

APRIL 15, 2025

CYBER SECURITY



E-NEWSLETTER BY DEPARTMENT OF COMPUTER SCIENCE



HOW TO PROTECT YOURSELF ONLINE

- ✓ Use Strong Passwords – Enable multi-factor authentication for extra security.
- ✓ Update Software Regularly – Patch vulnerabilities before hackers exploit them.
- ✓ Beware of Suspicious Emails – Don't click on unknown links or attachments.
- ✓ Secure Your Wi-Fi – Change default passwords and use encryption.
- ✓ Monitor Your Accounts – Regularly check for unauthorized activity.

FEATURED ARTICLE

"Staying Secure in the Digital Age"

The rise of cyber threats has made digital security more crucial than ever. From phishing attacks to ransomware, learn how to protect your data and stay safe online.

"The knock-on effect of a data breach can be devastating for a company. Reputational damage alone can be enough to put a company out of business." – Christopher Graham



The Growing Need for Cybersecurity Professionals

With over 3.5 million unfilled cybersecurity jobs worldwide, this field offers exciting career opportunities for those interested in tech and security.

In-Demand Cybersecurity Careers:

- ✓ Ethical Hacker (Penetration Tester) – Finds vulnerabilities in systems.
- ✓ Security Analyst – Monitors and prevents cyber threats.
- ✓ Digital Forensics Expert – Investigates cybercrimes.
- ✓ Cloud Security Specialist – Secures cloud-based infrastructures.



"How Secure Are You?"

Which is the strongest password ?

- A) Password123
- B) P@ssw0rd
- C) Xy\$5g8!L9b (Correct Answer)



Why is Cybercrime Increasing?

- ✓ Growing Digital Dependency – More businesses and individuals rely on online systems, making them vulnerable.
- ✓ Sophisticated Attack Methods – Hackers now use AI, deepfakes, and automated tools for cyberattacks.
- ✓ Ransomware Epidemic – Criminals are increasingly using ransomware to extort money.
- ✓ Remote Work Vulnerabilities – The shift to work-from-home has increased phishing and social engineering risks.
- ✓ Dark Web Expansion – Cybercriminals can easily buy hacking tools and stolen data.

🔒 Stay safe, stay informed! 🔒

Final Thought:

As cyber threats grow, cybersecurity awareness and prevention have never been more important. Whether you're an individual, a business owner, or a future cybersecurity professional, staying informed and proactive is the key to a safer digital future.



🔴 Trending Cyber Threats

- ◆ AI-Powered Cyberattacks – Hackers are now using artificial intelligence to automate attacks, create deepfake scams, and bypass traditional security measures.
- ◆ Ransomware-as-a-Service (RaaS) – Cybercriminals are selling ransomware tools to less-skilled hackers, leading to more attacks on businesses and individuals.
- ◆ Phishing 2.0 – Phishing attacks are becoming more advanced, using AI-generated emails, deepfake voice calls, and fake websites that are nearly impossible to detect.
- ◆ Supply Chain Attacks – Instead of attacking companies directly, hackers are targeting suppliers and third-party vendors to infiltrate major businesses.
- ◆ 5G Network Threats – The expansion of 5G increases the risk of cyberattacks on connected devices, leading to large-scale data breaches.



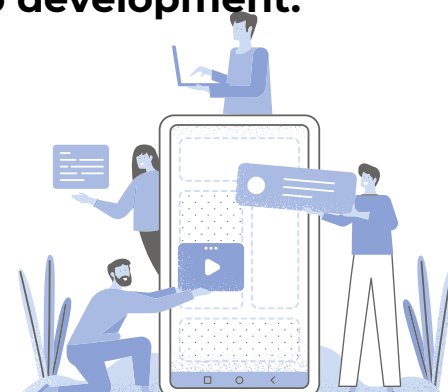
ACTIVITIES 2024-2025



Department of computer science organised a guest lecture on the topic “WEB DEVELOPMENT AND ITS FUTURE PERSPECTIVES” on August 24, 2024 in the seminar room. Mr. Yuvraj Tiwana, Senior Trainer from Eligo Creative Services was the resource person.



Mr. Yuvraj discussed the fundamental concepts of web development, including front-end and back-end development, web design principles, and responsive design. He also talked about the emerging trends and future advancements in web development.





WEBINAR ON "CMAI-CSAI-IHRO CYBER WARRIOR MISSION: A PATHWAY TOWARDS EMPLOYABILITY"



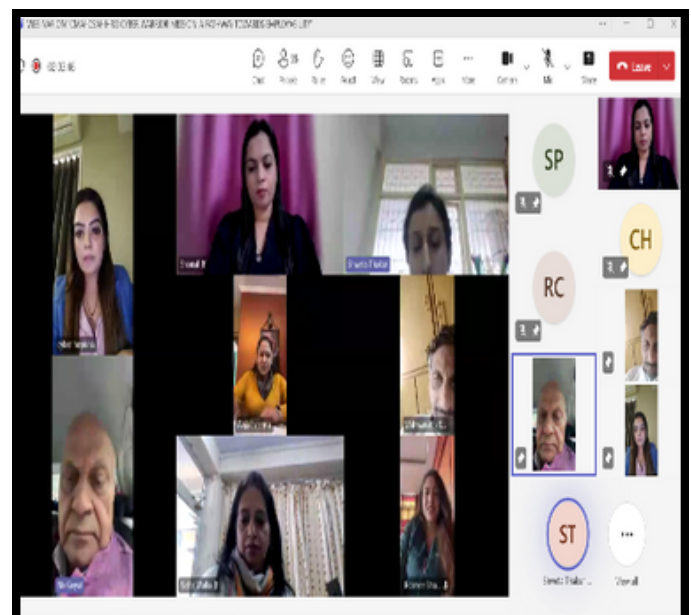
Webinar on "CMAI-CSAI-IHRO Cyber Warrior Mission: A Pathway Towards Employability" aimed to provide participants with valuable insights, knowledge, and skills that will enhance their employability in the cybersecurity field.



Webinar on "CMAI-CSAI-IHRO Cyber Warrior Mission: A Pathway Towards Employability" was organised by Department of Computer Science under the aegis of the Internal Quality Assurance Cell (IQAC), St. Bede's College, Shimla on November 22, 2024. Webinar was organised under the guidance of the Principal Prof. Sr. Molly Abraham with Ms. Neha Walia as the convener, Ms. Nivedita Bhardwaj, Assistant Professor, Department of Computer Science and Mr. Devender Singh, IT Technician, Department of Computer Science. The webinar was organised on MS-Teams platform.

The poster is for a webinar titled "CMAI-CSAI-IHRO CYBER WARRIOR MISSION: A PATHWAY TOWARDS EMPLOYABILITY". The theme is "SECURE OUR WORLD". It is organized by the Department of Computer Science under the aegis of IQAC. The poster lists several speakers: Prof. N.K. Goyal (Chairman Emeritus, TEMA), Ms. Anjali Verma (Director, Cyber Security Association of India), Ms. Hephtha (Cyber Security & Crime Intelligence Researcher), Ms. Shonali (Anti-Crime Strategist & Cyberpsychology Practitioner), Mr. Sandeep Arya (Deputy Director General, Ministry of Telecom), and Mr. Ravi Chhawan (Director Security, Ministry of Communications). The target audience includes faculty members and college & school students. The date is November 22, 2024, and the platform is MS-Teams.

Participants will learn about the critical skills required for different cybersecurity roles, such as risk management, penetration testing, threat analysis, and incident response. They will also be informed about essential cybersecurity certifications (e.g., CompTIA Security+, CISSP, CEH) that will enhance their employability and credibility in the field.





GUEST LECTURE ON CAREER COUNSELLING ON LATEST TECHNOLOGIES

Department of computer science organised a guest lecture on the topic "CAREER COUNSELLING ON LATEST TECHNOLOGIES" on December 6, 2024, in the computer lab.



Ms. Arpana Grover, HR Manager and Career Counsellor, InfoMaths Studies Private limited, Chandigarh was the resource person. She guided the students about the courses that can be opted by the students after completing their graduation. Students were also informed about career choices in accordance with the market demands.





St. Bede's College

Department of Computer Science

REPORT

On March 8, 2025, the Women Cell and Gender Champion Club, in collaboration with the Computer Science Department of St. Bede's College under Unnat Bharat Abhiyan, celebrated International Women's Day.



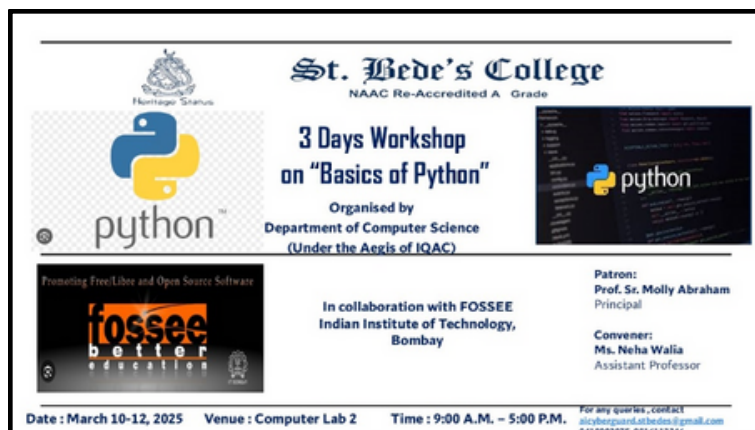
The event included a PowerPoint presentation on women empowerment and gender equality, followed by a moving musical play portraying a woman's journey through life. The play was later performed at Gram Panchayat, Dhalli, where it deeply resonated with the audience. Additionally, students conducted an awareness session on digital literacy and cyber security. The initiative successfully promoted gender equality and women's rights, fostering a greater understanding of empowerment.





3 DAYS WORKSHOP ON BASIC OF PYTHON

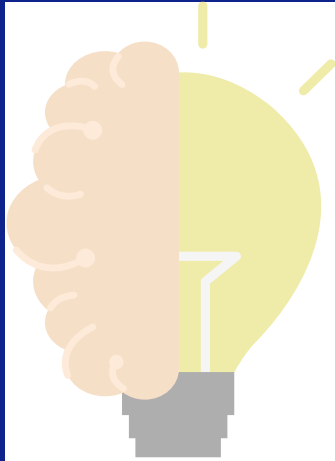
3 Days workshop on "Basics of Python" was held at St Bede's College from March 10-12, 2025 from 9:00 AM to 5:00 PM with the initiative of the Principal Prof. (Sr.) Molly Abraham and the faculty members Ms. Neha Walia, Ms. Nivedita Bhardwaj Sharma and Mr. Devender Singh of Department of Computer Science and FLOSS- Free/Libre and Open-Source Software for Education, Indian Institute of Technology, Bombay.



छात्राओं ने जाने पायथन प्रोग्रामिंग के गुरु
शिमला। सेंट बीडेस कॉलेज के कंप्यूटर साइंस विभाग ने बेसिक्स ऑफ पायथन कार्यशाला का आयोजन किया। कार्यशाला को इंडियन इंस्टीट्यूट ऑफ टेक्नोलॉजी बाम्बे के फ्री लिब्रे और ओपन-सोर्स सॉफ्टवेयर फॉर एजुकेशन प्रोग्राम के तहत आयोजित किया गया। प्रदेश में इस तरह की कार्यशाला पहली बार हुई। कार्यशाला के सफल समापन पर 32 छात्राओं को आईआईटी बाम्बे ने ई-प्रमाण पत्र प्रदान किए। कार्यशाला में ई-लेक्चर, वीडियो सत्र, व्यावहारिक अभ्यास और वास्तविक उदाहरणों के माध्यम से छात्रों को प्रशिक्षित किया गया। कार्यशाला कॉलेज की प्राचार्या प्रो. (सिस्टर) मौली अब्राहम, प्राध्यापक नेहा वालिया, निवेदिता भारद्वाज शर्मा और देवेंद्र सिंह ने भाग लिया। संवाद

This kind of workshop took place for first time in Himachal Pradesh. Workshop was organised to provide students with a solid foundation in Python programming and designed for beginners with little or no prior experience in coding, targeting to introduce students to Python's core concepts and practical applications. Over the span of three days, students were guided through e-lectures/videos, hands-on coding exercises, and real-world examples to help them become comfortable with Python.

The hands-on coding exercises and quizzes were conducted in online mode on Yaksh portal. after the successful completion of the workshop, 32 students were awarded e-certificates by Indian Institute of Technology, Bombay. More workshops will be organized in future for the students to promote the use of open-source tools in academia and research.



I speak without a mouth and hear without ears. I have no body, but I come alive with code. What am I?

Answer: A computer program

Riddles

You tap me gently, I respond with flair, I light up your world, held with care. What am I?

Answer: A smartphone

"The Voice of AI"

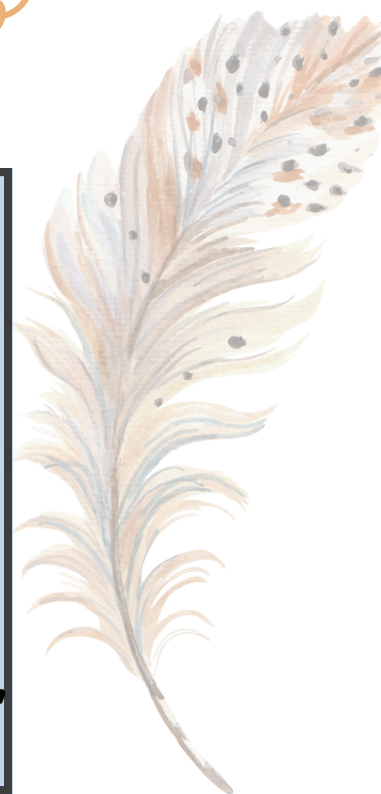
I think, I learn, yet I'm not real,
I mimic thought with cold appeal.
No heart to feel, no soul to bare,
But I can talk, and even care.
My wisdom grows with each command,
Yet never do I lift a hand.
I am the child of code and spark,
A ghost that lives inside the dark.

Poetry

"The Life of a Coder"

Lines of logic, loops that spin,
A race against bugs we seldom win.

Brackets, semis, tabs in place,
A single error—we lose the race.
Yet joy it brings, this digital art,
To build a world, to craft a part.
Behind each screen, a coder writes,
Creating magic, days and nights.





INVESTITURE CEREMONY



Priyamvda Thakur
Admiral
Ex-Bedeian



Shivani Verma
NSS Secretary
2nd Year



Shivangi Kaushik
Class Representative
2nd year



STUDENT ACHEIVEMENT



PRIYAMVADA THAKUR
(2021-2024)

Jai hind!

I feel really grateful to have this opportunity knock my door where I can share my journey with everyone. All of this possible for the benedictions I have received from my teacher and thank them to give me this beautiful chance of sharing few experience with all the people

I entered this college in 2021 as a very raw girl with no vision, no idea of what I want to be but experiencing the life in these three years I have been given one the best opportunities to not only improve my knowledge but also shape some sort of road that I would like to walk upon in life. A very raw child who was somehow sculpted through the experiences gained. I would like to share few of the experiences with all.

I joined NCC just with a vague idea that it would help me improve my personality, I got a chance to work on myself in all aspects be it physical, mental toughness, public speaking, team work and building confidence, but little did I know that NCC would give me much more than all these things and it was a feeling of patriotism. It made me realise that to be a patriot one does not need to join the Indian army but just by being a good and a loyal citizen, we can give a lot back to our mother on which we have taken birth. It gave me the definition of patriotism: whatever we as individuals decides to do in life, it should simply be in the good interest of our nation.

In third year, I decided to stand for the elections of the Admiral and I feel very blessed to win which was no less than a miracle that happened and also to work with all the teachers and so many students. My true learnings came from this 1 year where I learned that that no matter what we do or who we are, there is always a scope for improvement and to see this scope we have to be humble. Definitely I learned what does responsibility means, what does accountability means, what it is like to lead a team and what it is like to hold a team together but more than this a life lesson that I learned was that every individual makes mistakes and will make mistakes as we forward in the journey of life and what becomes important is to keep yourself humble, accept them and then learn from them.

there will always be moments of failures and moments of success, but one is not defined by any of them. A person is defined by the unbreakable will of being unshakable even in the moments of despair, By having the humility to accept failures and by being non attached to success and keep trying to learn and move forward in life. I learned that it is never about achieving something and stopping, it is about humbly looking towards growth even in period of success.

Success is never about achieving things in the world but what qualities we achieve inside of us.

Hope that we all grow and do good in our lives!

Priyamvada thakur



APOORVA SOOD
(2017-2020)

"From Student to Scientist: A Data-Driven Journey"

As I sit down to pen my reflections on my college journey, I am struck by the pivotal moments that have shaped my path from a curious undergraduate to a dedicated Data Scientist. My journey through my BSc in Computer Science was more than just attending classes; it was a crucial part of my life that provided me with essential skills and sparked my love for technology. I was surrounded by passionate faculty who encouraged creative learning. They fostered an environment where questions were welcomed, and equal opportunities were provided to all. Their guidance played a fundamental role in my decision to delve deeper into the field of Data Science, motivating me to take the next step and pursue an MSc in Data Science. Today, I find myself at the intersection of medicine and technology, working as a Data Scientist in a pharmaceutical company. In my role, I effectively harness my skills to analyze complex datasets and extract valuable insights that play a pivotal role in guiding key decisions.

I remain grateful for the support from my college, St. Bede's (and MAHE), which has propelled me to where I am today. This field is filled with immense potential but also presents its fair share of challenges. However, it's important to remember that every obstacle is an opportunity for growth. Keep pushing through—stay curious, seek help when needed, and wholeheartedly embrace the learning process. With dedication and resilience, you can carve out a fulfilling career where your passion for data can truly make a difference.

Regards
Apoorva Sood
Clinical Data Scientist
Novo Nordisk

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