BOARD OF REGENTS



SUMMARY OF ITEM FOR ACTION, INFORMATION OR DISCUSSION

TOPIC: Coppin State University: Bachelor of Science in Management Information Systems

COMMITTEE: Education Policy

DATE OF COMMITTEE MEETING: June 6, 2012

SUMMARY: The proposed Bachelor of Science program is in keeping with the plans for enhancement of the University's Management Science and Economics program. The existing concentration in Management Information Systems serves as a core for the new major. The curriculum includes a variety of courses including systems analysis and design, database management principles, project management, human computer interface, computer and information security, and a capstone course.

Graduates of the proposed program will be able to manage and understand how to secure important information within such agencies as the federal government, hospitals, and public and private industry. Demand for information system professionals will increase as firms continue to expand their use of wireless and mobile networks. Additional professionals will be needed to design and build these new networks as well as to upgrade existing ones. In addition, the expansion of healthcare information technology will cause an increase in the use of networking technology in that industry, and more computer network architects will be employed there.

According to the Maryland Department of Labor and the Occupational Outlook, overall employment is expected to grow by 22% between 2008 and 2018, much faster than the average for all occupations. Demand for information security analysts is expected to be very high. Cyber attacks have grown in frequency and sophistication over the last few years, and many organizations are behind in their ability to detect these attacks. Analysts will be needed to develop innovative way to prevent hackers from stealing critical information or creating havoc on computer networks.

ALTERNATIVE(S): The Regents may not approve the program or may request further information.

FISCAL IMPACT: No additional funding is necessary. The program will be supported through tuition and reallocated funds.

<u>CHANCELLOR'S RECOMMENDATION</u>: That the Committee on Education Policy recommend that the Board of Regents approve the proposal from Coppin State University to offer the Bachelor of Science in Management Information Systems.

COMMITTEE RECOMMENDATION	l: Approval.	DATE: June 6, 2012	
BOARD ACTION:		DATE:	
SUBMITTED BY: Irwin Goldstein	(301) 445-1992	irv@usmd.edu	

New Instructional Program Substantial Expansion/Major Modification Cooperative Degree Program Coppin State University Institution Submitting Proposal **Management Information Systems** Title of Proposed Program **Bachelor of Science** Fall 2012 Degree to be Awarded Projected Implementation Date 0702-00 110401 Proposed HEGIS Code Proposed CIP Code **Management Information Systems** Sadie R. Gregory Department in which program will be located Department Contact 410-951-3483 srgregory@coppin.edu Contact Phone Number Contact E-Mail Address for L. Collen, v 5/22/12

Signature of President or Designee

UNIVERSITY SYSTEM OF MARYLAND INSTITUTION PROPOSAL FOR

Date

Mission

The need for a new B.S. degree in Management Information Systems arises from the mission of the university, the strategic plan of the University System of Maryland and the needs of the state and the nation. Furthermore, the proposal is consistent with the recommendations of the Coppin Study Team Report which reviewed progress made since the original 2001 Toll Report, Coppin State University seeks to enhance its Management Science and Economics Program by changing the existing concentration in Management Information Systems to a B.S. major in Management Information Systems.

The proposed major would help the university realize its new mission statement which includes the following: Coppin State University, an urban, comprehensive, historically Black institution located in Baltimore, Maryland, offers quality undergraduate and graduate programs in teacher education, the liberal arts, mathematics, sciences, technology, and professional disciplines. The University provides educational access and diverse opportunities for students through excellence in teaching, research, and community engagement thus preparing analytical, socially responsible, lifelong learners. Coppin State University builds on a rich legacy of empowering students, promoting community revitalization, and strengthening relationships with local, national, and global partners.

Characteristics of the Proposed Program

The proposal also helps the University align its efforts to several of the five themes identified in the University System of Maryland's Strategic Plan, USM in 2020: A Call to Action. Providing a major rather than a specialized track helps students and employers to better understand our program offerings, thus, allowing us to attract more prospective students from high schools, community colleges, and other institutions of higher learning. The major is more favorably preferred over the specialized track, providing employers with practitioners with degrees in respective disciplines.

The USM Strategic Plan's commitment to access (Theme 1) and the university's pledge to provide *educational access makes this new degree an urgent necessity*.

The major places our graduates in a competitive position in the job market. Students prefer colleges/universities where they can obtain degrees instead of concentrations or specialized tracks in their disciplines. Several of our students have transferred to other institutions where they can get degrees in management information systems rather than concentrations.

According to the Maryland Department of Labor and the Occupational Outlook, employment for managers is expected to grow <u>much faster than the average</u> for all

human resources, training, and labor relations managers and specialists occupations. College graduates and those who have earned certification should have the best job opportunities. Overall employment is projected to grow by 22 percent between 2008 and 2018, much faster than the average for all occupations. Demand for information security analysts is expected to be very high. It is necessary that more professionals are skilled in information management and understand how to create databases and protect them. Cyber attacks have grown in frequency and sophistication over the last few years, and many organizations are behind in their ability to detect these attacks. Analysts will be needed to come up with innovative ways to prevent hackers from stealing critical information or creating havoc on computer networks.

Graduates will be able to manage and understand how to secure important within such agencies as the Federal Government, hospitals, and private and public industry. In addition, as the healthcare industry expands its use of electronic medical records, ensuring patients' privacy and protecting personal data are becoming more important. More information security analysts are likely to be needed to create the safeguards that will satisfy patients' concerns.

Demand for information system professionals will increase as firms continue to expand their use of wireless and mobile networks. This occupation will be needed to design and build these new networks, as well as upgrade existing ones. In addition, the expansion of healthcare information technology will cause an increase in the use of networking technology in that industry, and more computer network architects will be employed there.

Initial students served will be those within Coppin State University who are currently in the specialized tracks. Those students will declare themselves actual majors. The program will also be available to prospective new students to the University. It is critical that the University continues to serve the needs of local and regional businesses by providing them with graduates with specialized skill sets that the major provides.

The B.S. degree in Management Information Systems prepares students for graduate school, advanced and entry-level positions in the every changing job market. The management major offers a variety of courses including human resources management, labor management relations, organizational psychology and not-for-profit management. Coppin's major integrates theory with business practice. The degree is popular among businesses because the fundamentals of the program are delivered in an experience-driven format with an emphasis on values-centered leadership and responsible business practice.

Educational Objectives of the Program

The program objectives for the B.S. in Management Information Systems (MIS) include six primary objectives that are consistent with the institutional learning

outcomes. This will facilitate accurate assessment of student learning and performance. The objectives are:

- Communicate management information systems concepts orally and in writing.
- Engage in logical thinking and critical analysis.
- Utilize information from multiple sources with the assistance of current technologies.
- Develop philosophical perspectives and viewpoints concerning business through thoughtful reading, dialogue, and application.
- Develop the consciousness of one's role as a business professional in the context of the broader society.
- Encourage responsive citizenship by engaging and participating in society in a manner that exhibits awareness and concern for the issues affecting collective citizenry.

Program Description for the Catalog

The Management Information Systems degree program is designed to prepare students for careers in systems analysis, database administration, applications development, and decision making for both public and private sectors for the demands of 21st century business. Students will learn how to use computer and information technology to address business needs with a foundation in computer software, database, decision making and with a sound business background.

General Requirements for Degree

The candidates for the Bachelor of Science in Management Information Systems are required to successfully fulfill all admissions requirements for degree seeking students at Coppin State University. Students will complete 40 credit hours of general education requirements, 39 credit hours of school core, 18 credit hours of the management information systems core courses, 6 credit hours of management information systems elective courses, 6 credit hours of school electives, 7 free electives, 1 credit hour of freshman seminar, and 3 credit hours for the University System of Maryland requirement.

Total number of credits and their distribution

See APPENDIX A – Plan of Study

List of Courses by Title and Number

General Education Requirements (40 Credits)

English Composition (6.0)

ENGL 101 and ENGL 102

Arts & Humanities (15.0)

WLIT 207

WLIT 208 Honors or any 200-Level English

Or Literature Course

And PHIL 102 Or PHIL 103

And HIST 201, HIST 202

Or HIST 203, HIST 204

Or HIST 205, HIST 206

And IDIS 103 Or IDIS 102

Or (any Foreign Language)

SPAN 101, 102, 201, 202

FRENCH 101, 102, 103, 104

ART 105 Or MUSC 201

Or DANC 226 Or THEA 211

Social and Behavioral Sciences (6.0)

ANTH 207 Or ECON 201

Or ECON 103 Or POSC 301

Or PSYC 201 Or SOCI 201

Or SOSC 200

Mathematics (3.0)

MATH 110 Or MATH 103

Or MATH 125, Or MATH 131

Or MATH 203

Natural Sciences (1 from each of two disciplines BIOL, or CHEM, or PHSC) (7.0)

BIOL 101 Or BIOL 107

And CHEM 101 Or PHSC 101

Or PHSC 103

Interdisciplinary & Emerging Issues (3.0)

HEED 101 Or (any health course)

HEED 102, HEED 103, HEED 110,

HEED 201, HEED 203, HEED 205

Or SPCH 105 Or SPCH 202 Or

SPCH 204 Or GEOG 102

School Core (39 Credits)

MGMT 404 - Business Communication

MGMT 315 - Business Law

MGMT 390 - Operations Management

FINM 330 - Principles of Business Finance

MKTG 480 - International Business

MNSC 322- Business Statistics

ACCT 201 - Principles of Financial Accounting

ACCT 202 - Principles of Managerial Accounting

MGMT 328 - Principles of Management

MKTG 310 - Principles of Marketing

ECON 211 - Principles of Economics I

MNSC 407 - Seminar in Strategic Management

MISY 341 - Small Systems Software

MISY Major Core Courses (18 Credits)

MISY 348 System Analysis and Design

MISY 350 Database Management Principles

MNSC392 Project Management

MISY 339 Programming with Visual Basic

MISY 321 Human Computer Interface

MISY 400 Management Information Systems (Capstone)

Electives(Select any two courses, 6 credit hours)

MISY 415 Management of Information Storage Systems

MISY 422 Decision Support Systems

MISY 450 Contemporary Developments in Computers

MISY 220 Introduction to Computer and Information Security

MIS Course Descriptions

MISY 348 System Analysis and Design

A study of the fundamentals of structured systems analysis and design techniques. Students will learn to define user problem statements, isolate user requirements, model the flow of data through an organization and design systems to solve management problems.

MISY 350 Database Management Principles

An introduction to the advantages of a database approach to data management. The course covers database systems architecture and design, logical and physical design, relational database, data dependencies and normalization, query languages (including SQL), database security, data dictionaries, and distributed databases.

MNSC392 Project Management

A study of project management techniques including PERT analysis, CPM techniques, Scheduling and Queuing Models and Simulation techniques.

MISY 339 Programming with Visual Basic

A Windows-based programming language used for developing Windows applications. Using the graphical user interface (GUI) provided by Visual Basic, students will be able to develop event-driven applications and the codes to control these applications.

MISY 321 Human Computer Interface

This course provides a theoretical foundation of human-computer interaction and design principles and approaches.

MISY 400 Management Information Systems (Capstone)

An examination of the elements, relationships and procedures comprising goal-directed systems, identifying, evaluating, and justifying the concepts of management information systems according to the information sources required for effective decision-making.

MISY 415 Management of Information Storage Systems

This course provides a comprehensive overview of information storage technology and its management. Major topics storage technology, storage systems architecture, storage security and management, and business continuity. Hands-on skills will be provided through a simulated environment.

MISY 422 Decision Support Systems

This course provides a comprehensive discussion of the theoretical and practical aspects of decision support systems including computerized decision support, group support systems, knowledge management, intelligent systems, and system implementation and impacts.

MISY 450 Contemporary Developments in Computers

A survey of new developments in software offerings, stateof-the-art development in software, and hardware technology.

MISY 220 Introduction to Computer and Information Security

This course is a study of the critical characteristics of information systems, including existing threats, and attacks to computer and information systems. The techniques and methods to conduct risk management and to implement computer and information security are also introduced.

Expected Student Learning Outcomes

- 1. Express ideas and concepts related to management information systems in a professional manner and in a language that is appropriate for the audience.
- 2. Write formal reports with clear arguments, structure, and appropriate language.
- 3. Analyze various business problems or scenarios.
- 4. Apply management information systems principles and techniques.
- 5. Develop solutions for various business problems or scenarios through systematic reasoning.
- 6. Gather and evaluate information for systems analysis and design.
- Demonstrate proficiency in the use of appropriate technology-based tools to address business issues.
- 8. Demonstrate understanding of the roles of information systems in various organizations.
- Acquire knowledge of global and cultural perspectives in management information systems analysis and design.
- 10. Demonstrate their knowledge/skills using real life business/management problems.
- 11. Develop a comprehensive understanding of the management information systems profession.
- 12. Demonstrate knowledge of information systems ethics.
- 13. Evaluate the social impact of the corresponding ethical issues in the field of management information systems.

<u>Plans to Use Assessment Data to Enhance Teaching and Learning in the Program:</u>

Once course level assessment data are collected and analyzed, faculty, staff and administrators will collaborate together to evaluate the achievement of SLOs at the course level and program level and identify potential areas that need improvements. Course work, both traditional and non-traditional will be evaluated. Also, learning activities within a course will be examined. Assessment data will also be used to inform graduation and retention and the identification of needed student support services.

Assessment data collection and evaluation is a dynamic and continuous improvement cycle for the enhancement of the program.

Also planned for the remainder of the academic year, will be the alignment of assessment to strategic planning for the School. Data will be used of course to inform teaching and learning, but also to inform the faculty of needed mid-course changes. For example, we may discover that students are not meeting a certain level of master within a particular course. Upon that discovery, we will analyze other courses where there may be opportunities to meet the same learning outcome and offer the particular course in a revised format. The School may also decide to replace the course with another if it is not meeting the strategic demands of the program. As with all institutions nationally, the use and understanding of assessment is evolving and we are not going to limit the practices that may be resultant from good assessment practices.

The School has its own tutorial center and a resource center which will also be notified of assessment results from the courses. They will work in concert with faculty for advisement purposes and in identifying students for particular intervention services.

Demonstrable Quality of Program Faculty

Dr. Yangsoon Song earned his PhD in Business Administration from Pennsylvania State University, his MBA from Korea University and his BS from Seoul National University. His areas of research and teaching interests include telecommunication, negotiation, inventory management, forecasting, optimization, etc.

Dr. Lidan Ha with more than 7 years higher education teaching experience holds a Ph.D. in Information Systems from University of Maryland Baltimore County, Baltimore, MD. Dr. Ha worked in multiple industry positions from 1998 to 2001.

Dr. John Newman holds a Ph.D. and Master's Degree in management information systems from UMBC, an XMBA from Loyola College (Baltimore), and a JD from the University of Baltimore. Dr. Newman has taught at the undergraduate and graduate levels since 1990. He is currently Co-Chair of the Institutional Review Board Committee and a member of the Faculty Research and Development Committee.

Dr. Liangjun You holds a Ph.D. in Information Systems from University of Texas at Arlington, Texas, U.S.A. and Master of Science in Computer Science from St. Cloud State University, St. Cloud, MN. Dr. You has considerable background in computer and information security studies, both as an instructor and researcher. As instructor, Dr. You developed the Computer and Information Security course of study. He brings his skills as an interdisciplinarian in integrating the disciplines such as computer science, management and management information systems. As a researcher, Dr. You published a research papers on national and international conferences and European Journal of Operational Research, Journal of Informatics Education and Research, etc.

Student Audience to be Served by Program and Enrollment Estimates

By fall 2012, we anticipate about 80-100 students in the Program. We anticipate about 10% growth each year for the next 3 years.

Impact on Student's Technology Fluency

The CSU School of Business recognizes that the use of technology is instrumental in enabling learning, advancing research, facilitating business functions, and enhancing the quality of citizens' lives. We also recognize the importance of technology fluency in promoting success in employment and enhancing lifelong learning and communication capabilities. The School of Business graduates will possess information technology related skills that result from curricular focus, instructional strategies, and exposure to technology.

Students will be competent in technology fluency and information literacy. B.S. in MIS graduates will possess the ability to use information technology to identify and evaluate information sources, develop write and edit projects documents, computer programs, reports and papers, and meet other course requirements (i.e., online information research, analysis, and writing skills); present their work through a variety of online or technology assisted means; and bring appropriate technology to bear on the problems within their disciplines and have knowledge of technological tools relevant to their disciplines and to being an active member of society (i.e., problem solving).

Library Requirements

Parlett L. Moore Library, named for Coppin's second president, Parlett Longworth Moore, supports the instructional program and provides an environment conducive to general intellectual enrichment and continued learning. The library provides space for classrooms, computer classrooms, meetings, visual exhibits, special programs and receptions, and offices. The library has over 40 public workstations to allow access to the Internet and various other networked resources.

Parlett L. Moore Library is a member of the Library Information Management System (LIMS) of the University System of Maryland and Affiliated Institutions (USMAI), a collaborative effort that permits state higher education institutions to share resources. LIMS provides a USMAI union on-line public access catalog that contains more than 1,400,000 titles.

Facilities and Equipment

The University will physically house the program within its existing department of Management Information Systems. Also, the technology infrastructure is more than adequate to accommodate the program. Coppin State University has now received

worldwide recognition for its extraordinary strides in IT as one of 50 companies and one of only five universities worldwide to receive the "Education All-Star Award" from Network World magazine. The University has been ranked as one of the nation's top college campuses for wireless communications technology. The ranking was prompted by a survey conducted and sponsored by Intel Corporation. In the October 17 edition of U.S. News & World Report, Coppin is ranked no. 19 in a list of the top 50 college and universities throughout the nation with absolute wireless capability. The School of Business also provides the following support facilities for its majors: computer lab, advisement center, and a newly-created tutorial center.

TABLE 1: RESOURCES												
Resources Categories	(Year 3)	(Year 4)	(Year 5)									
1.Reallocated Funds ¹	\$25,000	\$40,000	\$40,000	\$0	\$0							
2. Tuition/Fee Revenue ²	\$256,800	\$356,700	\$463,800	\$563,700	\$699,300							
(c+g below)												
a. #F.T Students	40	55	70	85	105							
b. Annual Tuition/Fee	5,700	5,700	5,700	5,700	5,700							
Rate												
c. Annual Full Time	228,000	313,500	399,000	484,500	598,500							
Revenue (a x b)												
d. # Part Time Students	20	30	45	55	70							
e. Credit Hour Rate	160	160	160	160	160							
f. Annual Credit Hours	9.0	9.0	9.0	9.0	9.0							
g. Total Part Time	28,800	43,200	64,800	79,200	100,800							
Revenue (d x e x f)												
3. Grants, Contracts, &	0	0	0	0	0							
Other External												
Sources ³												
4. Other Sources	0	0	0	0	0							
TOTAL (Add 1 - 4)	\$281,800	\$396,700	\$503,800	\$563,700	\$699,300							

 $^{^{1}}$ ITEM 4 – OTHER SOURCES: Sources derive from the discontinuance of specialized tracks within the school and moving all resources to the major.

TABLE 2: EXPENDITURES												
Expenditure Categories	(Year 1)	(Year 2)	(Year 3)	(Year 4)	(Year 5)							
Total Faculty Expenses	\$91,000	\$91,000	\$182,000	\$182,000	\$273,000							
(b + c below)												
a. # FTE	1	1	2	2	3							
b. Total Salary	70,000	70,000	140,000	140,000	210,000							
c. Total Benefits	21,000	21,000	42,000	42,000	63,000							
2. Total Administrative	0	0	0	0	0							
Staff Expenses (b + c below)												
a. # FTE	0	0	0	0	0							
b. Total Salary	0	0	0	0	0							
c. Total Benefits	0	0	0	0	0							
3. Total Support Staff	\$16,200	\$16,200	\$37,800	\$37,800	\$37,800							
Expenses (b + c below)												
a. # FTE	.5	.5	1	1	1							
b. Total Salary	15,000	15,000	35,000	35,000	35,000							
c. Total Benefits	1,200	1,200	2,800	2,800	2,800							
4. Equipment	0	0	0	0	0							
5. Library	250	250	250	0	0							
6. New or Renovated Space	0	0	0	0	0							
7. Other Expenses	0	0	0	0	0							
TOTAL (Add 1 - 7)	\$107,450	\$107,450	\$220,050	\$219,800	\$310,800							

15

hrs. hrs. hrs. hrs. hrs. 12 hrs. hrs. hrs. hrs. hrs. 15 3 SEMESTER GEN ED TOTAL SEMESTER GEN ED TOTAL Small Systems Software Marketing for Managers English Composition II Tech & Human Affairs Intro to Spch Commun Financial Accounting I SEMESTER TOTAL Dynamics of Mgmt Tech Fluency Course Title Course Title CSU REQ History II SPRING SEMESTER SPRING SEMESTER MGMT 328 MKTG 310 MISY 150 **ENGL 102** PHSC 103 SPCH 105 ACCT 201 **ECON 211** MISY 341 Code HIST Code IDIS & Emerg Issues GER/MAJ Category Natural Sciences Soc & Behav Sci LEVEL I (FIRST-YEAR) Tech Fluency* **GER Category** English Comp Major Course Major Course Major Course Major Course Arts & Hum. LEVEL II (SOPHOMORE) hrs. hrs. hrs. hrs. hrs. hrs. 15 hrs. hrs. hrs. hrs. 91 10 hr. SEMESTER GEN ED TOTAL SEMESTER GEN ED TOTAL Intro to Bus & Ent Econ English Composition I Math for Management SEMESTER TOTAL Freshman Seminar Biological Science College Algebra World Literature Gen Psychology Intro to Logic Course Title Course Title CSU REQ History I Spanish I FALL SEMESTER FALL SEMESTER **MATH 131 ORIE** 101* MNSC 222 **ENGL** 101 **ECON 103** BIOL 101 PHIL 102 PSYC 201 WLIT 207 **SPAN 101** Code HIST Code GER/MAJ Category Soc. & Behav. Sci. Fresh. Orientation Natural Sciences GER Category English Comp Major Course Major Course Mathematics Arts & Hum. Arts & Hum. Arts & Hum. Arts & Hum.

APPENDIX A

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	IESTER	Course Title	Financial Mgmt	Oper & Prod Memt	Svs Analysis & Design	Data Base Memt Prin			SEMESTER TOTAL		IESTER	Course Title	Mgmt Infor Systems	Mgmt Sci II				SEMESTER TOTAL	TOTAL CREDITS		
	SPRING SEMESTER	Code	FINM 330	MNSC 390	MISY 348	MISY 350	MISY ELE				SPRING SEMESTER	Code	MISY 400	MNSC 420	ELEC	ELEC	ELEC				
NIOR)		MAJ/ELE Category	Major Course	Major Course	Major Course	Major Course	Major Course			(SENIOR)		MAJ/ELE Category	Major Course	Major Course	Gen Elective	Gen Elective	Gen Elective				
LEVEL III (JUNIOR)			hrs.	hrs.	hrs.	hrs.	hrs.		15	L IV (SE			hrs.	hrs.	hrs.	hrs.	hrs.	15			
LEVE			3	3	23	3	6	-		LEVEL IV			3	3	3	3	2			HRS.	
		Course Title	Financial Accounting II	Prin of Econ II	Legal Analysis	Managerial Statistics	Mgmt Science I		SEMESTER TOTAL			Course Title	Mgl Communications	Seminar in MNSC	Project Mgmt			SEMESTER TOTAL		10 TECH FLUENCY (3HRS.) = 4 HRS.	m of 120 credits to earn a degree.
	FALL SEMESTER	Code	ACCT 202	ECON 212 Prin of Econ II	MGMT 315 Legal Analysis	MNSC 322 Managerial Statistics	MNSC 355				FALL SEMESTER	Code	MGMT 404	MNSC 407	MNSC 392	MISY ELE	MISY ELE		REQUIREMENTS:	*ORIE 101 - FRESHMAN SEMINAR (1HR.) & MISY 150 TECH	Students must complete a minimum of 120 credits to earn a degree.
		MAJ/ELE Category	Major Course	Major Course	Major Course	Major Course	Major Course					MAJ/ELE Category	Major Course	Major Course	Major Course	Major Course	Major Course		CSU GRADUATION REQUIREMENTS:	*ORIE 101 - FRESHA	Additional Notes: