

School of Information Technology

The Monroe College School of Information Technology prepares students for careers as competent technology professionals by using a challenging curriculum, state-of-the-art technological resources and real-world experience in the classroom. The School offers undergraduate programs in Computer Information Systems (CIS) and Computer Networks and Cybersecurity (CNC), and a graduate program in Computer Science (CS).

AS in Computer Information Systems

Most computer users in business neither know, nor need to know, how a computer actually works in order to use it. They just need it to work. Therefore there is a demand for “user advocates” who help users decide which technology is appropriate for their needs and consult them on how to deploy that technology to meet their goals. The Computer Information Degree program arms students with the knowledge and skills necessary to become one of these much sought after advocates.

Information technology students learn to “make things work” for people in today’s business. The curriculum develops students’ competencies in four major areas: technical/practical skills, business/soft skills, industry/field experience, and certifications. The School of Information Technology teaches students to apply what they have learned and to solve practical business problems by creating applications that support the problem-solving and decision-making needs of the corporate community.

The program level objectives for students completing the AS in Computer Information Systems are as follows:

1. To prepare and develop students to be competent in four (4) areas:
 - a. Technical / Practical Skills
 - b. Business / Soft Skills
 - c. Industry Training / Experience
 - d. Certification Preparation
2. To prepare students to think critically to solve computing problems through identification, assessment and evaluation of business and information systems; design and develop software applications and plan a scheme of secure systems
3. To develop students to become leaders and decision-makers; and ability to work with others to function effectively as business solution providers
4. To build students' awareness in conducting themselves in a manner that is professional, ethical, and social
5. To prepare students for rewarding careers in computer and information technology related fields

Computer Information Systems AS Requirements

Major-Related Courses: 27 Credits		
<u>Course #</u>	<u>Course Name</u>	<u>Credits</u>
IT-100	Introduction to Information Technology	3
IT-118	Integrated Business Applications	3
	or	
MG-105	Personal Financial Management	3
IT-120	Computer Hardware	3
IT-126	Computer Software	3
IT-130	Database	3
IT-150	Web Design Technology	3
IT-170	Cisco I: Cisco Networking Basics	3
	Major Area Electives	6
Sub-total:		27
General Education and Related Courses: 33 Credits		
<u>Course #</u>	<u>Course Name</u>	<u>Credits</u>
EN-111	College Writing and Critical Analysis	3
EN-121	Analytical Thinking, Writing, and Research	3
EN-206	Professional Writing and Presentation	3
IT-160	Programming Logic	3
IT-295	System Analysis & Design	3
LA-122	Fundamentals of Communication	3
MA-115	Quantitative Reasoning	3
	Liberal Arts Electives (including IT-Liberal Arts Courses)	6
	Social Science or Liberal Arts Electives	3
	Mathematics or Liberal Arts Elective	3
Sub-total:		33
Total Credit Hours: 60		

BS in Computer Networks and Cybersecurity

The Bachelor's degree program in Computer Networks and Cybersecurity is designed for students to enhance their theoretical, analytical, and practical skills through a solid foundation in computing, networks, and cybersecurity. The courses in this degree program help students develop the teambuilding, communication, critical-thinking, and technical skills required to keep current with the rapid advances in technology. Our students are taught by IT leaders, including former CIOs, network analysts, and database administrators. Students who complete their Bachelor's degree in Computer Networks and Cybersecurity will have the practical and theoretical knowledge necessary for employment in network design and administration, cybersecurity, computer forensics, and more.

The program level objectives for students completing the BS in Computer Networks and Cybersecurity are as follows:

1. To build and strengthen students' competencies, qualifications and marketability in four (4) areas:
 - a. Technical / Practical Skills
 - b. Business / Soft Skills
 - c. Industry Training / Experience
 - d. Certification Preparation
2. To cultivate problem-solving and critical thinking skills to solve complex computing problems through identification, assessment and evaluation of networks and security of business systems; effectively design, develop and implement well-secured systems
3. To promote students' leadership and decision-making skills; and ability to work with others to function effectively as business network and cybersecurity solution providers
4. To strengthen students' awareness in conducting themselves in a manner that is professional ethical, and social
5. To adequately prepare students for rewarding careers in computer networks and cybersecurity related fields

Computer Networks and Cybersecurity BS Requirements

Major-Related Courses: 57 Credits		
<u>Course #</u>	<u>Course Name</u>	<u>Credits</u>
IT-100	Introduction to Information Technology	3
IT-120	Computer Hardware	3
IT-126	Computer Software	3
IT-170	Cisco I: Cisco Networking Basics	3
IT-172	Cisco II: Cisco Basic Routing	3
IT-270	Cisco III: Cisco Switching	3
IT-271	Cisco IV: Cisco Wan Technologies	3
IT-275	Networking in a Windows Environment	3
IT-373	Network Security	3
IT-376	Wireless Technology	3
IT-390	Internship seminar	3
IT-495	Senior Seminar	3
	Major Area Electives, Open Electives, or Minor Courses	21
	Sub-total:	57

General Education and Related Courses: 63 Credits		
<u>Course #</u>	<u>Course Name</u>	<u>Credits</u>
EN-111	College Writing and Critical Analysis	3
EN-121	Analytical Thinking, Writing, and Research	3
EN-206	Professional Writing and Presentation	3

EN-221	Literary Criticism and Analysis	3
LA-122	Fundamentals of Communication	3
MA-115	Quantitative Reasoning	3
MA-120	Finite Mathematics & Linear Modeling	3
MA-145	Statistics for Business Decisions I	3
	or	
MA-242	Calculus I	3
IT-160	Programming Logic	3
IT-295	System Analysis and Design	3
IT-320	Operating Systems	3
IT-387	Ethical Hacking	3
IT-472	Information Security	3
IT-477	Network and Computer Forensics	3
IT-494	IT Project Management	3
	Liberal Arts Electives (including IT-Liberal Arts Courses)	18
		Sub-total: 63

Total Credit Hours: 120

BS in Computer Information Systems

The Bachelor's Degree Program in Computer Information Systems (CIS) develops employable technologists who apply what they have learned to solve practical business problems. Students gain a solid IT foundation. The curriculum helps students develop five areas of employment competencies: management, team building, communication, critical-thinking, and technical skills. Students hone business and soft skills and are encouraged to benefit from field experiences and obtain IT certifications.

The program level objectives for students completing the BS in Computer Information Systems are as follows:

1. To build and strengthen students' competencies, qualifications and marketability in four (4) areas: (a) Technical / Practical Skills (b) Business / Soft Skills (c) Industry Training / Experience, and (d) Certification Preparation
2. To cultivate problem-solving and critical thinking skills to solve complex computing problems through identification, assessment and evaluation of business and information systems; effectively design and develop diverse software applications and implement well-secured systems
3. To promote students' leadership and decision-making skills; and ability to work with others to function effectively as business solution providers
4. To strengthen students' awareness in conducting themselves in a manner that is professional ethical, and social
5. To adequately prepare students for rewarding careers in computer and information technology related fields

Computer Information Systems BS Requirements

Major-Related Courses: 57 Credits		
<u>Course #</u>	<u>Course Name</u>	<u>Credits</u>
IT-100	Introduction to Information Technology	3
IT-120	Computer Hardware	3
IT-126	Computer Software	3
IT-130	Database	3
IT-150	Web Design Technology	3
IT-170	Cisco I: Cisco Networking Basics	3
IT-172	Cisco II: Cisco Basic Routing	3
IT-280	Object Oriented Programming	3
IT-373	Network Security	3
IT-376	Wireless Technology	3
IT-390	Internship seminar	3
IT-495	Senior Seminar	3
	Major Area Electives, Open Electives, or Minor Courses	21
Sub-total:		57
General Education and Related Courses: 63 Credits		
<u>Course #</u>	<u>Course Name</u>	<u>Credits</u>
EN-111	College Writing and Critical Analysis	3
EN-121	Analytical Thinking, Writing, and Research	3
EN-206	Professional Writing and Presentation	3
EN-221	Literary Criticism and Analysis	3
IT-160	Programming Logic	3
IT-260	Advanced Programming	3
IT-295	System Analysis and Design	3
IT-320	Operating Systems	3
IT-330	Database Management Systems	3
IT-396	Management Information Systems	3
IT-494	IT Project Management	3
LA-122	Fundamentals of Communication	3
MA-115	Quantitative Reasoning	3
MA-120	Finite Mathematics & Linear Modeling	3
MA-145	Statistics for Business Decisions I	3
	or	
MA-242	Calculus I	3
	Liberal Arts Electives (including IT-Liberal Arts Courses)	18
Sub-total:		63
Total Credit Hours: 120		

Course Offerings

IT – Information Technology

IT-100 - Introduction to Information Technology (3)

This course is intended for students interested in pursuing a career in the field of Information Technology. Topics include an overview of the fundamentals of information technology, specializations and career paths, current and emerging technologies, business applications, communications and decision-making, and the impact of these systems on business, government, and society. This course also emphasizes the development of both writing and speaking skills. MS Windows and other popular software packages for word processing, spreadsheet development, presentations, and Internet concepts are also introduced.

Prerequisite: None.

IT-120 - Computer Hardware (3)

This course is intended for students interested in pursuing a career in the field of Information Technology. This course teaches students to become proficient in the inner workings of a microcomputer. It is a hands-on class that covers the replacement of all parts inside the PC. Students also learn about electricity, formatting hard drives, device drivers, as well as how software works with hardware. The class features lectures as well as hands-on exercises that allow students to disassemble and reassemble microcomputers. This course prepares students for the A+ Examination.

Prerequisite: IT-100 or IT-118.

IT-126 - Computer Software (3)

This course teaches proficiency in system software and the configuration of a microcomputer. Topics include the fundamental concepts of operating systems, installation, configuration and upgrading of operating systems, diagnosing and troubleshooting operating systems, basic concepts of networking, and Internet connectivity troubleshooting. Current and emerging operating system technologies are identified and analyzed. Career specializations and opportunities are discussed. This course emphasizes the development of analytical and problem-solving skills through hands-on lab exercises. Upon successful completion of this course, students will have the requisite knowledge and skills required to take the A+ Operating System Technologies Examination.

Prerequisite: IT-100 or IT-118.

IT-130 - Database (3)

Students learn the fundamental concepts of database management systems, relational database model, types of relationships, dependencies, and normalization of database. Students learn Structured Query Language (SQL) to create, maintain, update and query databases, and to enforce constraints. Industry standard Windows-based database management software is used

to create databases, forms, queries, and reports. Through hands-on experience, students gain proficiency in the design, creation, and function of tables, data entry forms, and reports.

Prerequisite: IT-100 or IT-118.

IT-150 - Web Design Technology (3)

This course introduces the student to Web page design. Careful planning is emphasized as the key to a successful Web site. Hypertext Markup Language (HTML) is introduced and students will create, format, and refine Web pages to include text, images, hyperlink, lists, tables, frames, and forms using an HTML editor. Students are also introduced to Cascading Style Sheets (CSS).

Prerequisite: IT-100 or IT-118.

IT-156 - Multimedia Authoring (3)

Students learn to develop multimedia applications using a variety of software and hardware tools. Students use multimedia software to incorporate text, graphics, video, audio, animation, and interactive links to organize and present information and create training materials.

Prerequisite: IT-100 or IT-118.

IT-160 - Programming Logic (3)

This course teaches students to apply top-down modular programming techniques for the designing and writing of computer solutions to common problems found in mathematics, science, and business. The C++ language is used to test and evaluate these techniques. Some of the concepts covered in the course include interactive programming on the microcomputer, arithmetic operations, logical operations, selection and looping, functions, and arrays.

Prerequisite: IT-100 or IT-118 and MA-115.

IT-170 - Cisco I: Cisco Networking Basics (3)

This course is for individuals seeking an understanding and knowledge of networking fundamentals including the Open Systems Interconnect (OSI) seven-layer model concepts; Ethernet and Cabling concepts; terminology and technologies. Students obtain the skills necessary for the configuration of Cisco routers connected in local-area networks (LANs) and wide-area networks (WANs) typically found at small to medium network sites. It is part of the recommended training for those seeking certification as a Cisco Certified Network Associate (CCNA).

Prerequisite: IT-100 or IT-118.

IT-172 - Cisco II: Cisco Basic Routing (3)

This course is for individuals seeking an understanding and knowledge of basic Cisco routing configuration, Cisco Routing Protocols (RIP/EIGRP/OSPF). Students obtain the skills necessary for the configuration and maintenance of Cisco routers connected in wide-area networks (WANs) typically found at small to medium network sites. It is part of the recommended training for those seeking certification as a Cisco Certified Network Associate (CCNA).

Prerequisite: IT-170.

IT-225 - Unix/Linux (3)

This course is an introduction to the use and management of Unix-based computer systems. Students learn advanced user functions as well as UNIX system administration. Topics include establishing and maintaining security, file system management, shell scripts, control of networks, multi-user environments, and inter-process control.

Prerequisite: IT-100 or IT-118; Junior Standing.

IT-250 - Advanced Web Design (3)

This course demonstrates how scripting language can be used to convert static HTML pages into dynamic pages. Syntax of a scripting language is introduced and students learn to use an advanced tool to generate more concise and readable code. The topics include Document Object Model (DOM), working with element set, Event model, animations and effects, library functions, latest technology to communicate with the server, creating user interfaces with themes and effects, and working with UI widgets.

Prerequisite: IT-150.

IT-260 - Advanced Programming (3)

A course designed for experienced C++ programmers. C++ is a leading edge, dominant language and an industry choice as a system implementation. The Procedural programming features as well as OOP (Object Oriented Programming) features are discussed. Procedural aspect control structures, functions, arrays, pointers and strings are covered. Object orientation concept and terminology are introduced. Identification of an object in a problem, specification of objects attributed and their behavior, and intersection among them are also included.

Prerequisite: IT-160.

IT-270 - Cisco III: Cisco Switching (3)

This course provides an understanding of Switching fundamentals, including a basic understanding of Cisco switches and an intermediate understanding of routers, terminology, and technologies. Students obtain the skills necessary for the configuration of Cisco switches and routers connected in local-area networks (LANs) and wide- area networks (WANs) typically found at small to medium network sites. It is part of the recommended training for those seeking certification as a Cisco Certified Network Associate (CCNA).

Prerequisite: IT-171.

IT-271 - Cisco IV: Cisco Wan Technologies (3)

This course is for individuals seeking an understanding and knowledge of Wide Area Network Technologies. It focuses on understanding Cisco WAN routers; WAN terminology and technologies; configuration of advanced IP addressing; Network Addressing Translation and WAN Protocols on Cisco routers connected in local-area networks (LANs) and wide-area networks (WANs). It is part of the recommended training for those seeking certification as a Cisco Certified Network Associate (CCNA).

Prerequisite: IT-270.

IT-275 - Networking in a Windows Environment (3)

This course provides students with an advanced study of Networking as a doorway to Network Administration through the most popular Operating System. Students are provided with the hands-on skills needed to manage a network. This includes configuring, administering, and troubleshooting network resources. The course also provides the knowledge needed to prepare for Networking Certification Exams.

Prerequisite: IT-170.

IT-280 – Object Oriented Programming (3)

This course introduces core programming basics—including data types, control structures, algorithm development, and program design with functions—via the Python programming language. The course discusses the fundamental principles of Object-Oriented Programming, as well as in-depth data and information processing techniques. Students will problem solve, explore real-world software development challenges, and create practical and contemporary applications using graphical user interfaces, graphics, and network communications.

Prerequisite: IT-160

IT-290 - Internship (3)

This course provides students with the opportunity to exercise their understanding of the academic field and to apply classroom theory in actual work settings in paid and non-paid supervised positions. This is a requirement and must be completed within the last two semesters of the program.

Prerequisite: Sophomore Standing.

IT-291 - Internship (3)

This course provides students with the opportunity to exercise their understanding of the academic field and to apply classroom theory in actual work settings in paid and non-paid supervised positions. This is a requirement and must be completed within the last two semesters of the program.

Prerequisite: IT-290.

IT-295 - System Analysis & Design (3)

This comprehensive study of the five phases of System Development Life Cycle (SDLC) and the System Analysis Toolkit shows the importance of communications, economic analysis, and project planning skills with current technologies across all phases of the SDLC. Students gain an in-depth understanding of how Information Systems support business requirements in today's intensely competitive environment. Several real world projects are assigned to students on an individual basis and as a member of a systems development team, which allows students to apply their knowledge and skills to act as a System Analyst and develop an information system for problems

that arise in typical business organizations.

Prerequisite: IT-130.

IT-320 - Operating Systems (3)

A course designed for students with primary knowledge of the working of operating systems. The topics include: various generations of operating systems, process and its transitions, concurrent processes and multiprogramming, deadlock, real storage, virtual and auxiliary storage, processor scheduling and operating system security. The management of the above mentioned resources by operating system are covered in detail. Various popular state-of-the-art operating systems are also discussed.

Prerequisite: IT-126.

IT-330 - Database Management Systems (3)

This course introduces the fundamental concepts of database management systems, with emphasis on the relational model, which is an increasingly important and widespread area in the computer field. Demonstrations and hands-on practice using ORACLE: SQL and PL/SQL reinforce the fundamental concepts.

Prerequisite: IT-130.

IT-360 - Java (3)

An introduction to World Wide Web-focused application programming, using the Java language is presented. Students familiar with the format and syntax of C and/or C++ will develop both Java applets designed to be transported over the Internet and executed with Web browsers as well as stand-alone Java applications. Topics will begin with basic input/output operations, the primary control structures and logical/math operations and proceed to the creation and use of methods, classes, arrays, and abstract data types (ADTs) utilizing accepted practices and techniques of contemporary object-oriented programming.

Prerequisite: IT-265.

IT-361 - Programming with Mobile Applications (3)

This course introduces students to the various platforms in use on small and mobile devices. Platforms include Apple iPhone, Google Android OS, and Microsoft Windows Mobile. Students learn about the mobile application development cycle and learn to use different tools to create applications for each platform using specialized development environments. Students also develop web applications for mobile browsers and explore cross- platform development.

Prerequisite: IT-260 or IT-280.

IT-362 - Mobile Application Development (3)

This course provides the students with the foundation necessary to build mobile applications for various platforms such as Google Android OS, Apple IOS and Windows Mobile 7. Students learn to work in integrated development environments with cross-platform programming languages. This course also introduces key programming concepts, including variables, decision

making, looping, lists, arrays and tables and teaches to incorporate audio, pictures, and animations to create state-of-the-art mobile applications for various platforms.

Prerequisite: IT-361.

IT-368 - Web Scripting and Development (3)

This course is intended for those who want to create interactive Web pages that provide customized data in response to visitor requests or collect data from site visitors. No prior experience with databases is required, but students must be familiar with general programming concepts, UNIX or Windows operating systems, and have a basic understanding of how to use the Internet. The course emphasizes the necessity of planning for multiple scenarios, encouraging the student to thoroughly prepare for the various options that Web page visitors might require in using a site.

Prerequisite: IT-250.

IT-373 - Network Security (3)

In this hands-on course, students gain the knowledge and skills necessary to assess and implement a total enterprise operating system security. Students learn to control the privacy, integrity and authenticity of data and resources from the file system to the network infrastructure. This course provides a firm background in the fundamentals of network security and prepares students for taking the Microsoft 70-214 exam towards the MCSE and MCSA certifications.

Prerequisite: IT-170.

IT-375 - Active Directory (3)

This course provides students with the knowledge and skills necessary to plan, install, configure, and troubleshoot the Windows Active Directory Components, DNS for Active Directory, and Active Directory Solutions. The course also provides the students the skills required to manage, monitor, and optimize the desktop environment by using Group policy, which is essential to the proper design and delivery of Network services in a LAN, WAN, Enterprise and Complex Networks. At the completion of the course, students will have the understanding and the knowledge to manage daily operations of the Windows Active Directory Structure and the knowledge needed to prepare for Networking Certification Exams.

Prerequisite: IT-275.

IT-376 - Wireless Technology (3)

This is a comprehensive course that provides broad knowledge of Mobile Systems and Wireless products. This course is intended for students who want to learn how to evaluate, plan, design and implement a wireless network system. Cisco, Bluetooth, and WAP technologies, protocols, and applications are covered in depth. Radio frequencies, bandwidth requirements, security challenges, the IEEE 802.11 standard, Service Set Identifiers (SSID) and Media Access Control (MAC) Wired Equivalent Protocol (WEP) are also discussed.

Prerequisite: IT-172 or IT-275.

IT-380 - Social and Professional Issues in IT (3)

This course covers historical, social, professional, ethical and legal responsibilities of computing. Real-life ethics issues, standards and guidelines, legal constraints and requirements, and the philosophical basis for ethical arguments will be covered in this course.

Prerequisite: Junior Standing.

IT-385 - Emerging Technologies (3)

This course presents and analyzes particular emerging technologies and their potential applications, including the opportunities and challenges of managing these technologies and their impact on business and society. Topics will include Cryptography, Computer Forensics, Nanotechnology, 3D Virtual Reality, Grid Computing, Wireless Technology, and other "Hot New Topics".

Prerequisite: Junior Standing.

IT-387 - Ethical Hacking (3)

This course is an introduction to offensive security topic with emphasis on ethical hacking. This class immerses students into an interactive environment to learn the tools and techniques to scan, test, hack, and secure their own systems. Students are exposed to current techniques used by attackers and learn defensive strategies using both Windows and Linux Systems. The learning environment gives students knowledge and practical experience with the current essential security systems. Students are taught how perimeter defenses work, how intruders escalate privileges and the steps to secure a system. Students also learn about Intrusion Detection, Policy Creation, Social Engineering, DDoS Attacks, Buffer Overflows, and Virus Creation.

Prerequisite: IT-373; Junior Standing.

IT-390 - Internship Seminar (3)

This elective course provides students with the opportunity to exercise their understanding of the academic field and to apply classroom theory in actual work settings in paid and non-paid supervised positions.

Prerequisite: Junior Standing.

IT-391 - Internship Seminar (3)

This elective course provides students with the opportunity to exercise their understanding of the academic field and to apply classroom theory in actual work settings in paid and non-paid supervised positions.

Prerequisite: Junior Standing.

IT-395 - Corporate Internship in Information Technology (6)

This course provides students with the opportunity to apply skills learned in the classroom within their discipline to a corporate experience. Students prepare for their professional career, gaining practical experience while being immersed in a corporate setting. Students are required to complete 320 hours at the corporate internship setting.

Prerequisite: Junior Standing; approval by Dean of IT.

IT-396 - Management Information Systems (3)

This course provides an understanding of MIS research and teaching, as well as practical experience designing and building real world systems. The fundamentals and importance of Information Systems in today's business environment are covered. The topics include computer and information systems (IS), software types, DBMS, telecommunications, systems analysis and design, software tools and engineering, design support systems, international information systems ethical and social issues. A case study on each topic is reviewed.

Prerequisite: IT-295.

IT-425 - Virtual Desktop Infrastructure (3)

This course is intended for students interested in pursuing a career in the field of Information Technology. Students learn to build virtual networks, implement high-availability clusters, enhance performance and security, and manage the virtual data center. Students build virtual desktop infrastructures using industry standard software tools. They also examine public and private cloud computing environments. Career specializations, career paths and business opportunities will be discussed upon successful completion of this course, student will have the requisite knowledge and skills required to take the VM Certification Exams.

Prerequisite: IT-373.

IT-435 - Database Administration (3)

This course introduces the students to administration of industry-standard database software and the role of a Database Administrator (DBA). Students are exposed to major topics such as installation and configuration of database software and its components; server and database maintenance; optimization and troubleshooting; backup and restore strategies; import and export of data; database security; managing users and roles, and their permissions; and implementation of high availability with mirroring. Students will attain DBA skills and will be in a better position to help solve complex business problems in their chosen careers.

Prerequisite: IT-330.

IT-472 - Information Security (3)

This course offers students an overview of information security planning and staffing. Students learn about key issues for protecting information assets, determining the levels of protections, and for responding to security incidents using the latest technologies. Students learn authentication techniques and how to distinguish different types of attacks and malicious codes. This course provides the information and skills necessary for students to take the Certified

Information System Security Professional (CISSP) certification exam.

Prerequisite: IT-373.

IT-477 - Network and Computer Forensics (3)

This course is designed to provide students with an understanding of the overall investigative process of computer forensics as well as the tools and techniques used. Students are introduced to the steps necessary to detect intruders, discover damage, and identify the offending intruder. The documentation of an incident response plan will also be taught. This course provides students with the information and skills necessary to take the International Association of Computer Investigative Specialists (ACIS) certification exam.

Prerequisite: IT-373.

IT-494 - IT Project Management (3)

In this course, the relationship between information technology and the fundamental processes driving the business enterprise are evaluated. The course aims to reorient students from a “business as usual” approach to information systems toward an integrated, cross-functional reassessment of the critical processes of the firm. The role of information technology as both an objective of and a participant in effective change is emphasized in relation to crucial organizational, managerial, and cultural factors. Students work as members of project teams to analyze case studies of actual reengineering efforts and to participate in original prototype exercises.

Prerequisite: IT-295.

IT-495 - Senior Seminar (3)

Under the guidance of a faculty advisor, students in their final semester are required to utilize their full scope of training and academic abilities in the design and development of an individualized computer-based management information system intended for business use. The project entails system conceptualization, detailed documentation, design, writing and testing of student written software, hardware specifications, user training manuals and other support and background materials. Students also are required to “sell” the project results at a formal presentation to fellow seminar members and faculty. Projects and teams are critiqued on the basis of content, approach, and degree of professionalism.

Prerequisite: Senior Standing.

*Faculty***School of Information Technology Faculty**

*Adjunct Faculty members **St. Lucia Campus

***Arvelo-Reyes, Elizabeth**

BA, Monroe College
MBA, Monroe College
Certified Scrum Master

***Ayloo, Sridevi**

BS, Osmania University
MS, Brooklyn College

***Bamkole, Clement**

BS, Mercy College
MS, Central Missouri State University
CCNA, MCSE, MCP & Internet Certified

Berisha, Haxhi

BS, Fordham University
MS, Fordham University
MCSE, MCSA, MCP, Network+, Server+ and A+ Certified

Bhagoji, Shantanu

BS, Osmania University
MS, Rochester Institute of Technology

Boaheng, Jacob

BBA, Baruch College
MA, Brooklyn College
PhD, Walden University

Brozo, Clifford

Director, Information Technology Programs,
New Rochelle Campus
BA, Iona College
MS, University of Bridgeport
MS, New York University

***Bustamante, Miguel**

BE, The City College of New York
ME, The City College of New York
PhD, The City College of New York

***Carranza, Harrison**

BS, NYC College of Technology
MS, Marist College

***Cato, Sayyid**

BA, Lehman College
MA, Teachers College
MEd, Teachers
College
PhD, Keiser University

***Chak, Arslan**

BS, Monroe College
MS, Mercy College

Connell, Michael

BS, Polytechnic University
MS, Polytechnic University
MCP, Erdiston College
PhD, Walden University

Ennoure, Taoufik

BS, Cadi Ayyad University
MS, University of Pau
MS, Lehman College

***Ewan, Parcus M.**

BBA, Monroe College
MS, American Sentinel University

***James, Joyce**

BBA, Monroe College
MBA, Monroe College

Kounavelis, Nikita

BS, Westminster College
MS, Pace University

****Maxwell, Richard Shane**

MS, Northumbria University at New Castle

***Mendoza, Froilan**

BBA, Monroe College
MS, New York University

***Monaghan, Maureen**

BA, Neumann College
MA, West Chester State University

***Nardi, Nicholas**

BA, Iona College
MS, Iona College

***Rodgers, Kristi**

BS, Kent State University
MS, Youngstown State University

***Rodriguez, Anthony**

BBA, Monroe College
MS, Pace University

***Sanni, Omolola**

BBA, Monroe College
MBA, University of Bridgeport

Shah, Nilesh

Dean, School of Information Technology
BSEE, National Institute of Technology
MS, New Jersey Institute of Technology
PhD, New Jersey Institute of Technology

****Vernor, Joshua**

BS, John Jay College of Criminal Justice
MBA, Monroe College, St. Lucia

Villegas, Asteria P.

Director, Information Technology Programs,
Bronx Campus
BS, St. Scholastica's College
MS, Iona College