

## **THE PROGRAM OUTCOMES (BIOMEDICAL ENGINEERING)**

<b>PO 1</b>	<b>Engineering knowledge:</b> Apply the knowledge of mathematics, science, and engineering fundamentals to solve the problems related to Biomedical Engineering.
<b>PO 2</b>	<b>Problem analysis:</b> Identify, formulate, review research literature, and analyze complex Biomedical Engineering problems to arrive at suitable conclusions using first principles of mathematics, anatomy & physiology, natural sciences, and engineering sciences.
<b>PO 3</b>	<b>Design/development of solutions:</b> Design solutions for complex Biomedical Engineering problems and develop healthcare system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
<b>PO 4</b>	<b>Conduct investigations of complex problems:</b> Use research-based knowledge and research methods to <b>conduct investigations/ evaluate results/ interpret results</b> to arrive at the most effective solution for solving Biomedical Engineering problems.
<b>PO 5</b>	<b>Modern tool usage:</b> Create, select and apply appropriate techniques, resources, electronic components, modern engineering and IT tools including prediction and modeling to complex bioengineering activities with an understanding of the limitations to demonstrate concepts in Healthcare Engineering.
<b>PO 6</b>	<b>The engineer and society:</b> Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional Biomedical Engineering practice.
<b>PO 7</b>	<b>Environment and sustainability:</b> Understand the impact of the professional biomedical engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
<b>PO 8</b>	<b>Ethics:</b> Apply ethical principles and commit to professional ethics and responsibilities and norms of the Healthcare engineering practice.
<b>PO 9</b>	<b>Individual and team work:</b> Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary systems.
<b>PO 10</b>	<b>Communication:</b> Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
<b>PO 11</b>	<b>Project management and finance:</b> Apply the knowledge and understanding of project management, Biomedical Engineering resource management and cost analysis while implementing projects in medical science.
<b>PO 12</b>	<b>Life-long learning:</b> Recognize the need for and ability to engage in independent and life-long learning in the broadest context of technological change.