MEMORANDUM

To: Dr. Martha Venn, Provost and Vice President for Academic Affairs
From: Dr. Alex Koohang, Chair, School of Information Technology
Date: October 10, 2012
Re: Approval of Curriculum for the School of Information Technology for Middle Georgia State College

It is recommended by the School of Information Technology that the attached curriculum be approved by the Academic Affairs Committee and included in the Middle Georgia State College 2013-2014 catalog. The following academic programs are included in this document:

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<td>Information Technology, BS</td>
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<td>Information Technology, BS (fully online)</td>
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The Curriculum Work Team members in each program area were as follows:

**Computer Science:** Edward Hufft (MGC); Pedro Colon (MGC); Alex Koohang (MSC)

**Information Technology:** Alex Koohang (MSC); Terry Smith (MSC)

**Information Technology (fully online):** Alex Koohang (MSC); Terry Smith (MSC)
School of Information Technology

Acceptance into the Information Technology Program

Beginning Fall 2012, students are required to have a minimum 2.0 GPA to be admitted to the program. In addition, students must not have College Preparatory Curriculum (CPC) or Learning Support (LS) holds to be admitted to the Bachelor of Science in Information Technology beginning in Fall 2012.

Information Technology Program Educational Objectives

The IT program provides students with knowledge in the core information technologies and builds on that knowledge to create professionals who meet the business and economic needs of Central Georgia. The program is designed to produce graduates with a diversified set of skills, roles, and experiences including knowledge in Network/network administration, information assurance, media design, and application development. These knowledge areas will prepare our graduates for careers in a range of organizations, from small to large.

The core knowledge in the program includes programming, application development, Web design, systems analysis and design, human computer interaction, interactive digital media, database principles, Web programming, project management, IT organizational integration, legal and ethical issues in information technology, and foundations of information assurance. Senior capstone is the last core course students take in the program. In this course students (normally in teams of three to five members) will analyze, design, develop, implement, and assess an information system based on their accumulated knowledge throughout the IT program.

It is appropriate to refer to IT graduates as “versatilists.” A career in information technology requires a person with the ability to react expeditiously to the dynamic nature of technology. A versatilist can synthesize knowledge and context in order to respond rapidly to forces, changes, and opportunities.

The courses in the program also emphasize critical thinking, problem solving, decision-making, and interpersonal and communication skills. Career success through lifelong learning and professional development is emphasized at all levels of the curriculum.

It is therefore anticipated that, a few years after graduation, our graduates will

1. Assume productive roles in IT-related positions, such as network administrator, software developer, web master, systems analyst, information security officer, multimedia designer, and database administrator;
2. Pursue life-long learning enabling them to adapt and grow as organizational responsibilities change

Information Technology Program Outcome

Upon completion of the baccalaureate program in IT, students should be able to:

- Use and apply current technical concepts, skills, practices, and tools in the core information technologies of human computer interaction, information management, programming, and web systems;
- Analyze, identify, and define information system requirements in local and global environments;
- Design, implement and administer effective IT solutions based on user needs;
- Use appropriate project management methods in the creation of an effective IT project plan;
- Describe and apply best practices and standards in IT applications;
- Identify IT methods used in protecting the confidentiality, integrity, and availability of information and its delivery systems;
- Identify and apply relevant ethical, legal, security, and social issues in a technology environment;
- Work effectively in teams to develop IT based solutions;
- Communicate effectively both orally and in writing; and
- Recognize the need for lifelong professional development and learning.
Information Technology (B.S.)

The mission of the School of Information Technology is to educate students in information technology in ways that lead to fulfilling careers and enhance the economic vitality of Central Georgia. The School prepares its graduates to solve problems and apply new technologies within an increasingly interconnected and changing global environment. The School pursues this mission as an educational leader in teaching excellence, scholarship, professional service, and community outreach.

The early part of the IT program provides students with knowledge in the core information technologies. Students can then focus on one or more concentrations to enhance their set of skills and knowledge. The courses in the program emphasize critical thinking, problem solving, decision-making, and interpersonal and communication skills. Career success through lifelong learning and professional development is stressed at all levels of the curriculum.

The IT program is designed to produce graduates with a diversified set of skills, roles, and experiences. It is appropriate to refer to graduates as "versatilists." A career in information technology requires a person with the ability to react expeditiously to the dynamic nature of technology. A versatilist can synthesize knowledge and context in order to respond rapidly to forces, changes, and opportunities.

Candidates for the baccalaureate degree in IT must complete all graduation requirements as outlined in the Middle Georgia State College Academic Catalog. A grade of at least a "C" is required in all ITEC courses used to meet the School of Information Technology's degree requirements. Students pursuing the bachelor of science degree in Information Technology must complete the following:

**Curriculum for Bachelor of Science in Information Technology**

**Area A Credit: 9 Hours**

**Essential Skills**
- ENGL 1101 - English Composition I **Credit:** 3 hours
- ENGL 1102 - English Composition II OR ENGL 1102H - Honors English Composition II **Credit:** 3 hours
- Area A Math Elective. **Credit:** 3 or 4 hours. Choose one of the following:
  - MATH 1111 - College Algebra
  - MATH 1113 - Pre-calculus
  - MATH 1113H - Honors Pre-calculus
  - MATH 1251 - Calculus I

*Note: Courses required for Area A must be completed within the first 30 hours.*

**Area B Credit: 4 Hours**

**Institutional Options**
- To be determined at a later date.

**Area C Credit: 6 Hours**

**Humanities/Fine Arts**
- Literature Elective **Credit:** 3 Hours
- COMM 1110 - Public Speaking **Credit:** 3 hours
Area D Credit: 11 Hours
Science, Math, and Technology
- Lab Science Elective Credit: 4 hours
- Lab Science Elective Credit: 4 hours
- Area D Elective Credit: 3 hours
  Choose from MATH 1200, 1251, 2252, 2253, 2260 and 2270.

Area E Credit: 12 Hours
Social Sciences
- HIST 2111 - United States History to 1865 Credit: 3 hours
  or
- HIST 2112 - United States History since 1865 Credit: 3 hours
- POLS 1101 - American Government Credit: 3 hours
- Area E Elective Credit: 3 hours
  Choose from the following:
  HIST 1111 - History of World Civilizations to 1650 Credit: 3 hours
  HIST 1112 - History of World Civilizations Since 1650 Credit: 3 hours
  POLS 2301 - Introduction to Comparative Politics Credit: 3 hours
  POLS 2401 - Introduction to Global Issues Credit: 3 hours
- Area E Elective Credit: 3 hours

Area F Credit: 18 Hours
Major Field
- ITEC 2215 - Introduction to Information Technology Credit: 3 hours
  School of Information Technology will accept a passing grade of 50 from the CLEP Exam "Information Systems and Computer Applications" as credit for ITEC 2215 - Introduction to Information Technology.
- ITEC 2260 - Intro to Computer Programming Credit: 3 hours
- ITEC 2270 - Application Development Credit: 3 hours
- ITEC 2320 - Networking Essentials Credit: 3 hours
- ITEC 2380 - Web Development Credit: 3 hours
- MATH 1220 - Discrete Mathematics Credit: 3 hours

Information Technology Core Curriculum Credit: 30 Hours
- ITEC 3155 - Systems Analysis and Design Credit: 3 hours
- ITEC 3235 - Human Computer Interaction Credit: 3 hours
- ITEC 3236 - Interactive Digital Media Credit: 3 hours
- ITEC 3245 - Database Principles Credit: 3 hours
- ITEC 3280 - Web Programming Credit: 3 hours
- ITEC 3300 - Project Management Credit: 3 hours
- ITEC 3310 - Information Technology and Organizational Integration Credit: 3 hours
- ITEC 4205 - Legal and Ethical Issues in Information Technology Credit: 3 hours
- ITEC 4200 - Foundations of Information Assurance Credit: 3 hours
- ITEC 4750 - Senior Capstone Credit: 3 hours
Upper-Level Electives Credit: 30 hours
Students are required to take 30 hours of upper-level courses to further enhance their skills, knowledge, and versatility. At least 15 hours must be IT courses.

Students may choose to satisfy the 30 hours of upper-level electives in one of the following four ways:

1. An IT concentration plus an additional 15 hours of upper-level courses within IT discipline and/or outside the IT discipline
2. Two IT concentrations
3. An Informatics concentration and either an IT concentration or 15 hours of upper-level IT courses
4. Fifteen hours of upper-level IT courses and an additional 15 hours of upper-level courses within IT discipline and/or outside the IT discipline

The upper-level IT courses may be chosen from various IT concentrations and/or upper-level IT courses outside major concentrations.

Upper-level courses outside the IT discipline may be chosen from various Informatics concentrations and/or other approved upper-level courses outside the IT discipline.

If a student completes one or two concentrations, the concentration name(s) will show on his or her transcript.

Area II - IT Concentrations
The IT Concentrations are Network Technologies & Administration, Information Assurance and Security, Integrated Digital Media, Software Development, and Gaming Design and Development. In order for a student to receive an IT Concentration, he/she must take 15 hours of coursework within a concentration.

Network Technologies & Administration
The Network Technologies & Administration concentration educates students in the use of current concepts and technologies of networking. Students will learn to analyze the needs of organizations, communicate the needs to the users, and then design and build networks to meet those needs. Graduates will be prepared for positions in networking or systems administration. Students should choose five courses from the following list:

- ITEC 3325 - Windows System Administration Credit: 3 hours
- ITEC 3328 - Linux Systems Administration Credit: 3 hours
- ITEC 4242 - Database Administration Credit: 3 hours
- ITEC 4285 - Web Server Administration Credit: 3 hours
- ITEC 4321 - Forensics/Data Recovery Credit: 3 hours
- ITEC 4324 - Wireless Technologies Credit: 3 hours
- ITEC 4329 - Data Communications Credit: 3 hours
- ITEC 4421 - Network Security Credit: 3 hours
  And other courses in this area as approved by the Dean.
Information Assurance and Security

The Information Assurance and Security concentration involves detecting, reporting, and responding to cyber threats, making encryption codes to securely pass information between systems, and taking appropriate measures to ensure the security of valuable information. Students will learn about digital evidence, computer crime and law, and server and network security important to law enforcement, forensic science, and information systems security. Students should choose five courses from the following list:

- ITEC 4285 - Web Server Administration Credit: 3 hours
- ITEC 4321 - Forensics/Data Recovery Credit: 3 hours
- ITEC 4341 - Incident Response and Contingency Planning Credit: 3 hours
- ITEC 4361 - Software and Database Security Credit: 3 hours
- ITEC 4421 - Network Security Credit: 3 hours

And other courses in this area as approved by the Dean.

Integrated Digital Media

The Integrated Digital Media concentration prepares students in the design and development of products for use in a variety of IT applications. Through the various courses, students will develop competencies in evaluating user and product needs and in designing, developing, and implementing digital media products to meet those needs. Students learn a broad range of skills including graphic design and production, interface design, and analysis and design techniques for constructing interactive applications. Graduates will find career opportunities as digital media designers and developers, specialists, and trainers. Students should choose five courses from the following list:

Required:

- ITEC 4230 - Graphic Imaging Credit: 3 hours
- ITEC 4238 - 2D Computer Animation Credit: 3 hours
- ITEC 4284 - Web Multimedia Delivery Credit: 3 hours

Choose 2 of the following:

- NMAC 3600 - Digital Storytelling Credit: 3 hours
- NMAC 3108 - Writing for Digital Media Credit: 3 hours
- ITEC 4231 - Designing Content for Instructional Applications Credit: 3 hours
- ITEC 4250 - Introduction to Artificial Intelligence for Gaming Credit: 3 hours

And other courses in this area as approved by the Dean.

Software Development

The Software Development concentration prepares students for the design, development, and implementation of software solutions. Graduates will be prepared for a variety of careers including software developers or systems, application, or database programmers.

Required course:

- ITEC 3264 - Data Structures Credit: 3 hours

Choose four courses from the following list:

- ITEC 4244 - Database Programming Credit: 3 hours
- ITEC 4248 - Web Development Environments Credit: 3 hours
- ITEC 4266 - C/C++ Programming Credit: 3 hours
- ITEC 4269 - Visual Basic for Client/Server Systems Credit: 3 hours
- ITEC 4286 - Web Applications Development Credit: 3 hours
- ITEC 4361 - Software and Database Security Credit: 3 hours

And other courses in this area as approved by the Dean.
Gaming Design and Development

The Gaming Design and Development concentration provides students with an understanding of the theory, design and programming techniques required for developing interactive games. This concentration will equip students with the theoretical and practical knowledge for careers in the games and simulation industries. Students will take the following courses:

- ITEC 3264 - Data Structures Credit: 3 hours
- ITEC 4230 - Graphic Imaging Credit: 3 hours
- ITEC 4238 - 2D Computer Animation Credit: 3 hours
- ITEC 4250 - Introduction to Artificial Intelligence for Gaming Credit: 3 hours
- ITEC 4255 - Game Design and Development Credit: 3 hours

And other courses in this area as approved by the Dean.

Area III – IT Electives (15 hours)

Students may choose to satisfy the 15 hours of upper-level electives in one of the following ways:
1. An additional IT concentration or Concentration in Health Informatics.
2. 15 hours of upper-level Information Technology courses within the IT concentrations and/or upper-level IT electives.
3. Transfer students with an associate’s or bachelor’s degree that satisfy the College’s general education course requirements and who have not taken ITEC 2215, ITEC 2260, ITEC 2270, ITEC 2320, and ITEC 2380 (within the Area F) are required to take these courses and may use them as partial-credit toward IT electives in AREA III.

Upper-Level IT Courses Outside Concentrations

- ITEC 3220 - Hardware and Systems Software Credit: 3 hours
- ITEC 3265 - Operating Systems Credit: 3 hours
- ITEC 3340 - Business Analysis Using Excel Credit: 3 hours
- ITEC 3351 - Decision Support and Organizational Intelligence Credit: 3 hours
- ITEC 4254 - Business Driven Technologies Credit: 3 hours
- ITEC 4288 - Electronic Commerce Systems Credit: 3 hours
- ITEC 4501 - Special Projects in Information Technology Credit: 3 hours
- ITEC 4701 - Internship in Information Technology Credit: 3 - 6 hours
- ITEC 4710 - Globalization & Technology Credit: 3 hours
- ITEC 4299 - Topics in Information Technology Credit: 3 hours

Informatics Concentrations

Informatics is the bridge that connects Information Technology to other areas of study. An Informatics Concentration provides students with a strong foundation in IT as well as a deeper understanding of another discipline. Informatics Concentrations allow students to more rapidly develop IT solutions for organizations within diverse disciplines. The Informatics Concentrations are Biology, English, Health, History, Humanities, and Mathematics.

Each Informatics Concentration has two components:
1. Fifteen hours of courses (Informatics: Biology includes 16 hours of courses) as prescribed in the specific Informatics Concentration.
2. Fifteen hours of upper-level IT courses (The upper-level IT courses may be an IT major concentration or chosen from various IT concentrations and/or upper-level IT courses outside major concentrations).

If the student takes all the upper-level IT courses within an IT Concentration, the student would then have two concentrations on his/her transcript (one Informatics Concentration and one IT Concentration). All courses in the Informatics Concentration are taken outside the School of Information Technology. These courses are deemed to cover the foundations, theory, and principles within each concentration. Some concentrations lead to recognized disciplines for graduate study.
Informatics: Biology

Required Courses Credit: 12 Hours
- BIOL 3104K - Cell Biology Credit: 4 hours
- BIOL 3510K - Invertebrate Zoology Credit: 4 hours
- BIOL 4110K - Genetics Credit: 4 hours

Required Electives Credit: 4 Hours
Select one course from the following
- BIOL 3350K - Ecology Credit: 4 hours
- BIOL 3360K - Plant Biology Credit: 4 hours
- BIOL 3520K - Vertebrate Zoology Credit: 4 hours
- BIOL 3540K - Microbiology Credit: 4 hours

Students interested in the Informatics: Biology must take the following prerequisite courses: CHEM 2111K, BIOL 2107K, and BIOL 2108K. (All or some of these courses are normally taken in the core at MSC. They may also be approved transferred courses from other institutions.) NOTE: This informatics concentration is not a bioinformatics program.

Informatics: English

Required Courses Credit: 15 Hours
Select five courses from the following
- ENGL 3106 - Professional Communication Credit: 3 hours
- NMAC 3108 - Writing for Digital Media Credit: 3 hours
- NMAC 4450 - Visual Rhetoric: Principles of Production Credit: 3 hours
- NMAC 4451 - Advanced Video Production: Broadcast Forms Credit: 3 hours
- HUMN 4480 - History of Print Credit: 3 hours
- NMAC 4481 - Film Analysis Credit: 3 hours

Students interested in the Informatics: English must take the following prerequisite courses: ENGL 1102 and BUSA 2201. (ENGL 1102 is normally taken in the core at Middle Georgia State College. BUSA 2201 is offered through the School of Business. Both courses may also be approved transferred courses from other institutions.)

Informatics: Health (Online Only)

Required Courses Credit: 12 Hours
- HLSA 3310 - American Health Care System Credit: 3 hours
- HLSA 3320 - Health Care Management Credit: 3 hours
- HIMA 4120 - Health Informatics I Credit: 3 hours
- HIMA 4121 - Health Informatics II Credit: 3 hours

Required Electives Credit: 3 Hours
Select one course from the following
- HLSA 3350 - Public Health and Epidemiology Credit: 3 hours
- HLSA 3360 - Quality Management and Improvement Credit: 3 hours
- HLSA 4435 - Managed Care Credit: 3 hours
Informatics: History

Required Courses Credit: 15 Hours

Option 1 - American History
Select five courses from the following:

- HIST 3710 - Colonial America Credit: 3 hours
- HIST 3730 - America, 1815-1848 Credit: 3 hours
- HIST 3750 - The Civil War and Reconstruction Credit: 3 hours
- HIST 3760 - United States History 1877-1917 Credit: 3 hours
- HIST 3770 - United States History 1917-1960 Credit: 3 hours
- HIST 3790 - United States History Since 1960 Credit: 3 hours
- HIST 3930 - History of Georgia Credit: 3 hours
- HIST 4700 - Multicultural America Credit: 3 hours
- HIST 4710 - Religion and Politics in American History Credit: 3 hours

Students interested in the Informatics: American History must take the following prerequisite courses: HIST 2111 and HIST 2112. (These courses are normally taken in the core at Middle Georgia State College. They may also be approved transferred courses from other institutions.)

Option 2 - World History
Select five courses from the following:

- HIST 3050 - The Ancient Mediterranean Credit: 3 hours
- HIST 3100 - History of Latin America Credit: 3 hours
- HIST 3150 - History of Africa to 1875 Credit: 3 hours
- HIST 3200 - Traditional China Credit: 3 hours
- HIST 3210 - Modern China Credit: 3 hours
- HIST 3230 - History of the Middle East Credit: 3 hours
- HIST 3440 - Europe in the Middle Ages Credit: 3 hours
- HIST 3460 - The Renaissance and Reformation Credit: 3 hours
- HIST 3480 - Europe in the Nineteenth Century Credit: 3 hours
- HIST 3490 - Europe in the Twentieth Century Credit: 3 hours
- HIST 4220 - History of Japan Credit: 3 hours
- HIST 4290 - Modern Russia Credit: 3 hours
- HIST 4308 - Seventeenth Century Britain Credit: 3 hours
- HIST 4320 - France 1660-1815 Credit: 3 hours
- HIST 4330 - Modern Germany Credit: 3 hours
- HIST 4336 - The Holocaust Credit: 3 hours
- HIST 4360 - Modern East Central Europe Credit: 3 hours

Students interested in the Informatics: World History must take the following prerequisite courses: HIST 1111 and HIST 1112. (These courses are normally taken in the core at Middle Georgia State College. They may also be approved transferred courses from other institutions.)
Informatics: Humanities

Required Courses Credit: 15 Hours

- NMAC 3145 - Digital Media Studio Credit: 3 hours
- HUMN 3153 (BUSI 3153) - Organizations, Work, and Literature Credit: 3 hours
- NMAC 3600 - Digital Storytelling Credit: 3 hours
- HUMN 3999 - Special Topics Credit: 3 hours
- HUMN 4472 - Studies in Culture Credit: 3 hours

Students interested in the Informatics: Humanities must take the following prerequisite course: ENGL 1102. (ENGL 1102 is normally taken in the core at Middle Georgia State College. This course may also be an approved transferred course from other institutions.)

Informatics: Mathematics

Required Courses Credit: 6 Hours

- MATH 3040 - Bridge to Higher Mathematics Credit: 3 hours
- MATH 3600 - Probability and Statistics Credit: 3 hours

Electives Credit: 9 Hours

Select three courses from the following

- MATH 3010 - History of Mathematics Credit: 3 hours
- MATH 3251 - Applied Combinatorics Credit: 3 hours
- MATH 3510 - Foundations of Geometry Credit: 3 hours
- MATH 4110 - Number Theory Credit: 3 hours
- MATH 4150 - Linear Algebra Credit: 3 hours
- MATH 4260 - Mathematical Analysis Credit: 3 hours
- MATH 4300 - Regression Analysis Credit: 3 hours
- MATH 4480 - Graph Theory Credit: 3 hours
- MATH 4621 - Mathematical Statistics I Credit: 3 hours
- MATH 4622 - Mathematical Statistics II Credit: 3 hours
- MATH 4630 - Topics in Applied Statistics Credit: 3 hours
- MATH 4651 - Numerical Analysis I Credit: 3 hours
- MATH 4652 - Numerical Analysis II Credit: 3 hours
- MATH 4901 - Operations Research I Credit: 3 hours
- MATH 4902 - Operations Research II Credit: 3 hours
- MATH 4905 - Optimization Credit: 3 hours
- MATH 4910 - Mathematical Models Credit: 3 hours

Students interested in the Informatics: Mathematics must take the following prerequisite courses: MATH 1251, MATH 2252, MATH 2253, MATH 2260, and MATH 2270. (Some of these courses are normally taken in the core at Middle Georgia State College. They may also be approved transferred courses from other institutions.)

Total Hours: 120
Information Technology Degree Online (B.S.)

The Curriculum
(First and second years of the program)
The first two years of undergraduate studies include general education courses (Areas A - E) and IT Courses (Area F).

- General education courses may be approved transfer courses from other higher education institutions or completed entirely online through the Middle Georgia State's e-Core.
- Area F courses at Middle Georgia State may be completed through the college's School of Information Technology. They may also be approved transfer courses from other higher education institutions.
- Upper-division courses are completed during students' junior and senior years through the college's School of Information Technology (for IT courses) and School of Nursing & Health Sciences (for Health Informatics courses).

(Third and fourth years of the Program)
The third and fourth years of the undergraduate studies include three areas.

Area I – IT Core Curriculum (30 hours)

Area II – An IT Concentration (15 Hours)
To satisfy this area, students may choose one of the following IT concentrations:

- Information Assurance & Security
- Network Technologies and Administration
- Integrated Digital Media
- Software Development
- Gaming Design and Development

Area III – IT Electives (15 hours)
Students may choose to satisfy the 15 hours of upper-level electives in one of the following ways:
1. An additional IT concentration or Concentration in Health Informatics.
2. 15 hours of upper-level Information Technology courses within the IT concentrations and/or upper-level IT electives.
3. Transfer students with an associate’s or bachelor’s degree that satisfy the College’s general education course requirements and who have not taken ITEC 2215, ITEC 2260, ITEC 2270, ITEC 2320, and ITEC 2380 (within the Area F) are required to take these courses and may use them as partial-credit toward IT electives in AREA III.

Total Hours: 120
Information Technology (Certificate)

A student completing this curriculum must satisfy Learning Support requirements in English, Reading, and Math unless exempted.

Curriculum for the Certificate in Information Technology (Career)

- ENGL 1101 - English Composition I Credit: 3 hours
- ITEC 2215 - Introduction to Information Technology Credit: 3 hours
- ITEC 2260 - Intro to Computer Programming Credit: 3 hours
- ITEC 2270 - Application Development Credit: 3 hours
- ITEC 2320 - Networking Essentials Credit: 3 hours
- ITEC 2380 - Web Development Credit: 3 hours

Select Either:

- MATH 1101 - Introduction to Mathematical Modeling Credit: 3 hours
  or
- MATH 1111 - College Algebra Credit: 3 hours

Select One:

- MATH 1200 - Elementary Statistics Credit: 3 hours
  or
- MATH 1200H - Honors Elementary Statistics Credit: 3 hours
  or
- MATH 1220 - Discrete Mathematics Credit: 3 hours
  or
- MATH 1251 - Calculus I Credit: 4 hours
  or
- Any 2000-level math course

ITEC Electives Credit - 6 Hours

ITEC Electives
Select from any ITEC 2000-level or higher courses

Total Hours: 30
Information Technology (Minor)
Middle Georgia State College's School of Information Technology offers a minor in Information Technology (IT) for undergraduates enrolled in any discipline or program other than IT. The IT minor is designed for students who wish to develop knowledge and skills in applying as well as integrating current computing technologies to enhance and support their primary field of studies.

Information technology has become increasingly important in such fields as education, nursing, business, biology, history, public service, and communications. Few careers exist today that are not impacted by technology, and graduates in all fields should be prepared to use it to its greatest potential.

Goal
A minor in Information Technology provides students with essential skills needed in a variety of fields, including:

- Enhancing the student's understanding of the fundamentals of information technology.
- Developing the student's ability to specify, select, and utilize information technology in his or her major field of study.
- Equipping students with the skills and terminology needed to interact with technology professionals.

The minor in Information Technology contains a total of 15 hours of coursework with a minimum of nine hours in upper division IT courses.

Grade Requirements: A grade of "C" or better must be earned in all courses used to satisfy the minor.

Required Coursework
One course is required,

Either:

- ITEC 2215 - Introduction to Information Technology Credit: 3 hours
- ITEC 2201 - Business Information Applications Credit: 3 hours

The additional four courses may be selected from any course in the IT curriculum, at least three of which must be at the 3000 or 4000 level.

While any combination of courses meeting the above requirements will be suitable for a minor, the School of Information Technology recommends that at least some of the selected courses focus on competencies central to the information technology profession. Courses selected from the following list will accomplish this goal.

- ITEC 2320 - Networking Essentials Credit: 3 hours
- ITEC 2380 - Web Development Credit: 3 hours
- ITEC 3155 - Systems Analysis and Design Credit: 3 hours
- ITEC 3235 - Human Computer Interaction Credit: 3 hours
- ITEC 3236 - Interactive Digital Media Credit: 3 hours
- ITEC 3245 - Database Principles Credit: 3 hours
- ITEC 3220 - Hardware and Systems Software Credit: 3 hours
- ITEC 3300 - Project Management Credit: 3 hours
- ITEC 3340 - Business Analysis Using Excel Credit: 3 hours
- ITEC 4205 - Legal and Ethical Issues in Information Technology Credit: 3 hours

And any other ITEC courses approved by the Dean of the School of Information Technology

Note: Courses taken from this list to satisfy a major may not be used for credit toward the completion of this minor.

Total Hours: 15
Web Design and Instructional Technology (Minor)

Middle Georgia State College's School of Information Technology minor in Web Design and Instructional Technology (WIT) is designed for technology trainers, teachers, instructional support specialists or other professionals who are interested in learning more about integrating the use of computers and other Web-based technologies into teaching and learning.

The Web Design and Instructional Technology Minor contains a minimum of 18 hours of coursework.

Grade Requirements: A grade of "C" or better must be earned in all courses used to satisfy the minor.

**Required Coursework:**

- **Select either:**
  - ITEC 2201 - Business Information Applications (3 hours)
  - or
  - ITEC 2215 - Introduction to Information Technology (3 hours)

**Additional Required Courses:**
- ITEC 2380 - Web Development (3 hours)
- ITEC 3235 - Human Computer Interaction (3 hours)
- ITEC 3236 - Interactive Digital Media (3 hours)
- ITEC 4231 - Designing Content for Instructional Applications (3 hours)
- ITEC 4284 - Web Multimedia Delivery (3 hours)

Note: Courses taken from this list to satisfy a major may not be used for credit toward the completion of this minor.

**Total Hours: 18**
Computer Science (A.S.)

Area A Credit: 10 hours
Essential Skills
- ENGL 1101 - English Composition I Credit: 3 hours
- ENGL 1102 - English Composition II Credit: 3 hours
- MATH 1113 - Pre-calculus Credit: 4 hours

Area B Credit: 4 Hours
Institutional Options – To Be Determined

Area C Credit: 6 hours
Humanities/Fine Arts
- Literature Elective Credit: 3 hours
- Area C Elective Credit: 3 hours

Area D Credit: 12 Hours
Science, Math, and Technology
- Science Sequence I Credit: 4 hours
- Science Sequence II Credit: 4 hours
- MATH 1127 - Calculus I Credit: 4 hours

Area E Credit: 12 Hours
Social Sciences
- Take one of the following courses - Credit: 3 hours
  - HIST 2111 - United States History to 1865 Credit: 3 hours
  - HIST 2112 - United States History since 1865 Credit: 3 hours
- POLS 1101 - American Government Credit: 3 hours
- Area E Global Perspectives Elective Credit: 3 hours
  Choose from the following courses:
  - HIST 1111 - History of World Civilizations to 1650 Credit: 3 hours
  - HIST 1112 - History of World Civilizations Since 1650 Credit: 3 hours
  - POLS 2301 - Introduction to Comparative Politics Credit: 3 hours
  - POLS 2401 - Introduction to Global Issues Credit: 3 hours
- Area E Elective Credit: 3 hours

Outside Core: 2 hrs
- HILTH 1101 - Health Credit: 2 hours

Area F Credit: 18 Hours
Major Field
- CSCI 1301 Computer Science I Credit: 4 hours
- CSCI 1302 Computer Science II Credit: 4 hours
- MATH 1128 Calculus II Credit: 4 hours
- Take two of the following courses - Credit: 3 hours
  - CSCI 1001 Introduction to Computer Science Credit: 3 hours
  - CSCI 1101 Introduction to Visual Basic.Net Programming Credit: 3 hours
  - CSCI 1201 Introduction to C++ Programming Credit: 3 hours
  - CSCI 1202 Object-Oriented Programming in C++ Credit: 3 hours

Total Hours: 64