

About the FDP :

The Faculty Development Programme **SHAstra 2026** aims to provide participants with a comprehensive understanding of the fundamentals of hardware security and the challenges involved in designing trustworthy computing systems. The programme covers secure hardware design, vulnerabilities across the hardware design lifecycle, hardware Trojans, side-channel attacks, formal verification techniques, and emerging trends in trusted hardware and secure integrated circuit (IC) design.

The FDP will feature expert lectures, practical case studies, and discussions on recent research and industrial practices in hardware security. It is designed to equip faculty members, researchers, and industry professionals with the knowledge required to analyze hardware vulnerabilities, develop secure hardware solutions, and explore future directions in hardware security research.

Target Participants & Eligibility:

This Faculty Development Programme is intended for faculty members, research scholars, postgraduate students, and industry professionals interested in hardware security and trusted computing. Participants from Computer Science, Electronics, Electrical Engineering, Information Technology, and related disciplines with an interest in secure hardware design, embedded systems, VLSI, FPGA, and cybersecurity are encouraged to apply.

Patron
Prof. K. Umamaheshwar Rao

Chairman
Prof. Pankaj Kumar Sa
(HOD, Department of CSE, NIT Rourkela)

Course Coordinator & Convener
Prof. Shyamapada Mukherjee
Contact: 0661-2462357
email: stcnitr2024@gmail.com

Keynote Speakers:
Eminent speakers from IITs, NITs, IISc,
Industries and other govt. Institutes.

Course Contents:

This FDP is intended to cover the following topics:

- Fundamentals of Hardware Security
- Secure IC Design Techniques
- Hardware Attack and Defense
- Side Channel Countermeasures
- Physical Attack Countermeasures
- Secure FPGA and SoC Design
- Future Research Directions

**NATIONAL INSTITUTE OF
TECHNOLOGY, ROURKELA**



Department of Computer Science and Engineering

Organizing
Faculty Development Programme
ON

**Secure Hardware Architecture, Systems, Trust &
Research Advancement (SHAstra 2026)**

Building Secure Hardware, Enabling Trusted Systems

21st Sept. – 25th Sept., 2026



Sponsored By:



इलेक्ट्रॉनिक्स एवं
सूचना प्रौद्योगिकी मंत्रालय
MINISTRY OF
ELECTRONICS AND
INFORMATION TECHNOLOGY



About NIT, Rourkela

The **National Institute of Technology, Rourkela (NIT RKL)**, formerly the Regional Engineering College, is a premier public institution dedicated to higher learning in engineering, science, and technology. Located in the industrial "Steel City" of Rourkela, Odisha, it is one of India's 31 National Institutes of Technology and is officially recognized as an Institute of National Importance. Affirming its status as a top-tier university, NIT Rourkela secured the **13th rank** among Indian engineering institutions in the **NIRF Rankings 2025**, cementing its reputation for academic and research excellence in the nation.



About Department of Computer Science and Engineering

Computer Science and Engineering (CSE) at NIT Rourkela is one of the most popular courses offered by the Institute. The Department has a strong faculty team with extensive academic and research experience from premier Institutes. The department offers undergraduate, postgraduate, and doctoral program in Computer Science and Engineering.



About Secure Chip Lab

The **Secure Chip Lab** in the Department of Computer Science and Engineering is a dedicated research lab led by **Prof. Shyamapada Mukherjee**. The lab supports **Ph.D., JRF, M.Tech, and M.Tech (Research) scholars** working in advanced areas of **hardware security and emerging technologies**. It is equipped with modern hardware platforms and GPU resources to facilitate high-quality research and development.

Important Dates :

Registration Deadline:	30th August, 2026
Workshop Dates:	21 st Sept. - 25 th Sept. 2026

Registration Form:

To complete online registration, the participants need to fill out the following google form & ISEA Portal:



1. **Google Form:**

<https://forms.gle/N3HwYPbA7gYQTtNY7>

2. **ISEA PORTAL:**

https://faas.isea.app/formview/FDP_SHAstra_2026

Registration Details:

- All the registered participants are required to attend the FDP and attendance is mandatory.
- Faculty members, research scholars, and students of NIT Rourkela are exempted from paying the registration fee.

Total Registration Fees:	
Students	INR 590/- only. (INR 500/- + 18% GST)
Academicians	
Industry Professionals	INR 1180/- only. (INR 1000/- + 18% GST)

Payment Details:

Account Name	CONTINUING EDUCATION NIT ROURKELA
Account No.	10138951784
Bank	State Bank Of India
Branch	NIT Campus Rourkela
IFS Code	SBIN0002109

Scan below for payment:



UPI ID : 01389517841@sbi

Merchant Name : Continuing Education NIT

Confirmation of registration will be communicated through email by **15th September 2026**.

Student Coordinators

Mrs. Ananya Jyoti Mahanta

Ms. Sonali Beura

Ms. Arpita Gupta

Contact and Queries:

Kindly send your queries via email or contact us during working days between 10:00 AM and 5:00 PM.

Email : stcnitr2024@gmail.com

Contact No: 0661-2462357