club
- 6. Game Development Club

Some of them also work as graphic designers, marketing research team members, and content writers.

Students have created a massive impact on the university learning culture with GDSC GGV in just one year of its inception. These co-curricular activities make them suitable for industry-related roles. GDSC GGV has been successful in bridging the gap between Theory and Practical Application for student developers.





NOTABLE ALUMNI

Our Pride.....



Pushpendra Tiwari
Architecture Lead
at Accenture



Anindita Mitra
IAS Officer
MC Commissioner,
Chandigarh



Vikram Manghnani Technical Program Manager at Google



Uttam Jha Senior Associate (AVP) at JP Morgan Chase



Rajat Naidu Vice President -AML Programme Manager at Barclays



Chhaya Saraf Project Manager at Shell



Choukha Ram Senior Data Scientist at Cognite



Vikas Singh

Principal - Enterprise

Architecture at

Larsen & Toubro Infotech Ltd



Rishabh Gupta
GATE 2018 | AIR - 2
Data Scientist
at Flipkart







NOTABLE ALUMNI

Our Pride.....



Deepak Verma Senior Technology & Regional Manager Senior Consultant at MediaTek



Abhishek Chakraborty at Deloitte



Tanveer Nishat Corporate QHSE Manager at Doosan Power Systems



Sweeti Raj **Founder & Managing Partner** at Source Resources



Sreekanth Srivastava Deputy Manager atMaruti Suzuki India Ltd.



Jagadeesh Koduru **Operations Analyst II** at FIS



Amit Pandey Senior Engineer at MediaTek



Abhinav Srivastava Assistant Vice President at Gemini Solutions

RECRUITERS

Our students have been selected at renowned companies







































































"Computer science is a science of abstraction - creating the right model for a problem and devising the appropriate mechanizable techniques to solve it."

~by Alfred Aho



Guru Ghasidas Vishwavidyalaya School of Studies of Engineering and Technology, Koni, Bilaspur (C.G) - 495009