

4.0 COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

4.1 Computer Science and Information Technology (CL): Students will understand computer science and information technology concepts necessary to function in a rapidly changing technological, global society. They will demonstrate competency by performing multiple tasks required to develop and use appropriate resources to access, modify, and provide information effectively.

4.1.1 Business and Technology Ethics—define, explain, and demonstrate proper business and technology ethics, including management of intellectual property

4.1.2 Computer and Communications Systems—use operating systems, hardware and peripherals, integrating communication tools and appropriate resources, to share information

4.1.3 Computer Applications—identify, select, and use a variety of business and industry standard applications software; discuss current and emerging standards technology and trends

4.1.4 Knowledge Management and Business Processes—use technology and electronic media to identify, analyze, design, and create processes to manage workflow, communicate a collective understanding, and provide feedback for operational management

4.1.5 Program Design and Development—identify programming models and data elements including the development of user-friendly systems

4.1.6 Project Management—prioritize activities and manage the details including project scope, timelines, and budgets for the life cycle of the system in a team environment

4.1.7 Security—illustrate and implement basic security plans and procedures for information systems

4.1.8 Systems Analysis and Design—analyze current manual and electronic systems and develop efficient and effective solutions

4.1.9 Technical Resources—locate, organize and engage appropriate resources necessary to implement and support systems and/or solve problems