ITS - Information Technology Systems

ITS 110 Introduction to Networking and Cabling: 3 Credits (2 Lec, 1 Lab)
Provides student current and emerging network technology information and hands-on exposure to networking skills, that will empower them to enter employment or further education and training in the computer networking field.

ITS 125 Fundamentals of Voice and Data Cabling: 3 Credits (2 Lec, 1 Lab)
(F) This course covers cabling issues related to data and voice connections. Students will learn about industry and worldwide standards, types of media and cabling, physical and logical networks, and signal transmission in preparation for the BICSI Registered Installer exam.

ITS 142 CCNA 2: Discovery: 4 Credits (2 Lec, 2 Lab)
Students will learn basic design, configuration, and troubleshooting of routers and switches to resolve common issues in small to medium networks. Students learn how to configure a router and a switch for basic functionality.

ITS 163 Windows and Configuration: 4 Credits (2 Lec, 2 Lab)
Intensive introduction to multitasking operating systems and network operating systems. Operating system upgrades/configuration, installation procedures, security issues, backup procedures, remote access, command line, and graphical user interfaces. Second of a two-course sequence covering the A+ certification objectives.

ITS 164 Networking Fundamentals: 3 Credits (2 Lec, 1 Lab)
This course is an introduction to networking fundamentals with both lecture and hands-on activities. Topics include the OSI model and industry standards, network topologies, IP addressing (including subnet masks), and basic network design. Concepts are reinforced with lab activities using equipment in live and simulated environments.

ITS 170 Microsoft Windows Serve: 4 Credits (2 Lec, 2 Lab)
This course gives you in-depth coverage of the 70-740 certification exam objectives and focuses on the skills you need to install and configure Windows Server 2016. After you finish this course, you'll have an in-depth knowledge of Windows Server 2016, including installation, local and remote management, file and storage services, Active Directory, group policies, TCP/IP, networking services, and Hyper-V virtualization.

ITS 191 Special Topics: Salesforce Operations: 3 Credits (3 Lec)
PREREQUISITES: ITS 100 Salesforce Fundamentals
ITS 200 Salesforce Operations is the second of two Salesforce courses offered by Gallatin College. This course provides students skills to communicate the technical capabilities within the Salesforce platform. After students explore the seven course objectives, they will select two technologies to gain an in-depth study. The course curriculum incorporates hands-on introduction and training to the Salesforce platform, including configuration, reporting, and use. Students who enroll in this course will learn the fundamentals of the Salesforce platform, data-driven optimization and solutions, effective reporting, and more.

ITS 218 Network Security: 3 Credits (1 Lec, 2 Lab)
Security baselines, network infrastructure security, web security, cryptography, operations security, and security management. CompTIA Security+ certification objectives.

ITS 221 Project Management: 3 Credits (2 Lec, 1 Lab)
(Sp) Covers ten project management knowledge areas and five process groups to information technology projects. Project management includes project integration, scope, time, cost, quality, human resources, communication, risk, procurement, and stakeholder management. Process groups cover initiating, planning, executing, monitoring/controlling, and closing.

ITS 224 Introduction to Linux: 4 Credits (2 Lec, 2 Lab)
(F, Sp) Cybersecurity students only. This course is intended for students who want to learn about the Linux operating system and prepare to pass the Linux+ certification exam from CompTIA (Powered by LPI). It does not assume any prior knowledge of Linux and is geared toward those interested in systems administration as well as those who will use or develop programs for Linux systems. The course provides comprehensive coverage of topics related to Linux certification, including Linux distributions, installation, administration, X-Windows, networking, and security.

ITS 250 CCNA 3: Exploration: 3 Credits (2 Lec, 1 Lab)
PREREQUISITE: ITS 142. (F) Offered fall (first 8 weeks). Covers router configurations including advanced IP addressing techniques, variable length subnet masking, intermediate routing protocols, Ethernet switching, virtual LANs, spanning-tree protocol, and VLAN trucking protocol

ITS 252 CCNA 4: Exploration: 3 Credits (2 Lec, 1 Lab)
(F) Project-based course in wide-area networking including advanced IP addressing techniques, network address translation, port address translation, DHCP, WAN technology and terminology, PPP, ISDN, DDR, Frame Relay, network management, and introduction to optical networking.

ITS 271 Securing Desktop/Mobile Devices: 4 Credits (2 Lec, 2 Lab)
This course is an introduction to technologies, terminology, and skills used in the world of mobile security. Students will learn to apply best practices, examine security trends, and secure mobile device within the network.

ITS 272 Cyber Defense: 3 Credits (2 Lec, 1 Lab)
Information security and risk management, access controls, application security, disaster recovery planning, cryptography, capstone project and legal aspects of information security.

ITS 274 Ethical Hacking and Network Defense: 3 Credits (2 Lec, 1 Lab)
This course provides an in-depth understanding of how to effectively protect computer networks. Students will learn the tools and penetration testing methodologies used by ethical hackers. In addition, the course provides a thorough discussion of what and who an ethical hacker is and how important they are in protecting corporate and government data from cyber attacks. Students will learn updated computer security resources that describe new vulnerabilities and innovative methods to protect networks. Also covered is a thorough update of federal and state computer crime laws, as well as changes in penalties for illegal computer hacking.

ITS 279 Cloud Systems: 3 Credits (2 Lec, 1 Lab)
(Sp) This course is designed to introduce foundational cloud-based learning and provide the skills needed to manage and configure Microsoft on-premises servers. From there, students will learn how to integrate their on-premises environment with Microsoft Azure cloud services.

ITS 280 Computer Repair Maintenance: 4 Credits (4 Lec)
(F) This course teaches advanced hardware theory and practical application with the emphasis on individual computer components. Successful students will know how to identify and install appropriate computer hardware.

ITS 291 Special Topics: 1-4 Credits ()
Repeatable up to 15 credits.

ITS 299 Capstone: 3 Credits (2 Lec, 1 Lab)
(Sp) The capstone course allows students to integrate previously completed coursework for associate degrees in Networking Technology or Cyber-Security. Students will complete approved academic projects and reports that demonstrate mastery of their program of study in accordance with required degree outcomes.