



DEPARTMENT OF PHYSICS

(www.nitt.edu)

The Institute

The Institute (formerly Regional Engineering College) was established as a joint venture of Govt. of India and Govt. of Tamil Nadu in 1964 for technical education. With the approval of UGC/AICTE and Govt. of India, the Institute was granted University status in 2003, and renamed as National Institute of Technology, Tiruchirappalli (NITT). In recent years, NITT has been ranked among the top technical institutes of India.

The Campus

A Modern Central Library with more than one lakh volumes
A Computer Centre with campus-wide intranet and internet access
A Sports Centre which includes a Modern Gym and a Swimming Pool
More than 20 Hostels for both the genders
Cafeteria, Hospital, Bank, Post-Office, Shopping Centre

The Department

It is one of the major departments of NITT having 14 faculty members with wide research expertise. In addition to the basic physics courses for B.Tech. students, the department offers post-graduate programs namely, *M.Sc. in Physics*, *M.Tech. in Non-Destructive Testing* (in collaboration with BHEL, Trichy) and regular Ph.D. programs. The research activities of the department have gained momentum with funding worth of ₹2 crore from various agencies. Further, the department is well supported by the DST-FIST program. The major facilities include Powder X-ray Diffractometer, Vibrating Sample Magnetometer and Transmission Electron Microscope.

Research Areas

Nanomaterials, Thin Films, Carbon Nano Tube
Polymer Nanocomposites and Biomaterials
Thin Films for Solar Cells, Sensors and Optoelectronics
Crystal Growth, Crystallography, Material Evaluation
Nano photonics, Nonlinear Optical Materials, Ferro/Piezo-electric Materials
Physics of Dielectrics, Magnetism at nano-scale
Laser Material Processing and Fiber Optic Sensors
Quantum Chaos and Quantum Computation

Admission

M.Sc. (Physics): Students with B.Sc. (Physics/Applied Physics) having a minimum of 60% marks are eligible for admission. Admission is based on the performance in the qualifying degree examination and an entrance test. For details check the website during the first week of May.

M.Tech. (NDT): Students with B.Tech. (Mechanical/Metallurgy/Production) or M.Sc. (Physics), having a minimum of 60% marks and a valid GATE score are eligible for admission. Students get a stipend of ₹8,000 per month.

Ph.D.: Students with M.Sc. (Physics) having a minimum of 60% marks and a valid GATE/NET score are eligible for research. Admission, opens in June and December, is based on an entrance test and an interview. Selected candidates get a stipend of ₹16,000 per month.

Career Prospects

M.Sc. (Physics) students are pursuing research career in India and in abroad, or get placed in leading software companies like InfoSys, CTS etc.,
M.Tech. (NDT) students get placed in NDT divisions of leading industries like GE, Sievert, Tata Steel, etc. through Training and Placement.