

PROGRAMME SPECIFIC OUTCOMES

At the end of **B.Sc. Electronics** at St. Xavier's College, Mapusa, a student will have developed

PSO-1	Insightful Knowledge and Understanding of Electronics Fundamentals: Graduates will have a solid grasp of fundamental electronic principles, including circuit theory, electromagnetic theory, and semiconductor devices, analog and digital electronic circuits, Signal Processing, Microelectronics and Integrated Circuits, Control Systems, Communication Systems, Power Electronics, Biomedical Instrumentation, Optoelectronics, Robotics, Programming, Agro Electronics and to implement these principles effectively.
	Problem Analysis and conduct investigations of complex problems: Graduates will be able to identify, formulate, review research literature, and analyze complex problems thus using research – based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PSO-2	Modern tool usage in Design/ Development of solutions: Graduates can create, select and apply appropriate techniques, resources, and modern hardware and software tools including prediction and modelling to complex engineering activities with an understanding of the limitations and also to design 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.
	Environment and sustainability: Graduates will be able to understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of Electronics concepts, and need for sustainable development.
PSO-3	Effective Communication: Graduates will be able to communicate effectively on complex engineering activities with the Electronics Forum community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and to give and receive clear instructions.
	Project management and Teamwork: Graduates will be able to demonstrate knowledge and understanding of management principles to function effectively and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
	Employment and Life-long learning: The strong foundation of Electronics concepts will accreditation standards and industry expectations for electronics graduates, preparing them for careers in fields such as telecommunications, semiconductor industry, power systems, automation, and consumer electronics and also 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.