



# PDEU

PANDIT DEENDAYAL ENERGY UNIVERSITY

Formerly Pandit Deendayal Petroleum University (PDPU)

## B.Sc. (HONS.) Program Outcomes

<b>PO 1</b>	<b>Science knowledge</b>	Apply the knowledge of Physics, Chemistry and Mathematics in solving/analyzing problems in industries, research and development institutions, public sector units, higher education and in academia.
<b>PO 2</b>	<b>Problem Analysis</b>	Analyze and interpret theoretical and practical data at various work-places.
<b>PO 3</b>	<b>Design/ Development of solutions</b>	Design a system, component, or process to meet the desired needs within realistic constraints such as economic, environmental, health and safety, manufacturability, and sustainability.
<b>PO 4</b>	<b>Investigations of complex problem</b>	Develop the ability to apply the knowledge of applied research to investigate complex problems and provide viable solutions.
<b>PO 5</b>	<b>Modern tool usage</b>	Identify, formulate, and solve scientific problems using modern tools and techniques.
<b>PO 6</b>	<b>Science and Society</b>	Acquire the broad education necessary to understand the impact of scientific solutions in a local, global, economic, environmental, and societal context
<b>PO 7</b>	<b>Environment and Sustainability</b>	Assess environmental damage and develop environment friendly and sustainable scientific practices
<b>PO 8</b>	<b>Ethics</b>	Develop an ethical moral value system and cater to the community needs in a voluntary manner by the judicious use of scientific principles.
<b>PO 9</b>	<b>Multidisciplinary Approach</b>	Develop a multidisciplinary approach and function on multidisciplinary teams.
<b>PO 10</b>	<b>Communication</b>	Develop various communication skills such as listening, speaking, writing, etc. which will help in effective expression of ideas and views.
<b>PO 11</b>	<b>Project Management and Finance</b>	Apply scientific knowledge and management skills to manage projects in industries, research and development institutions, public sector units, higher education and in academia.
<b>PO 12</b>	<b>Life-long Learning</b>	Demonstrate effective usage of existing resources at workplaces and raise awareness of the importance of life-long learning



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## B.Sc. (HONS.) Mathematics Program Specific Outcomes (PSOs)

<b>PSO 1</b>	Develop a basic understanding of fundamental concepts of Physics, Chemistry and Mathematics to solve the problems having interdisciplinary dimensions. Build both analytical as well as innovative approach in solving problems of mathematical sciences
<b>PSO 2</b>	Develop concepts and understanding of various fields in mathematical sciences in addition to a basket of electives in humanities, social sciences etc. Apply, analyze and interpret basic and advanced computational laboratory concepts to develop necessary computing skills in scientific community.
<b>PSO 3</b>	Earn research experience within a specific field of mathematical sciences, through a supervised project to enhance the ability of the students in successfully carrying out multidisciplinary projects, in collaboration with other departments.



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## B.Sc. (HONS.) Mathematics Program Educational Objectives (PEOs)

<b>PEO 1</b>	Develop core competent graduates with sound mathematical knowledge and technical skills to identify, analyze and solve real-world problems.
<b>PEO 2</b>	Prepare students to pursue higher studies and conduct research in various fields including academia, industries, etc.
<b>PEO 3</b>	Integrate comprehensive knowledge, team work, teaching and communication skills for lifelong learning.
<b>PEO 4</b>	Provide students with guidance, practical training and hands-on project experience to meet the employment needs.