

## ABOUT THE UNIVERSITY

The Central University of Jammu (CUJ), established in 2011 under the central universities Act, 2009, is a premier institution of higher education located in the Samba district of Jammu, Jammu & Kashmir. Spanning 610 acres in the scenic Rahya-Suchani village of Bagla region, the university offers a serene environment conducive to learning and research. CUJ is committed to academic excellence, innovation, and social responsibility, providing a wide range of undergraduate, postgraduate, and doctoral programs across disciplines such as Engineering, Business Studies, Life Sciences, Basic and Applied Sciences, National Security Studies, Humanities & Social Sciences, Mass Communication and Media Studies, Educational Studies and Languages.

## ABOUT THE DEPARTMENT

The Department of Mathematics came into existence in 2011 along with the inception of the Central University of Jammu and is the first DST-FIST sponsored department in the university. The department is running different programs (Master Degree Programme, Ph.D. 5-Year Integrated Program). The department offers specialization in diverse fields such as Commutative algebra, Complex analysis, Functional analysis, Nonlinear dynamical systems, Operator theory, Operation research, Quantum cryptography etc.

## ABOUT THE FDP

On the occasion of Viksit Bharat @2047 and in alignment with the National Education Policy (NEP) 2020, the Department of Mathematics, Central University of Jammu, is organizing a Five-Day Faculty Development Program (FDP) on "Mathematical Computations and Applications". This program aims to provide an enriching academic platform for participants to strengthen their knowledge and skills in modern computational techniques and their diverse applications across scientific and engineering domains. The FDP seeks to bridge the gap between theoretical mathematics and practical computation, focusing on areas such as Numerical methods, Optimization, Image processing, Computer vision and Engineering sciences. The program will feature expert lectures and interactive sessions conducted by eminent resource persons from reputed national institutions, fostering academic collaboration, and the adoption of advanced pedagogical practices in mathematical sciences.

## Five-Day Faculty Development Program (FDP)

On

## Mathematical Computations and Applications

(Online Mode)

(MCA\_2025)

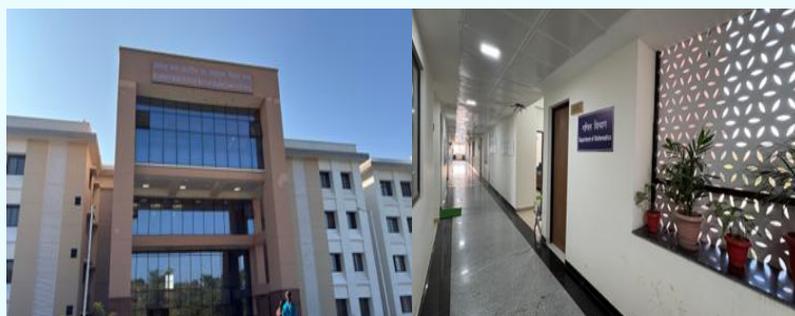
(December 01-05, 2025)



Organized by

## Department of Mathematics CENTRAL UNIVERSITY OF JAMMU

Rahya-Suchani (Bagla), District: Samba  
181143, Jammu (J&K)



## CHIEF PATRON



**Prof. Sanjeev Jain**  
Hon'ble Vice Chancellor  
Central University of Jammu

## PATRON

### Prof. Vinay Kumar

Dean, School of Basic and Applied Sciences  
Central University of Jammu

## CHAIRPERSON

### Prof. Uday Pratap Singh

Associate Dean Academics  
Central University of Jammu

## CONVENER

### Prof. Kamlesh Kumar

Head of the Department (Mathematics)  
Central University of Jammu

## COORDINATORS

### Dr. Km. Deepa, Dr. Sulekha Rani & Dr. Sanjay Kumar

Department of Mathematics  
Central University of Jammu.

## MEMBERS

### Prof. Ajay Kumar Sharma, Dr. Pavinder Singh, Dr. Mehak Sharma & Research Scholars

Department of Mathematics  
Central University of Jammu.

## OBJECTIVES OF THE FDP

- To acquaint participants with recent trends in mathematical computation and applications.
- To explore the applications of Mathematical Computation in Optimization, Modeling, Image Processing, Computer Vision etc.
- To promote interdisciplinary research through mathematical modeling and computational techniques.
- To strengthen the teaching-learning process by integrating computational approaches into mathematics curriculum.

## TOPICS

- Optimization Techniques and Applications
- Large Scale Optimization, Multi-objective Optimization and Networks optimization
- Computational methods in Data Science and Machine Learning
- Applications in Image Processing, Computer Vision, Engineering Sciences
- Computational Algorithms based on Machine Learning and Optimization

## FDP INCLUDES

- Five-day training sessions (3 hours per day) by renowned experts from India. 15 hours of lecture and Hands-on sessions including interactive query Sessions.
- **E-certificates will be given to participants who have attended up to 80% of the all sessions and complete the assessment at the end of the FDP.**
- Mode of conduction: **Online**
- Timings: **(2.00 P.M.-5.00 P.M.)**

## INVITED SPEAKERS

- Prof. Madhu Jain, Department of Mathematics, IIT Roorkee, Uttarakhand
- Prof. C.K. Jaggi, Department of Operations Research, University of Delhi, New Delhi
- Prof. J.C. Bansal, Department of Mathematics, South Asian University, Delhi
- Prof. Rashmi Bhardwaj, Department of Mathematics, GGSIP University, New Delhi
- Prof. Sachin Kumar, Department of Mathematics, University of Delhi, New Delhi
- Dr. Harish Garg, Department of Mathematics, Thapar Institute of Engineering and Technology, Patiala, Punjab
- Dr. Kranti Kumar, School of Liberal Studies, Dr. B.R. Ambedkar University, New Delhi
- Dr. Naresh Kumar, Department of Mathematics and Computing, Dr. B.R. Ambedkar NIT Jalandhar, Punjab
- Dr. Mahima, Department of Mathematical and Computational Sciences, NITK Surathkal, Karnataka
- Dr. N. Kishore Babu, Department of Computer Science and Engineering, IIIT Ranchi, Jharkhand

## MORE INFORMATION

**Contact Details: All queries and clarification related to FDP should be emailed to [fdpmcaa2025@gmail.com](mailto:fdpmcaa2025@gmail.com)**

**Prof. Kamlesh Kumar (+91 9797850485)**  
**Dr. Km. Deepa (+91 9797435327)**  
**Dr. Sulekha Rani (+91 8430819173)**  
**Dr. Sanjay Kumar (+91 7006433053)**

## WHO CAN PARTICIPATE

Faculty Members, Industry professionals, Research scholars, Post-Doctoral candidates & Students.

## REGISTRATION FEE

The registration fee (non-refundable) is as follows:

Students/Research Scholars: Rs.100

Faculty/Professional/ Post-Doctoral candidates: Rs.200

## REGISTRATION DETAILS

1. Registration fee should be paid online in the account given below:

Account No. **0902040500000041**  
Account Name: HOD DEPTT OF  
MATHEMATICS CENTRAL UNIVERSITY OF  
JAMMU  
IFSC: JAKA0RAHYAA  
Bank Name: J&K Bank  
*\*(In IFSC code please read 0 as zero)*

2. Fill out the registration form by clicking on the link/ scanning the QR given below:



[https://docs.google.com/forms/d/e/1FAIpQLScs8\\_skeN7cc7NH13d4xzPAk6clE6aedagFNmXrPh3LZQedFg/viewform?usp=publish-editor](https://docs.google.com/forms/d/e/1FAIpQLScs8_skeN7cc7NH13d4xzPAk6clE6aedagFNmXrPh3LZQedFg/viewform?usp=publish-editor)

3. Last date of Registration: **28<sup>th</sup> November, 2025.**