**Revised MS/M.Phil. in Physics**

(Approved by Board of Faculty 2018)

**Course List**

Below is a list of courses we are offering. We offer flexibility in choosing different courses from the list of elective courses, depending on the interest of the students. However, students will be assisted in identifying sets of courses which correspond to a specific area of specialization. More elective courses may be added to the list, if necessary. Courses from other departments may be taken as electives.

**Core Courses for MS/M.Phil.in Physics**

• PH5011 Advanced Quantum Mechanics

• PH5031 Advanced Mathematical Methods for Scientists and Engineers

• PH5041 Advanced Electrodynamics

• PH6021 Advanced Classical Mechanics

* PH7260 Experimental Techniques in Physics

**Elective Courses for MS/M.Phil. in Physics**

* PH7125 Nanotechnology
* PH7130 Thin Film Technology
* PH7232 Plasma Physics
* PH7245 Health Physics
* PH7249 Optoelectronics

• PH6011 Advanced Statistical Mechanics

* PH7250 Materials Science
* PH7251 Principles of Optics
* PH7252 Introduction to Nuclear Science
* PH7253 Optical Detectors and Applications
* PH7254 Fundamentals of Sensors and Sensor Systems
* PH7255 Fundamental of Photonics
* PH7256 Physics of Fluids
* PH7257 Theory of Computation
* PH7258 Image Formation
* PH7259 Laser and their Applications
* PH7261 Advanced Optics
* PH7262 Nuclear Physics and High Energy Physics
* Ph7263 Solid State Physics
* PH7264 Atomic, Molecular and Optical Physics
* PH7265 Semiconductor Physics
* Ph7266 Computational Physics
* PH7267 Introduction to Thin Film Science and Technology
* PH7268 Emerging Energy Technology