



Name of the Program	<b>M.Sc. Physics</b>
Name of the Program Co-ordinator	<b>Mr. Jerry Joseph</b>
Expected achievement level for PO, PSO& CO	<b>3</b>

### Analysis of CO Attainment

<i>Course No</i>	<i>Course Code</i>	<i>Course Name</i>	<i>Course Attainment Value</i>
Course1	PH010101	Mathematical methods in physics I	3
Course2	PH010102	Classical mechanics	2.8
Course3	PH010103	Electrodynamics	2.5
Course4	PH010104	Electronics	3
Course5	PH010105	General Physics practical	3
Course6	PH010201	Mathematical method in physics	3
Course7	PH010202	Quantum Mechanics I	2.6
Course8	PH010203	Statistical mechanics	2.5
Course9	PH010204	Condensed matter physics	2.75
Course10	PH010205	Electronics practical	3
Course11	PH010301	Quantum mechanics II	2.5
Course12	PH010302	Computational physics	2.5
Course13	PH010303	Atomic and molecular physics	2.5
Course14	PH810301	Solid state physics for materials	2.75
Course15	PH010402	Computational physics practical	2.75
Course16	PH010401	Nuclear and particle physics	3
Course17	PH810402	Science of advanced materials	2.75
Course18	PH810403	Nanostructures and materials characterisation	3
Course19	PH810302	Advanced practical's in material science	3
Course20	PH010403	Project	3
Course21	PH010404	Comprehensive viva voce	3

#### Analysis & Recommendations:

- The learning outcomes of the courses Electrodynamics, Statistical mechanics, Quantum mechanics and computational physics has to be improved by collaborative learning and regular assessments.
- Outcomes of specialization paper can be improved by conducting learning activities with the help of teaching aids.
- The performance in core subjects can be enhanced by adapting different teaching - learning styles such as visual, social and physical



## Analysis of PSO Attainment

<i>PSO No</i>	<i>PSO</i>	<i>PSO Attainment value</i>
PSO1	Discuss the methodology of physics in research oriented manner and explain the basic principles of advanced physics(Understand)	2.80
PSO2	Solve the problems of advanced physics fields using mathematical tools for in depth understanding of theoretical papers(Analysis)	2.80
PSO3	Experiment ad theories related to advanced physics in specialized labs and employ computer programming for solving various physical problems and mathematical calculations( Analysis)	2.81
PSO4	Develop communication skill to improve scientific temper and awareness of environment and human values in society	2.80
PSO5	Combine fundamental theoretical concepts and extrapolate the available data to propose and validate new concepts through research oriented project works	2.80

### Recommendations:

- Provide materials and training that promote new ideas and experimentation skills
- Subject based workshops & seminars to be organized.
- Improve subject understanding by providing additional learning recourses.
- Assessing students with questions, puzzles, quizzes etc and provide feedback on the performance of the students.

## Analysis of PO Attainment

<i>PO No</i>	<i>PO's</i>	<i>Course Attainment Value</i>
PO1	Develop critical thinking and drive for scientific exploration	2.80
PO2	Gain in-depth understanding of the principles and philosophies of the subject	2.80
PO3	Develop research aptitude	2.80
PO4	Acquire data interpretation and problem solving skills	2.80
PO5	Acquire practical skills in the area of specialization	2.80



PO6	Effective communication. Principles and concepts	2.80
PO7	Enhance employability through application-oriented learning	2.80
PO8	Practice professional and publication ethics thereby improve ethical decision making ability	2.80
PO9	Create drive for leadership, innovation and entrepreneurship	2.80
PO10	Develop positive attitude toward environmental sustainability and inclusivity	2.80

**Recommendations:**

- Implement collaborative learning to develop alternate ways of thinking and problem solving
- Practice online tests under simulated exam conditions for improving research aptitude.
- Personalised assistance may be provided.
- Student centered and activity based methodology may be adopted.

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