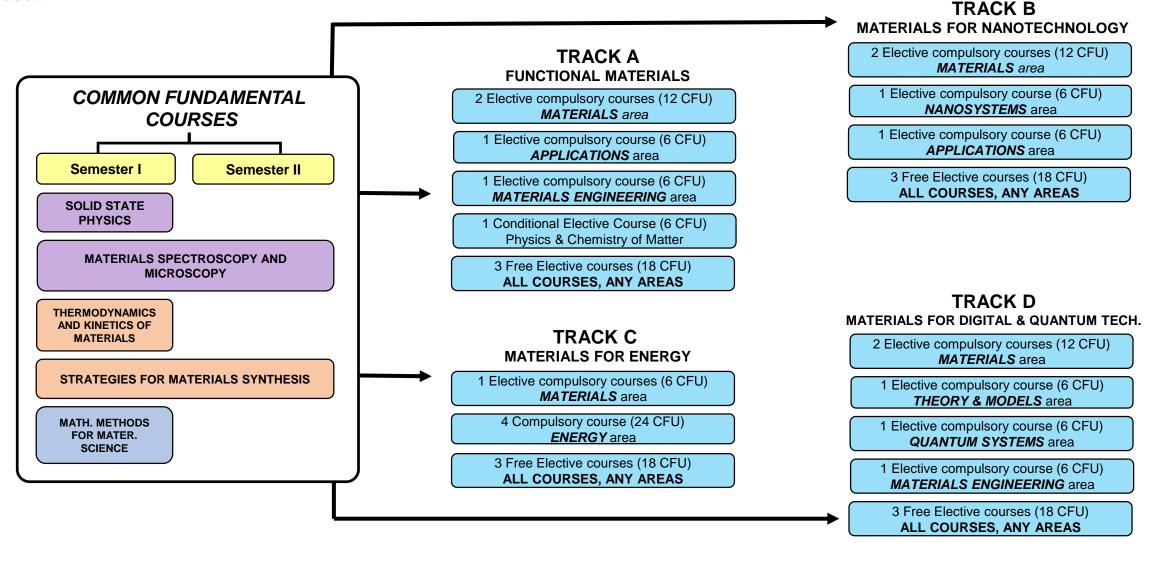


MSc COURSE IN MATERIALS SCIENCE & NANOTECHNOLOGY 2023-2024



Communication skills (3 CFU) + Internship (3 CFU) + MSc THESIS (30 CFU)

FINAL DEFENSE

TRACK A ELECTIVE COURSES

MATERIALS area

- CHEMISTRY OF INORGANIC MATERIALS
- CHEMISTRY OF MOLECULAR MATERIALS
- PHYSICAL CHEMISTRY OF SOLIDS
- PHYSICS OF SEMICONDUCTORS
- METALS SCIENCE AND SUSTAINABILITY

APPLICATIONS area

- CHEMISTRY & TECHNOLOGY OF POLYMERS & INDUSTRIAL APPLICATIONS
- APPLICATIONS OF MATERIALS FOR IONIZING RADIATION DETECTION
- LOW ENVIRONMENTAL IMPACT MATERIALS
 AND PROCESSES
- MOLECULAR ELECTRONICS AND PHOTONICS

MATERIALS ENGINEERING area

- ADVANCED FUNCTIONAL POLYMERS
- ENGINEERED NANOMATERIALS

TRACK B ELECTIVE COURSES

MATERIALS area

- CHEMISTRY OF INORGANIC MATERIALS
- CHEMISTRY OF MOLECULAR MATERIALS
- PHYSICAL CHEMISTRY OF SOLIDS
- PHYSICS OF SEMICONDUCTORS
- METALS SCIENCE AND SUSTAINABILITY

APPLICATIONS area

- CHEMISTRY & TECHNOLOGY OF POLYMERS & INDUSTRIAL APPLICATIONS
- APPLICATIONS OF MATERIALS FOR IONIZING RADIATION DETECTION
- LOW ENVIRONMENTAL IMPACT MATERIALS
 AND PROCESSES
- MOLECULAR ELECTRONICS AND PHOTONICS

NANOSYSTEMS area

- NANOTECHNOLOGY & INNOVATION
- NANOCHEMISTRY AND NANOPOROUS MATERIALS
- PHYSICS OF SOFT MATTER
- NANOSTRUCTURES
- ENGINEERED NANOMATERIALS



MATERIALS area

- CHEMISTRY OF INORGANIC MATERIALS
- CHEMISTRY OF MOLECULAR MATERIALS
- PHYSICAL CHEMISTRY OF SOLIDS
- PHYSICS OF SEMICONDUCTORS
- METALS SCIENCE AND SUSTAINABILITY

ENERGY area

- FUNDAMENTALS OF ELECTROCHEMISTRY FOR ENERGY STORAGE
- CATALYSIS FOR ENERGY AND THE ENVIRONMENT
- MODELS AND MATERIALS FOR ELECTROCHEMICAL ENERGY GENERATION AND CONVERSION
- ENERGETICS
- PHOTOVOLTAICS & OTHER RENEWABLE ENERGY TECHNOLOGIES

TRACK D ELECTIVE COURSES

MATERIALS area

- PHYSICAL CHEMISTRY OF SOLIDS
- PHYSICS OF SEMICONDUCTORS

MATERIALS ENGINEERING area

- PHYSICS AND TECHNOLOGY OF ELECTRONIC DEVICES
- QUANTUM ELECTRONICS

THEORY & MODELS area

- ADVANCED SOLID STATE PHYSICS
- COMPUTATIONAL MATERIALS SCIENCE

QUANTUM SYSTEMS area

QUANTUM MATERIALS SYNTHESISQUANTUM PHOTONICS