



About Course

Objectives of Training Programme: The training programme CMDIMO-2025 aims to equip participants with advanced computational techniques for data science, integrating mathematical modeling and operation research. It focuses on enhancing problem-solving skills, optimization strategies, and data-driven decision-making using modern algorithms and tools, enabling applications in diverse scientific, industrial, and business contexts for improved efficiency and innovation.

About CEC

Continuing Education Cell (CEC), NIT Raipur aims to update skills, broaden knowledge, enhance qualifications, foster personal growth, and promote National and International technological advancement through training and expertise.

About NIT Raipur

National Institute of Technology Raipur (An Autonomous institute of National Importance) fully funded by the Govt. of India. NIT Raipur is located in Raipur, the Capital City of Chhattisgarh State and spread over an area of approx. 100 acres. NIT Raipur is ranked 70th in engineering category in India by the NIRF, and it is the highest ranked engineering college in Chhattisgarh. Presently NIT Raipur offers 12 under graduate, 14 Postgraduate (including M.Sc., M.C.A and M.Tech. in Applied Geology) and 18 Ph.D. programs. The institute offers facilities for research and also undertakes R & D activities, provides testing, consultancy and other extension services including continuing education to the industry through the Industry Institute Interaction cell and the placement of the student through the Department of Training & Placement.

About Department

The Department of Mathematics came in existence since 1956. The department provides an outstanding research environment and offers academic program leading to the award of PG/Ph.D. degree. Apart from this, department taking care of Mathematical input to all undergraduate and postgraduate courses in Engineering and Computer Science Applications

Eligibility for Participation

Participation is open to faculty, research scholars, UG/PG students of Science and Engineering, and professionals from R&D, industry, or academia seeking foundational knowledge in relevant mathematical, scientific, or engineering concepts.

Features of Course

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Important Dates

Registration Last Date:	6 th January 2026
List of shortlisted Candidates:	9 th January 2026
Course Start Date:	12 th January 2026
Course End Date:	16 th January 2026

Course Outlines

Introduction to Computational Data Science: Overview of data science workflows, computational frameworks, and key challenges in handling large datasets.

Mathematical Modeling Techniques: Developing mathematical representations of real-world problems using differential equations, stochastic models, and system dynamics.

Operation Research Fundamentals: Linear programming, integer programming, network models, and their applications to optimize resource allocation and decision-making.

Advanced Optimization Methods: Nonlinear programming, convex optimization, multi-objective optimization, and heuristic algorithms like genetic and swarm optimization.

Computational Tools and Software: Practical training in tools such as Python, R, MATLAB, and Maple software for simulation, modeling, and data analysis.

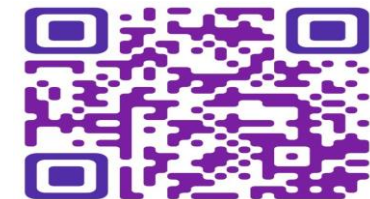
Applications in Industry and Research: Case studies and problem-solving in logistics, manufacturing, finance, healthcare, and environmental modeling.

Emerging Trends and Research Directions: Exploration of AI integration, deep learning in OR, and innovations in computational modeling for future-ready solutions.

For Registration

For More Details Click <https://www.nitr.ac.in/conference.php>

Scan QR for More Details





Chief Patron

Prof. N. V. Ramana Rao, Director, NITRR

Patron

Dr. Subhojit Ghosh, Chairman, NITRR (CEC)

Chairman

Dr. S. K. Samanta, HOD(Maths), NITRR

About NIT Raipur

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Speakers

Subject experts of the course may be from renowned institutes and Industries.

Account Details

Account No. : 38027633250
Name : Director, NIT Raipur
Bank Name : State Bank of India
Bank Branch : NIT Branch
IFSC Code : SBIN0002852
MICR Code : 492002004
Swift Code : SBININBB646
PAN Card No : AAAJN0643G
GSTIN Number : 22AAAJN0643G1ZN

OR

Scan the QR Code
for fee payment



Note: Applicants must upload the proof of fee payment via Google Form. Please note that the registration fee is non-refundable.

Fee Details

Category	Fee (Rupees)
NITRR Students	(₹ 500 + 18% GST) = ₹ 590 /-
External Students/ NITRR Staff	(₹ 750 + 18% GST) = ₹ 885 /-
Industry Delegates/Faculty	(₹ 1500 + 18% GST) = ₹ 1770 /-

Registration Process

The payment must be done through ONLINE mode in the given account details. After payment, participant is required to fill the following Google form:

Click Google form: <https://forms.gle/N9a5YGTVRW7eEg747>

Or
Scan Google form

