

## COMPETENCIES

| Basic Principles of Information<br>Technology Concepts, Systems,<br>Platforms & Tools | Students can use their understanding of fundamental IT concepts, systems, platforms, tools, and technology to understand the common roles of IT professionals.                               |
|---|--|
| Security  | Students can use their understanding of malware, firewall, IDS, and IPS to recognize and describe basic threats to networked computers.  |
| Logic & Fundamentals of<br>Computer Languages   | Students can use their understanding of how computer languages communicate to build basic mobile and web applications.   |
| <b>Routing &amp; Network Configuration</b>  | Students can use their understanding of common networking protocols to explain the purpose of routing, network configuration, and monitoring.  |
| User & Customer Support   | Students can use their understanding of the range of services used to provide assistance and technical support to help users implement and solve problems related to information technology. |
| <b>Basic Principles of Hardware</b>   | Students can use their understanding of communication systems hardware to describe the purpose and function of fundamental end user devices, switches, routers, wireless access points, etc. |
| Risk Management & Information<br>Assurance  | Students can use their understanding of the standards and applications needed to protect the confidentiality, integrity, and availability of information and information systems.            |
| Basic Principles of Software<br>Development   | Students can use their understanding of designing, writing, testing, and maintaining source code of computer programs to manage and maintain software.                                       |
| Networks  | Students can use their understanding of hardware and software to facilitate communication between people and computer systems.   |
| Basics of Virtualization & Cloud<br>Computing   | Students can use their understanding of the features, benefits, and concepts of virtualization and cloud computing to differentiate among types of cloud services.                           |



