COMPUTER INFORMATION SYSTEMS

Computer systems are smaller, faster, more powerful, less power consuming, and more portable than ever imagined; and are an essential part of every industry today. Their proliferation has produced a need for cybersecurity professionals, networking specialists, computer technicians and help desk specialists who can do it all … from connecting components and showing the user how to utilize the system most efficiently, to updating, upgrading, repairing, and protecting systems when required. Our Computer Information Systems (CIS) program is designed with guidance from industry professionals and is constantly being updated to keep up with the daily advances in technology.

The CIS program allows students the flexibility to select classes that best suit their skills, strengths, educational and career goals, as well as meet the industry needs of today. The curriculum covers fundamentals of computer systems and cybersecurity, operating systems, hardware, structured and visual programming languages, system troubleshooting and helpdesk fundamentals, network technologies, cyber law and ethics, digital forensics, and database administration. Students will also develop proficiency in popular applications such as word processing, spreadsheet, database, and Internet publishing. CompTIA and Microsoft certifications can be achieved along the way to assure students have the necessary skill sets to meet employer expectations. With these skills and certifications, a computer professional can expect to enjoy a good salary, steady work, and opportunities to advance.

Our program also teaches students how to learn and adapt to new technologies. Students will be prepared not just for the CIS Careers of *today*, but also for the developments of *tomorrow*. According to the Bureau of Labor Statistics, employment in all computer-based occupations will increase 22 percent by 2022. Our workforce needs well-trained computer professionals to fill these roles.

Entrance Requirements

None

Program Requirements
None

- Discuss hardware components, assemble a computer, test, troubleshoot, upgrade, repair, and perform preventative maintenance on a computer system.
- Discuss features, install, configure, and troubleshoot a computer operating system on a client server network or stand-alone computer.
- Install, secure, and troubleshoot a network using wired and wireless technology, configure the operating system, share and protect files over the network, install and configure software firewalls, and be able to detect and remediate malware.
- Define the problem, develop the logic, write, and debug a computer program which includes basic input/output instructions, if conditions, calculations, loops and array processing.
- Design, and create a fully functional interactive web site.
- Use Microsoft Office products to create, format, and edit documents and slides, create spreadsheets which include formulas, functions, what-if analysis, and charting techniques, and create, modify, and query a relational database.
- Perform basic digital editing of image, audio, and video files and they should have an idea of which media file formats are appropriate for various applications, such as printing a digital image vs. posting a digital image online.

Computer Information Systems - Associate of Applied Science

Course	Title	Credit Hours
First Semester		
BUS 100	Introduction to Business	3
BUS 101	Business Communications I	3
CMS 101	Fundamentals of Speech	3
CIS 105	Introduction to Computer Programming	4
CIS 110	Computer Concepts & Business Appls	3
	Total	16
Second Semester		
CIS 121	Computer Science I	4
CIS 222	Linux Operating Systems	3
CIS 230	Computer Hardware & Troubleshooting	4
CIS 231	Intro to Windows OS	3
	Total	14
Third Semester		
CIS 207	Object-Oriented Programming	4
CIS 210 or CIS 170	Intro to Database Design/Management or Introduction to Digital Forensics	3
CIS 252	Network Fundamentals	3
CIS 253	Principles of Cyber Security	3
CIS 256	Network Administration/Microsoft	3
	Total	16
Fourth Semester		
Required Humanities/Fine Arts Course		3
Required Social/Behavioral Science Course		3
Required Communication Course		3
Required Math Course		3-4
CIS 242	Spreadsheet Applications	2
	Total	14-15
	Program Total	60-61

Cybersecurity-Basic Vocational Specialist

Course	Title	Credit Hours
First Semester		

CIS 105
   or CIS 110
	Introduction to Computer Programming
	   or Computer Concepts & Business Appls
		3-4

CIS 120	Cyberlaw and Ethics	3
CIS 231	Intro to Windows OS	3
CIS 252	Network Fundamentals	3
	Total	**12-13**
Second Semester		
CIS 222	Linux Operating Systems	3
CIS 170	Introduction to Digital Forensics	3
CIS 253	Principles of Cyber Security	3
CIS 263	Ethical Hacking & Counter Measures	3
	Total	**12**
	Program Total	**24-25**

Computer Network Specialist-Basic Vocational Specialist

Course	Title	Credits
CIS 252	Network Fundamentals	3
CIS 253	Principles of Cyber Security	3
CIS 256	Network Administration/Microsoft	3
Total Credit Hours		**9**

Computer User Support Specialist-Basic Vocational Specialist

Course	Title	Credits
CIS 110	Computer Concepts & Business Appls	3
CIS 222	Linux Operating Systems	3
CIS 230	Computer Hardware & Troubleshooting	4
CIS 231	Intro to Windows OS	3
Total Credit Hours		**13**

CIS 105 Introduction to Computer Programming (4)   4,0
This is an introduction to the fundamentals of computer programming concepts and techniques. It is designed for students with no prior programming experience. Students design, write, and debug computer programs. Topics will include storage and variables, conditional executions, loops and repetition, functions, parameter passing, arrays, and data files. The course will involve many hands-on programming exercises. The computer language used and type of applications emphasized may vary by section. See individual section details in the class schedule for more information. This course will be taught using Visual Basic or Python programming languages. This course is repeatable 1 time. (1.2) Proficiency Credit Not Available Pass/No Credit Available.
In-District Tuition/Fees: $560 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: (1) Grade of C or better in MTH 098 or MTH 099 or satisfaction of other placement criteria; or (2) consent ofinstructor.
Semester(s) Offered: Fall, Spring and Summer

CIS 110 Computer Concepts & Business Appls (3)   3,0
This course introduces students to business application software and digital literacy computer concepts. Students will learn to use word processing, spreadsheet, database, presentation, internet including web design applications, and learn the role of information systems in the business environment. In addition, the course content includes fundamental concepts of hardware and software, file management, basic computer networking and security, and computer related ethical and legal issues. Intended for students seeking a business applications skillset and exploring various career options in information technology. (1.2) IAI Major: BUS 902 Proficiency Credit Available (3 T) Pass/No Credit Available.
In-District Tuition/Fees: $425 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: None
Semester(s) Offered: Fall, Spring and Summer

CIS 120 Cyberlaw and Ethics (3)   3,0
This course provides students with advanced knowledge about the current laws and regulations of cyberspace. It covers basic laws and ethical behavior associated with e-commerce security, privacy, and network security. In addition, it highlights legal issues involved in technology. Students examine best practices in ethical aspects of cybersecurity.(1.2) Proficiency Credit: Available (2 S) Pass/No Credit: Available.
In-District Tuition/Fees: $405 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Reading: Grade of C or better in RDG 091 or LTC 099, or satisfaction of other placement criteria.
Semester(s) Offered: Fall and Spring

CIS 121 Computer Science I (4)   4,0
This course is an introduction to computer programming, emphasizing a disciplined approach to problem-solving and algorithm development. Students will learn program design and structured programming techniques using selection, repetition, and sequence control structures. Topics will include storage and variables, procedural and data abstraction, parameter passing, arrays, records, data files, program-testing, documentation, and proper programming style. (1.1) IAI Major: CS 911 Proficiency Credit Available (3 TIC) Pass/No Credit Available.
In-District Tuition/Fees: $560 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in MTH 098 or MTH 099, or satisfaction of other placement criteria or in two years high school algebra or consent of instructor.
Semester(s) Offered: Fall, Spring and Summer

CIS 123 Computer Science for Engineers (4)   4,0
This course is an introduction to computer programming with a strong emphasis on mathematical applications relevant to science and engineering. Students will learn a disciplined approach to problem-solving and algorithm development using selection, repetition, and sequence control structures. Programming topics will include an introduction to basic hardware and operating systems, storage and variables, procedural and data abstraction, parameter passing, arrays, strings, data files, error-handling, program-testing, documentation, and proper programming style. Mathematical topics will include matrices, linear interpolation, convergence, linear regression, roots of functions, solution of simultaneous linear equations, graphing, and numerical integration. This course will be taught using the C++ programming language. (1.1) IAI Major: CS 911 Proficiency Credit Not Available Pass/No Credit Available NOTE: This course is offered concurrently as MTH 123. The student must decide whether to earn credits in Computer and Information Sciences (CIS) or Mathematics (MTH) prior to enrolling.
In-District Tuition/Fees: $565 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in MTH 190 or consent of instructor.
Semester(s) Offered: Fall and Spring

CIS 127 Discrete Structures (3)   3,0
This course is an introduction to analysis of finite collections and the mathematical foundations of computing. It is intended for students intending to major in Computer Science. Topics include computer system design, data structures, algorithms, sets, logic, arrays and vectors, number systems, counting, recursion, graph theory, trees, and Boolean algebra. Students will explore these topics by writing computer programs to apply and test the concepts they learn. (1.1) IAI Major: CIS 915 Proficiency Credit Not Available Pass/No Credit Available.
In-District Tuition/Fees: $420 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in MTH 112 and CIS 121 or CIS 123 or consent of instructor
Semester(s) Offered: Fall

CIS 149 User Interface Design Principles (1)   1,0
This course is an overview of basic principles of user interface design and graphic design as they apply to programmers. Emphasis will be on user interface design for programs written for Microsoft Windows and other GUI (Graphical User Interface) environments, and also how these design principles apply to interactive web sites on the Internet. Basic graphic design principles will also be applied to GUI applications and Internet page design. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available.
In-District Tuition/Fees: $140 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: CIS 148 or concurrent enrollment in CIS 148
Semester(s) Offered: Varies

CIS 170 Introduction to Digital Forensics (3)   2,2
This course provides students with an overview of digital forensics techniques and investigation process. It focuses on the use of the most popular forensics tools and provides specific guidance on the investigation process of matters relating to the law and technology. Topics include the representation of data, preserving data, recovering data from multiple sources, and legal issues unique to digital forensics investigations process.The course also assists students in establishing the basis for preparing for a certification in digital forensics. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available.
In-District Tuition/Fees: $445 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: None Recommended: CIS 110
Semester(s) Offered: Fall and Spring

CIS 171 Introduction to Cyber Crimes (2)   2,0
This course will acquaint the student with the various types of computer-related crimes and the legal issues involved in investigation. (1.2) Proficiency Credit Available (2 TI) Pass/No Credit Not Available.
In-District Tuition/Fees: $270 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: None
Semester(s) Offered: Varies

CIS 205 Visual Programming (4)   4,0
This course teaches how to program with a "visual" programming languages, such as Visual Basic. You will learn to write software using the various controls available in a graphical user interface, and learn how to best design programs using those controls. An important emphasis will be data access, manipulation, and queries with the available data controls. This course is repeatable 3 times. (1.2) Proficiency Credit Not Available Pass/No Credit Available.
In-District Tuition/Fees: $560 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in CIS 105 or CIS 121 or consent of instructor Recommended: CIS 110 or familiarity with Microsoft Windows
Semester(s) Offered: Varies

CIS 207 Object-Oriented Programming (4)   4,0
This course is an introduction to object-oriented programming for students who have already learned programming in another computer language. Object-oriented programming is the most widely-used modern programming paradigm. The course will introduce how to design larger programs by structuring them into multiple classes and objects with a variety of relationships between those classes, such as association, composition, and inheritance. The students will learn how to create stand-alone applications and applets for deployment over the Internet. These techniques will be applied to the building of sophisticated graphical user interfaces (GUI). Advanced topics, such as various development environments, or application projects such as object-oriented programming for programming robots, may vary by section. This course will be taught using the Java, C++ or C# programming language. (1.2) Proficiency Credit Not Available Pass/No Credit Available.
In-District Tuition/Fees: $560 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in CIS 121 or consent of instructor.
Semester(s) Offered: Fall and Spring

CIS 210 Intro to Database Design/Management (3)   3,0
This course covers the introduction to relational database management systems. It uses fundamental concepts in database design, database modeling techniques, and Structured Query Language (SQL) programming techniques while providing hands-on exercises in which students apply these concepts and techniques. Design and manipulation of relational databases will be emphasized. Students will implement a relational database from initial requirements and conceptual design (ER Diagram) to the physical database in a modern enterprise relational database management system (RDMS).(1.2) Proficiency Credit Not Available Pass/No Credit Available.
In-District Tuition/Fees: $420 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in CIS 110 and CIS 105 or CIS 121 or consent of instructor.
Semester(s) Offered: Fall

CIS 215 Multimedia Technologies (2)   2,0
This course is an introduction to software and hardware used for graphics, sound, and motion video. Students will learn to use basic presentation software, and they will learn the basics of multimedia types and delivery on the Internet. Topics will include image formats, scanners, image editing software, audio and video formats, software recording and playback, and multimedia streaming on the web. This course is repeatable 1 time. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available.
In-District Tuition/Fees: $280 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in CIS 110 or consent of instructor
Semester(s) Offered: Spring

CIS 222 Linux Operating Systems (3)   3,0
In this introduction to using the Linux operating system, students will learn the basics of using the command line for navigation and file management and learn the use of basic Linux utilities. Students will learn to use text editors and basic scripting and scheduling for processes. Other topics include Linux installation, software updates, graphical user interfaces, and open source Linux applications. (1.2) Proficiency Credit Not Available Pass/No Credit Available.
In-District Tuition/Fees: $425 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in CIS 110 or CIS 105 or CIS 121 or consent of instructor
Semester(s) Offered: Fall and Spring

CIS 223 Computer Science II (4)   4,0
This second course in computer science introduces more advanced topics in programming, with emphasis on data structures and file manipulation. Topics will include design and implementation of large-scale problems, program verification, dynamic memory allocation, data structures, file processing, and an introduction to object-oriented programming. This course will be taught using the C++ programming language. (1.1) IAI Major. CS 912 Proficiency Credit Available (3 C) Pass/No Credit Available.
In-District Tuition/Fees: $560 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in CIS 121 or CIS 123 or MTH 123 or consent of instructor
Semester(s) Offered: Fall and Spring

CIS 226 Computer Science III (4)   4,0
This course concentrates on algorithms, algorithm analysis, and advanced data structures. Algorithm approaches such as divide-and-conquer, dynamic, greedy, and back-tracking are considered. Complexity analysis is used to compare algorithm efficiency. Students will learn further use of object-oriented programming to implement ADTs such as graphs, sets, heaps, and hash tables. (1.1) Proficiency Credit Not Available Pass/No Credit Available.
In-District Tuition/Fees: $560 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: CIS 223 or consent of instructor
Semester(s) Offered: Spring

CIS 227 Computer Organization (3)   3,0
This is a course in basic computer architecture. The function of the CPU, memory systems and organization, input/output devices, busses and interrupts will all be included. Students will learn basic digital logic, instruction sets, microprogramming, and assembly language. (1.1) Proficiency Credit Not Available Pass/No Credit Not Available.
In-District Tuition/Fees: $405 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in CIS 127 or concurrent enrollment in CIS 127 or consent of instructor
Semester(s) Offered: Varies

CIS 229 Computer Science Independent Study (2-6)   4
(0, 4-12) This course permits the student to do research in a particular area of his/her interest in computer science with minimal assistance from the instructor. (1.2) Proficiency Credit Available (2 IC) Pass/No Credit Available.
In-District Tuition/Fees: $825 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Demonstrated ability to excel in an area of interest with consent of instructor
Semester(s) Offered: Varies

CIS 230 Computer Hardware & Troubleshooting (4)   4,0
This class is an introduction to the installation, configuration, upgrading, diagnosing/troubleshooting, and preventive maintenance of computer hardware. The class covers the basic hardware components, assembling the components into a working system. The course will also cover hardware peripherals such as printers, scanners, and displays as well as basic networking. Students will gain a complete, step-by-step approach for learning the fundamentals of supporting and troubleshooting computer hardware. This course maps fully to CompTIA's latest A + Exam objectives. (1.2) Proficiency Credit Available 2 Z Pass/No Credit Available.
In-District Tuition/Fees: $540 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in CIS 110 or CIS 105 or consent of the instructor.
Semester(s) Offered: Fall and Spring

CIS 231 Intro to Windows OS (3)   2,2
This hands-on course offers an in-depth study of the functions and features of installing, configuring, troubleshooting and maintaining current Microsoft Windows desktop operating systems. Topics include performing attended and unattended installations, monitoring and managing files. Students will gain a complete, step-by-step approach for learning the fundamentals of supporting and troubleshooting computer software. This course maps fully to CompTIA's A+ Exam objectives. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available.
In-District Tuition/Fees: $405 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Effective Summer 2024 Prerequisite: None.
Semester(s) Offered: Fall and Spring

CIS 236 Special Topics in Computer Science (.5-3)   3,6
(.5-3, 1-6) Designed to satisfy specific needs or interests of students and the community. The following guidelines are to be used in selecting topics: 1) adequate and available material on special topic; 2) comprehensive outlines for each topic; and, 3) course should be designed to increase skill and knowledge in field of data processing. This course is repeatable 3 times. (1.2) Proficiency Credit Not Available Pass/No Credit Available.
In-District Tuition/Fees: $82.5 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: None
Semester(s) Offered: Varies

CIS 241 Word Processing Applications (2)   2,0
This course covers beginning through advanced word processing topics that prepare you to achieve the Microsoft Word Certification. These topics include creating and managing letters, tables, research papers, Web content; merging documents; creating forms; embedding and linking objects; using Macros; and troubleshooting. Students in this course will complete the official Microsoft Word Certification exam as the course final. See the schedule for specific software packages used. This course is repeatable 3 times. (1.2) Proficiency Credit Available (3 S) Pass/No Credit Available.
In-District Tuition/Fees: $285 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: None Recommended: Working Knowledge of Microsoft Windows
Semester(s) Offered: Fall, Spring and Summer

CIS 242 Spreadsheet Applications (2)   2,0
This course covers beginning through advanced spreadsheet topics that prepare you to achieve the Microsoft Excel Certification. These topics include creating and managing worksheets and workbooks; managing data cells and ranges; creating tables; performing operations with formulas and functions; creating charts and objects; and troubleshooting. Students in this course will complete the official Microsoft Excel Certification exam as the course final. See the schedule for specific software packages used. This course is repeatable 3 times. (1.2) Proficiency Credit Available (3 S) Pass/No Credit Available.
In-District Tuition/Fees: $285 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: None Recommended: Working Knowledge of Microsoft Windows
Semester(s) Offered: Fall, Spring and Summer

CIS 243 Presentation Applications (2)   2,0
Recommended: Working Knowledge of Microsoft Windows This course covers beginning through advanced presentation topics that prepare you to achieve the Microsoft PowerPoint Certification. These topics include creating and managing presentations; inserting and formatting text, shapes, and images, tables, charts, SmartArt, and media; applying transitions and animations; managing multiple presentations; and troubleshooting. Students in this course will complete the official Microsoft PowerPoint Certification exam as the course final. See the schedule for specific software packages used. This course is repeatable 3 times. (1.2) Proficiency Credit Available (3 S) Pass/No Credit Not Available.
In-District Tuition/Fees: $285 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: None
Semester(s) Offered: Fall, Spring and Summer

CIS 244 Database Applications (2)   2,0
Recommended: Working Knowledge of Microsoft Windows This course covers beginning through advanced database topics that prepare you to achieve the Microsoft Access Certification. These topics include creating and managing a database; building tables; creating queries, forms, reports; and troubleshooting. Students in this course will complete the official Microsoft Access Certification exam as the course final. See the schedule for specific software packages used. This course is repeatable 3 times. (1.2) Proficiency Credit Available (3 S) Pass/No Credit Not Available.
In-District Tuition/Fees: $285 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: None
Semester(s) Offered: Fall, Spring and Summer

CIS 246 Programming Dynamic Web Pages (3)   2,2
This course will teach how to do client-side Internet programming with Javascript. Topics will include creating slide shows and active images, customizing web page content with Javascript programs, using data from querystrings and forms, creating calculators with forms, using new windows and redirection, validating form contents, and using cookies to maintain data. This course is repeatable 2 times. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available.
In-District Tuition/Fees: $415 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: CIS 105 or CIS 121 and CIS 148 or consent of instructor. CIS 148 may be taken concurrently
Semester(s) Offered: Varies

CIS 247 Internet Programming (3)   2,2
This course will teach various ways to write programs that can be used over the Internet. The actual topics may change from semester to semester as the Internet itself continues to evolve. Students will learn client-side and server-side scripting using one or more common Internet programming languages, how to gather form data into a database, and how to deliver database information over the web.This course is repeatable 3 times. (1.2) Proficiency Credit Not Available Pass/No Credit Available.
In-District Tuition/Fees: $420 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in CIS 105 or CIS 121 or consent of instructor Recommended: CIS 148
Semester(s) Offered: Varies

CIS 248 Internet Programming with PHP (3)   2,2
This course will teach how to do server-side Internet scripting with the language PHP. Topics will include gathering data from forms and querystrings, saving form information to data files on the server, reading and searching data files to create custom web pages on request, carrying information forward through multiple pages to create an interactive website, and various ways to use PHP to customize web pages and web sites from the server side.This course is repeatable 2 times. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available.
In-District Tuition/Fees: $420 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: CIS 105 or CIS 121 or consent of instructor Recommended: CIS 148
Semester(s) Offered: Varies

CIS 252 Network Fundamentals (3)   2,2
This course is an introduction to computer networks and networking devices. Topics include network topologies and architecture, Internet protocols, network hardware and media, the OSI and TCP/IP models, network scanners, and firewall and security appliances. This course maps to the CompTIA Network+ Exam Certification. (1.2) Proficiency Credit Available (2 TI) Pass/No Credit Not Available.
In-District Tuition/Fees: $425 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: None.
Semester(s) Offered: Fall and Spring

CIS 253 Principles of Cyber Security (3)   2,2
This is a network security course in which students will learn to protect computer networks from various vulnerabilities and threats. Students will learn about common threats, system hardening, network and intrusion security tools, access control methods, authentication, encryption, redundancy, disaster response, and organizational security. This course is aligned to the goals of the CompTIA Security+ exam certification. (1.2) Proficiency Credit Available (2 TI) Pass/No Credit Not Available.
In-District Tuition/Fees: $425 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: None.
Semester(s) Offered: Fall and Spring

CIS 256 Network Administration/Microsoft (3)   2,2
This course will provide students with experience necessary to plan, install, manage and maintain a local area network with Microsoft server software. Students will install client and server network operating systems on systems in an Ethernet environment, and act as system managers to set up user and group accounts, administer user and group accounts, secure network resources, manage network print functions, audit resources and events and manage system policies. This course should prepare the student for the related Microsoft network administration certification exam. This course is repeatable 3 times.(1.2) Proficiency Credit Not Available Pass/No Credit Available.
In-District Tuition/Fees: $425 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in CIS 231 or concurrent enrollment in CIS 231 or consent of instructor.
Semester(s) Offered: Fall and Spring

CIS 257 Serving the Internet/Microsoft (3)   2,2
This course is designed to provide students with the course work and lab experience necessary to plan, install, manage, and maintain an Internet Information Server. This course will use both Web and FTP servers from Microsoft designed to operate on a Windows Server platform. Completion of this course should prepare the student to fully design, create, deploy, and manage Web sites. This course is repeatable 3 times. (1.2) Proficiency Credit Not Available Pass/No Credit Available.
In-District Tuition/Fees: $420 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: CIS 256
Semester(s) Offered: Varies

CIS 260 Applied Technical Support (3)   2,2
This course will expose the student to various help desk/ field service tasks that will require use of knowledge gained through previous coursework in the degree program along with research into new situations and issues. The tasks will cover a variety of scenarios in system expansion, upgrades, maintenance, preventive maintenance, backup and data recovery, connectivity, and security. Typical problems encountered will involve defective hardware, network problems, application program errors, user errors, local and network data recovery, and virus elimination.This course is repeatable 3 times.(1.2) Proficiency Credit Not Available Pass/No Credit Not Available.
In-District Tuition/Fees: $420 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Consent of Instructor
Semester(s) Offered: Fall and Spring

CIS 262 Applied Programming (3)   1,4
This course will require students to apply their previous training in computer science to one or more large-scale programming tasks. Projects will be data-intensive and require a variety of acquired and research skills to complete, as well as a mixture of programming languages and applications software. The projects will be group-oriented and require students to work in teams. Coordinated team planning will be necessary. (1.2) Proficiency Credit Not Available Pass/No Credit Available.
In-District Tuition/Fees: $420 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Consent of Instructor
Semester(s) Offered: Varies

CIS 263 Ethical Hacking & Counter Measures (3)   2,2
This course introduces students to a broad range of systems, applications, and network intrusions, prevention and detection. It provides an in-depth understanding of how to effectively protect computer systems and networks. Students will identify and analyze new vulnerabilities and apply innovative methods to protect systems and networks. Students will learn the tools and methodologies used by ethical hackers. (1.2) Proficiency Credit: Available (2 S) Pass/No Credit: Available.
In-District Tuition/Fees: $425 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: CIS 252 or CIS 253 or concurrent enrollment in CIS 252 or CIS 253; or consent of instructor.
Semester(s) Offered: Fall and Spring

CIS 271 Application Device Evidence Recovery (3)   2,2
This lab intensive course will teach students how to analyze and recover potential evidence from digital media, applications, and operating systems. Students will utilize an industry standard self-contained digital forensics software suite, such as EnCase or Forensics Toolkit (FTK). Students will learn to use the software to manage cases, create evidence files, analyze disk and device images, use various search methods, and archive evidence. This course will also provide evidence recovery capabilities beyond what might be found in an all-in-one software suite. (1.2) Proficiency Credit Available (2 IS) Pass/No Credit Not Available.
In-District Tuition/Fees: $420 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in CIS 170 or consent of instructor
Semester(s) Offered: Fall and Spring