I. Nuclear Energy

- Nuclear Chemistry
- Nuclear Engineering
- Nuclear Physics
- Advanced Materials Science for Reactor Components and Fuel Cladding
- Nuclear Fuel Fabrication, Recycling, and Waste Form Development

II. Nuclear Science and Applications

- Isotopic Techniques applied to Human Health, Food and Agriculture, Biotechnology and Biophotonics, Water Resources, Environmental Engineering, and Bioengineering
- Medical Radiation Physics, Nuclear Medicine, Radiaton Oncology &Radiotherapy, Radiation Biology
- Synchrotron Radiation and Applications
- Computational Modelling and Simulation of Reactors
- Artificial Intelligence, Machine Learning for Nuclear Operations, and Big Data Analytics for Nuclear Operations and Research

III. Nuclear Safety and Security

- Health Physics
- Nuclear Safety
- Nuclear Security
- Radiation Detection, Instrumentation, and Monitoring Technologies
- Nuclear Forensics

IV. Non-Proliferation

- Arms Control and Disarmament
- Export Control
- Non-Proliferation Policy and Implementation

V. Nuclear Policy, Economics, and Management

- Nuclear Energy Policy and Regulation
- Nuclear Law and Legal Frameworks for Safety, Security, and Non-Proliferation
- Economics of Nuclear Power and Project Management
- Public Communication, Stakeholder Engagement, and Societal Acceptance

VI. Advanced Reactor and Emerging Technologies

- Small Modular Reactors (SMRs) and Microreactors
- Fusion Energy Research
- Accelerator-Driven Systems and Advanced Neutron Sources

VII. Environmental and Climate Applications

- Nuclear Methods for Climate Monitoring and Mitigation
- Radioecology and Environmental Radioactivity Assessment
- Decommissioning and Environmental Remediaon Technologies

VIII. Education, Training, and Nuclear Knowledge Management

- Nuclear Knowledge Management and Capacity Building using AI for efficient retrieval and decision support.
- Training Methodologies for Safe Nuclear Operations
- E-Learning and Virtual Laboratories (Environments) in Nuclear Sciences
- AI driven training tools for enhanced nuclear learning