



UNIVERSITY OF ENGINEERING & TECHNOLOGY, PESHAWAR
 DEPARTMENT OF MECHATRONICS ENGINEERING

Phone: (091) 9217070 Fax: (091) 9216663

The Mechatronics Engineering under graduate program is designed such that the students will have attained a set of learning outcomes establishing the following graduate attributes:

Attribute		Description
GA1	Engineering Knowledge:	An ability to apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
GA2	Problem Analysis:	An ability to identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
GA3	Design/Development of Solutions:	An ability to design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
GA4	Investigation:	An ability to investigate complex engineering problems in a methodical way including literature survey, design and conduct of experiments, analysis and interpretation of experimental data, and synthesis of information to derive valid conclusions.
GA5	Modern Tool Usage:	An ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations.

GA6	The Engineer and Society:	An ability to apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solution to complex engineering problems.
GA7	Environment and Sustainability:	An ability to understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of, and need for, sustainable development.
GA8	Ethics:	Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.
GA9	Individual and Team Work:	An ability to work effectively, as an individual or in a team, on multifaceted and /or multidisciplinary settings.
GA10	Communication:	An ability to communicate effectively, orally as well as in writing, 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.
GA11	Project Management:	An ability to demonstrate management skills and apply engineering principles to one's own work, as a member and/or leader in a team, to manage projects in a multidisciplinary environment.
GA12	Lifelong Learning:	An ability to recognize the need for, and have the preparation and ability to engage in, independent and life-long learning in the broadest context of technological change.