

# Technology and Business

Course Abbreviation	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p><i>Course Level Learning Competencies</i></p> </div> <div style="text-align: center;"> <p>Program Student Learning Outcomes</p> </div> </div>					
		Apply knowledge of business and management practices in the business environment..	Demonstrate knowledge of cyber security threats and concepts of information security	Communicate through verbal and written methods, using clear, accurate and concise language.	Work autonomously and/or in teams to effectively solve business and information technology concerns.	
<b>CIS110</b>	Create and format personal, business, and research-style documents using Word.	I,R		I	I	
	Use One Drive to store and share documents in the cloud.	I			I	
	Construct Excel formulas and functions to create charts and to perform mathematical operations with appropriate labeling	I		I	I	
	Create an Excel table for sorting and filtering data.	I			I	
	Create a relational database, in Access, including tables, queries, forms and reports.	I		I	I	
	Change the structure and properties of database objects in Access	I			I	
	Import an Excel worksheet into a Access database	I			I	
Create and format a PowerPoint presentation that usesvarious media such as pictures, videos, voice-overs, charts and tables.	I		I	I		
					Information Literacy	
					Quantitative Reasoning	
					Public Presentation	
					Global Awareness	
					Written Communication	
					Science & Technology	
<b>CIS112</b>	Create and use a range formulas and functions from basic to advanced including database functions	I, R			I	
	Use NestedIF functions	I			I	
	Use/Create Financial Functions and Data Tables such as pivot table and break even analysis	I			I	
	Perform what-if analysis using goal seeks and data tables	I			I	
	Create and use data validations and lookup functions	I			I	
	Create Excel templates that locks and protects the worksheet	I			I	
	Develop and edit macros to automate a process	I			I	
	Create a spreadsheet with appropriate labels for associated data	I, R		I,R	I	
	Import and export various file formats into and from Excel	I			I	
<b>CIS113</b>	Create databases to organize and analyze business or personal records	I,R		I	I,R	
	Design the structure and properties of tables, queries, reports, and forms	I,R		I	I,R	
	Import/export data into/from a Database	I,R			I	
	Create relationships between tables, while enforcing referential integrity, and setting join types	I, R				
	Create Queries in Access and in SQL to sort, omit duplicates and join tables	I,R			I	
	Plan, design, and create custom forms and sub forms containing calculated controls	I,R				
<b>CIS115</b>	Use the database splitter, encrypt and decrypt databases	I	I			
	Explain and Identify top threats to a computer network such as DDOS, password crackers, Spyware and Malware, and how to prevent them.		I	I		
	Explain how to avoid online fraud and identity theft		I	I		
	Compare and contrast perimeter and layered approaches to network security using best practices		I	I		
	Explain and demonstrate how to guard against malware, including viruses, worms and trojan horses and how they propagate, and understand how virus scanners operate.		I	I		
Describe related legal aspects to computer crimes, including cyber stalking		I	I			
Explain security protocols and principles, such as CIA triad		I	I			

	Describe key terms such as assurance, authenticity, cracker and firewall		I	I	
	Explain the basics of modern cryptographic concepts and methods; encryption, digital signatures and certificates		I	I	
	Describe the basics of privacy, including the function of VPNs, browser settings and anonymity		I	I	
	Describe how to implement usable security such as passwords, authentication and physical security		I	I	
	Describe how to protect yourself against social engineering threats		I	I	
CTN110	State the principles of how computers work including typical computer architecture using standard terminology			I	
	Write algorithms to solve specific problems.			I	I
	Demonstrate basic Operating system usage for Windows and Linux (command based) including basic file and folder management			I	I
	Demonstrate safe computer usage including basic PC security and information assurance		I	I	I
	Describe what happens when you email, use a web browser or IM			I	I
	Describe the differences among network types and the typical network equipment			I	I
	Explain the basic use of office application software and use it for basic problem solving in an Information Technology context.	I		I	I
	Demonstrate the implementation of an algorithm using a programming system (basic)				I
	Demonstrate the basic process of Help Desk calls.			I	I
	Describe the importance of ethics in Information Technology using specific examples			I	I
	Demonstrate an understanding of web terminology including protocols, ports and IP addresses		I	I	I
	Demonstrate a proficiency with virtualization				I