

M.Sc. Physics (2-Year Course) :-

Master of Science in Physics with specialization solid state physics has following outcomes

Course Outcomes:-

- 1) Students are able to apply basic mechanical tools like ordinary differential equations, partial differential equations.
- 2) Students can understand the theory & applications of matrix algebra complex variables, calculus of residues, Fourier series & transforms, central force problem , Hamiltonian formulation, canonical transformations, quantum mechanical concepts & problems.
- 3) Students can solve mathematical problems using mathematica.
- 4) Students are able to form thin films & characterise them by using different techniques such as XRD,SEM & study the properties of the material.
- 5) Students are able to understand the working of MOSFETS, microwave devices ,photonic devices, memory devices

Program Outcomes:-

- 1) Students are able to opt for higher studies such as Ph.D.
- 2) Students can understand concept, theory & experiment and solve problems from mathematical physics ,statistical mechanics, electrodynamics, atomic & molecular physics ,nuclear & particle physics , thin films, semiconductor physics, solid state physics, electronic devices .
- 3) Students are able to build & test multivibrators , conduct experiment & obtain results ,present result in tubular & graphical form, interpret results,in oral & written form.
- 4) Students are provided with knowledge ,competence & skill on an advanced level which is needed in different fields such as education ,industry, research, consultancy & administration .
- 5) Students becomes familiar with contemporary research in various fields of physics & inter disciplinary area.

Program Specific Outcomes:-

- 1) Students can apply knowledge gained & skill developed to projects in various disciplines of physics.
- 2) Students can work independently to plan & execute research in topic from materials science , thin films, nano materials.
- 3) Students are able to use modern measurements techniques & laboratory test equipments.
- 4) Student are able to access information on a topic on their own from variety of sources and are able to learn new things.
- 5) Students gain technical (experimental) expertise, soft skills required for leadership ,effective communication.