



SPC Government College

Beawer Road, Ajmer-305001



Program Outcomes of Physics

PROGRAM LEARNING OUTCOMES OF PHYSICS

Physicists are renowned for the power of their problem-solving capabilities. Great emphasis and effort is spent providing students with tools and methods to approach and solve increasingly challenging problems. We hope that these challenges will not only broaden and deepen students' skills but will amplify their drive to participate in discovery. Our most important outcome for all our students is that they enthusiastically engage in learning what is known about our world and develop a passion for participating in pushing the bounds of our knowledge even further.

Learning outcome

The Master of Science in Physics programme provides the candidate with knowledge, general competence, and analytical skills on an advanced level, needed in industry, consultancy, education, research, or public administration.

A student who has completed his or her qualification should have the following learning outcomes defined in terms of knowledge, skills and general competence.

The student

- ❖ has substantial knowledge in physics, basic knowledge in mathematics, and knowledge in supported fields like computer science.
- ❖ has some research experience within a specific field of physics, through a supervised project (the Master Thesis).
- ❖ has advanced knowledge in some areas in physics.

- ❖ is familiar with contemporary research within various fields of physics.
- ❖ understands the role of physics in society and has the background to consider ethical problems.
- ❖ knows the historical development of physics, its possibilities and limitations, and understands the value of lifelong learning.
- ❖ is able to gather, assess, and make use of new information.
- ❖ has the ability to successfully carry out advanced tasks and projects, both independently and in collaboration with others, and also across disciplines.
- ❖ has an adequate background for pursuing pedagogic education.
- ❖ has an international perspective on her/his discipline.
- ❖ has the background and experience required to model, analyse, and solve advanced problems in physics.
- ❖ is able to apply advanced theoretical and/or experimental methods, including the use of numerical methods and simulations.
- ❖ can combine and use knowledge from several disciplines.

- ❖ can critically and independently assess and evaluate research methods and results.
- ❖ has the ability to develop and renew scientific competence -- independently, via courses or through PhD studies in physics or related disciplines.
- ❖ is able to enter new problem areas that require an analytic and innovative approach.
- ❖ can disseminate subject matter and results to both specialists and a broader audience.