COLLEGE OF SOUTHERN MARYLAND
CSM
1958

Office of the President

January 2, 2018

Michael J. Kiphart, Ph.D.
Director of Academic Affairs
Maryland Higher Education Commission
6 N. Liberty Street
Baltimore, MD 21201

Dear Dr. Kiphart:

I am forwarding the following substantial change for Commission review:

Information Systems, AAS

The substantial modifications include a more current name change to Information Systems AAS, as documented in title change request letter submitted along with this proposal, as well as minor modifications to course selections and the addition of two new courses.

This submission has been thoroughly reviewed within the college and approved by the Board of Trustees. If further information is required, please contact Eileen Abel, Vice President of Academic Affairs (301-934-7846).

Sincerely,

Maureen Murphy, Ph.D.
President

LA PLATA • LEONARDTOWN • PRINCE FREDERICK • REGIONAL HUGHESVILLE

Office of the President
Center for Business and Industry, Room 204
8730 Mitchell Road, PO Box 910, La Plata MD 20646-0910
301-934-7625 • www.csmd.edu

Copy of Name Change Letter

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Office of the President

January 2, 2018

Michael J. Kiphart, Ph.D.
Director of Academic Affairs
Maryland Higher Education Commission
6 N. Liberty Street
Baltimore, MD 21201

Dear Dr. Kiphart:

CSM would like to request a title change:

Current Program Title	New Program Title
Computer Programming, AAS	Information Systems, AAS
CIP: 11.0201	CIP: 11.0201
HEGIS: 5103.01	HEGIS: 5103.01

At this time, CSM is also submitting a substantial program modification request for this program. If further information is required, please contact Eileen Abel, Vice President of Academic Affairs (301-934-7846).

Sincerely,

Maureen Murphy, Ph.D.
President

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MARYLAND HIGHER EDUCATIONCOMMMISSION
ACADEMIC PROGRAM PROPOSAL

PROPOSAL FOR:

____ **NEW INSTRUCTIONAL PROGRAM**

_X_ **SUBSTANTIAL EXPANSION/MAJOR MODIFICATION**

____ **COOPERATIVE DEGREE PROGRAM**

_X_ **WITHIN EXISTING RESOURCES or____REQUIRING NEW RESOURCES**

(For each proposed program, attach a separate cover page. For example, two cover pages would accompany a proposal for a degree program and a certificate program.)

College of Southern Maryland
Institution Submitting Proposal

Fall 2018
Projected Implementation Date

AAS
Award to be Offered

Information Systems
Title of Proposed Program

5103.01
HEGIS Code

11.0201
Suggested CIP Code

Business and Technology
Department of Proposed Program

Bernice Brezina
Name of Department Head

Ronda Jacobs
Contact Name

rjacobs@csmd.edu
Contact E-Mail Address

301-934-7553
Contact Phone Number

Signature and Date

President/Chief Executive Approval

12-14-17
Date

Date Endorsed/Approved by Governing Board

A. Centrality to mission and planning priorities, relationship to the program emphasis as outlined in the mission statements, and an institutional priority for program development;

The mission statement of the College of Southern Maryland (CSM) inspires the development of close partnerships among the college and its tri-county community stakeholders. The institutional commitment to "meet the diverse needs of students and the community" through "accessible, accredited, affordable, and quality learning opportunities for … career enhancement, and personal growth" aligns with the programmatic realities for the Information Systems AAS degree.

This proposal presents a modification to CSM's Computer Information Systems AAS degree. The changes include a more current name change to Information Systems AAS as well as minor modifications to course selections and the addition of two new courses. The degree will remain an AAS program rather than an AS program because this degree provides students with marketable skills upon completion to enter the work force while also providing some flexibility for students who intend to transfer to a four-year institution.

The Information Systems AAS degree is an interdisciplinary program combining the study of information technology and business management. This program provides students who are planning to work in either a business or technical environment with a strong foundation of knowledge and skills in key areas of information systems, management, and business. Students will be prepared for careers that require them to plan, coordinate, and directly interact with computer related activities within an organization. Students may pursue transfer opportunities that may lead to careers as a chief information officer (CIO) or chief technology officer (CTO). This program prepares students for these careers by emphasizing analytical, business, communication, decision making, leadership, and organizational skills.

The maximum number of credits accepted in transfer from other institutions to this program is 45.

The Information Systems AAS program is consistent with CSM's Strategic Goal #2, which is to promote student success by providing outstanding education, and related support services that help students achieve their goals. The new program will serve to increase graduate satisfaction with job preparation.

This Information Systems AAS program will "effectively serve a changing student population and emerging workforce." The course selections reflect the changing local workforce needs. The recommendations enclosed are reflections of these elements and are consistent with the College's Vision, "To transform lives through lifelong learning and service."

B. Critical and compelling regional or Statewide need as identified in the State Plan;

The availability of an in-demand Information Systems career path in an ever-evolving high technology industry, will attract both traditional and returning adult students, those entering a new field of opportunity as well as workers changing or upgrading skills. These very changes are evident in CSM's own enrollment records. An examination of the demographics of our current student population reflects these realities and supports the needs identified in the current Maryland State Plan for Post Secondary Education.

The degree in Information Systems AAS at CSM is consistent with the elements of the 2013-2017 Maryland State Plan for Postsecondary Education. Much of our focus in curriculum development addressed the advisories cited in this document. All the goals were utilized as required criteria but considerable attention was given to the Governor's Priorities and Goal 5: Economic Growth and Vitality. "Maryland will stimulate

economic growth, innovation, and vitality by supporting a knowledge-based economy, especially through increasing education and training and promoting the advancement and commercialization of research." The new program design at CSM reflects one of the priorities as cited in the State Plan. The updated Information Systems program will strengthen economic development and help to support a skilled workforce for the Southern Maryland region.

Citations in the State Plan also address the need for post secondary institutions to strive for academic excellence and effectiveness. In Goal 1: Quality and Effectiveness, "In order to maintain and improve quality and effectiveness, institutions and their leaders must have the flexibility and resilience to address the changing needs of the State and its citizens." The Information Systems program will provide the opportunity for students to complete this hands-on program in Southern Maryland close to their home and obtain the fundamental knowledge, skills, and practice to be prepared for entry-level employment. The very nature of this charge is to develop student-centered learning bolstered by the partnerships with the various media employers in our region. This format increases experiential learning through capstone, cooperative education, and other hands-on job related activities assuring workplace readiness.

In addition to this program modification, a new certificate in Information Systems is being proposed. This certificate will provide students with a pathway to earn a certificate towards their completion of the Information Systems degree. CSM's Information Systems program (certificate and degree) will offer courses that, taken together, enable our Information Systems students to earn credits and then matriculate to other potential programs. Formative and summative evaluations are an essential value of the educational process at CSM, and are a viable part of the new CSM program. Students are held to standards that are reflective of academic and professional systems, while the structure and operation of the program provides the environment to support the achievement of these standards.

Local employers have expressed interest in an Information Systems program and currently provide substantive experiential learning through capstone and cooperative education opportunities through the current Computer Information Systems Program. These are extremely important as they provide students enrolled at CSM in the Information Systems program both vital experience and opportunities for networking, and will increase chances of getting a job significantly.

To expand our geographic reach, stimulate enrollment and provide increased access to this new curricular option, the Information Systems program intends to incorporate alternative means of course --delivery. The program intends to provide traditional face-to-face courses complimented by offerings that are hybrid or fully online by form. The College of Southern Maryland has demonstrated success in delivering instruction by alternative methods, increasing flexibility and effective use of new technologies. The Division of Distance Learning and Faculty Development (DLF) supports the faculty in developing high quality, accessible and effective teaching and learning environments. To facilitate these goals, the DLF staff provides service to faculty including planning, consulting, training, and support. The DLF staff makes available the resources necessary to incorporate instructional technologies into their traditional or distance learning courses. As such, the DLF staff will contribute significantly to the delivery of all new courses in the Information Systems programs by providing the faculty with the necessary support structures to enhance student success in their delivery, particularly those identified for distance learning, be the methodology fully on line or hybrid.

In summary, the new Information Systems program at the College of Southern Maryland as proposed is consistent with and reflective of the current Maryland State Plan for Postsecondary Education.

C. Quantifiable and reliable evidence and documentation of market supply and demand in the region and service area;

The tri-county Southern Maryland region of Calvert, Charles, and St. Mary's counties are expecting a positive growth in computer and information systems jobs. Much of this is driven by the college's close physical proximity to the Patuxent Navy Base in St. Mary's county which employs over 17,000 military, civilian, and contractors, with many of them in technical positions. Below is a representation of expected growth per the Economic Modeling Specialists (EMSI, 2017). With the increased reliance of private industry and government reliance on computer systems, this growth is expected to continue to trend up in the foreseeable future.

Expected Computer and Information Systems Job Growth

County Name	2016 Jobs	2026 Jobs	2016 - 2026 Change	2016 - 2026 % Change	Median Hourly Earnings
St. Mary's County, MD	241	273	32	13%	$66.16
Charles County, MD	77	82	5	6%	$72.00
Calvert County, MD	41	49	8	20%	$70.41
District of Columbia (DC)	4005	4384	379	9%	$73.90
	4364	4788	424	10%	

Source: EMSI, Economic Modeling Specialists, 2017

D. Reasonableness of program duplication, if any;

The Information Systems AAS degree program prepares students who are interested in business and information technology to begin developing the skills and knowledge required for a variety of entry-level settings. The degree prepares students with a foundation and basis of knowledge and skills that students may develop further if they choose to continue their studies at a four-year institution. Others may choose to enter the workforce in entry-level, trainee, or internship positions after completing the two-year degree.

Students will be taking courses in this program through several course delivery formats. Students have the option of completing this degree entirely online. For many courses though, students may choose between face-to-face, web-hybrid, or online course sections.

The English requirement in this program is important to note. In order to successfully complete the coursework, it is essential that students obtain a strong background in reading and writing for their area of study.

The programs in the table below are all similar in providing students with the skills and knowledge to gain employment in entry-level positions in various fields of computer and information systems. CSM's program is designed with local workforce needs in mind, while still offering students the education required to pursue job opportunities in other fields of business, technology, and entry-level management.

INFORMATION SYSTEMS DEGREES AT MARYLAND COMMUNITY COLLEGES		
Institution	**Program Name**	**Degree Offered**
Anne Arundel Community College	Computer Information Systems	Associates Degree
Baltimore City Community College	Computer Information Systems	Associates Degree
Carroll Community College	Computer Information Systems - Micro	Associates Degree
Cecil College	Computer Information Systems	Associates Degree
Chesapeake College	Computer Information Systems	Associates Degree
Harford Community College	Computer Information Systems	Associates Degree
Prince George's Community College	Computer Information Systems	Associates Degree

Source: Maryland Higher Education Commission, Finding a Major

E. Relevance to the implementation or maintenance of high-demand programs at HBIs;

There is no relevance to the implementation or maintenance of high-demand programs at HBIs. The only other college in the tri-county area is St. Mary's College.

F. Relevance to the support of the uniqueness and institutional identities and missions of HBIs;

There is no impact to the uniqueness, identities and missions of HBIs. The only other college in the tri-county area is St. Mary's College.

G. Adequacy of curriculum design and delivery to related learning outcomes consistent with Regulation .10 of this chapter;

The program description and requirements are as follows:

Number of Credits: 60

The Information Systems AAS is an interdisciplinary program combining the study of information technology and business management. This program provides students who are planning to work in either a business or technical environment with a strong foundation of knowledge and skills in key areas of information systems, management, and business. Students will be prepared for careers that require them to plan, coordinate, and directly interact with computer related activities within an organization. Students may pursue transfer opportunities that may lead to careers as a chief information officer (CIO) or chief technology officer (CTO). This program prepares students for these careers by emphasizing analytical, business, communication, decision making, leadership, and organizational skills.

The maximum number of credits accepted in transfer from other institutions to this program is 45.

Career opportunities: information technology (IT) managers, IT project managers. IT directors, and/or IT security managers.

Educational objectives and intended student learning outcomes:

Through the curriculum, professional organizations and engagement activities, graduates of the College of Southern Maryland's Information Systems program will achieve the following educational objectives:

a. Introduce graduates to a common body of knowledge in a variety of business and technology information system industries.
b. Provide graduates with the capability to develop the skills and knowledge required of employees in a variety of business, information technology, and management settings.
c. Provide graduates the resources and skills allowing them to find entry-level employment or enter trainee programs in information systems and related professions.
d. Prepare graduates for further study in information systems.

Through the curriculum, professional organizations and engagement activities, graduates of the College of Southern Maryland's Information Systems AAS program will achieve the following intended student learning outcomes:

Students will…

1. Demonstrate understanding of an organization's computer, software, and security needs and make recommendations for system design, maintenance, and upgrades.
2. Demonstrate understanding of social, professional, security and ethical issues related to computing.
3. Apply fundamental information technology principles to business management.

PROGRAM TITLE: INFORMATION SYSTEMS AAS	
General education	
Course number and name	**Credits**
BIOLOGICAL/PHYSICAL SCIENCES ELECTIVE	3
COM-1010 BASIC PRINCIPLES OF SPEECH COMMUNICATION	3
ENG-1010 COMPOSITION AND RHETORIC	3
ECN-1015 INTRODUCTION TO BUSINESS IN A MARKET ECONOMY	3
ECN-2020 PRINCIPLES OF MICROECONOMICS	3
ECN-2025 PRINCIPLES OF MACROECONOMICS	3
MTH-2300 INTRODUCTION TO STATISTICS	3
	Credit Total: 21
Major requirements	
Course number and name	**Credits**
BAD-2070 BUSINESS LAW I	3

ACC-2010 PRINCIPLES OF ACCOUNTING I	3
ACC-2020 PRINCIPLES OF ACCOUNTING II	3
ENG-1020 COMPOSITION AND LITERATURE OR ENG-2050 BUSINESS AND TECHNICAL WRITING	3
ITS-1040 SYSTEMS ANALYSIS AND DESIGN	3
ITS-1050 A+ COMPUTING ESSENTIALS (new course)	3
ITS-1110 PROGRAM DESIGN AND DEVELOPMENT	3
ITS-1120 INTRODUCTION TO DATABASE	3
ITS-2090 COMPUTER SECURITY	3
ITS-2120 LOCAL AREA NETWORK ADMINISTRATION	3
ITS-2300 INTRODUCTION TO PROJECT MANAGEMENT	3
ITS-2480 DATA ANALYTICS (new course)	3
ITS-2900 CAPSTONE EXPERIENCE OR ITS-2910 COOPERATIVE EDUCATION I: COMPUTER	3
	Credit Total: 39
Electives where they exist	
Course name, and number	**Credits:** Credit Total: N/A
Program credit total= 60	

Recommended Course Sequence:

First Semester:
ENG-1010 COMPOSITION AND RHETORIC (3)
ECN-1015 INTRODUCTION TO BUSINESS IN A MARKET ECONOMY (3)
ITS-1050 A+ COMPUTING ESSENTIALS (new course) (3)
ITS-1110 PROGRAM DESIGN AND DEVELOPMENT (3)
MTH-2300 INTRODUCTION TO STATISTICS (3)

Second Semester:
BAD-2070 BUSINESS LAW I (3)
BIOLOGICAL/PHYSICAL SCIENCES ELECTIVE (3)

ITS-1040 SYSTEMS ANALYSIS AND DESIGN (3)
ITS-1120 INTRODUCTION TO DATABASE (3)
ITS-2120 LOCAL AREA NETWORK ADMINISTRATION (3)

Third Semester:
ACC-2010 PRINCIPLES OF ACCOUNTING I (3)
ECN-2020 PRINCIPLES OF MICROECONOMICS (3)
ENG-1020 COMPOSITION AND LITERATURE (3) OR
ENG-2050 BUSINESS AND TECHNICAL WRITING (3)
ITS-2300 INTRODUCTION TO PROJECT MANAGEMENT (3)
ITS-2480 DATA ANALYTICS (new course) (3)

Fourth Semester:
ACC-2020 PRINCIPLES OF ACCOUNTING II (3)
COM-1010 BASIC PRINCIPLES OF SPEECH COMMUNICATION (3)
ECN-2025 PRINCIPLES OF MACROECONOMICS (3)
ITS-2090 COMPUTER SECURITY (3)
ITS-2900 CAPSTONE EXPERIENCE (3) OR
ITS-2910 COOPERATIVE EDUCATION I: COMPUTER (3)

Program Description for the Catalog:

The Information Systems AAS is an interdisciplinary program combining the study of information technology and business management. This program provides students who are planning to work in either a business or technical environment with a strong foundation of knowledge and skills in key areas of information systems, management, and business. Students will be prepared for careers that require them to plan, coordinate, and directly interact with computer related activities within an organization. Students may pursue transfer opportunities that may lead to careers as a chief information officer (CIO) or chief technology officer (CTO). This program prepares students for these careers by emphasizing analytical, business, communication, decision making, leadership, and organizational skills.

The maximum number of credits accepted in transfer from other institutions to this program is 45.

Career opportunities: information technology (IT) managers, IT project managers. IT directors, and/or IT security managers.

Students will…

1. Demonstrate understanding of an organization's computer, software, and security needs and make recommendations for system design, maintenance, and upgrades.
2. Demonstrate understanding of social, professional, security and ethical issues related to computing.
3. Apply fundamental information technology principles to business management.

Course Descriptions for Information Systems AAS:

ENG-1010 COMPOSITION AND RHETORIC (3)
Prerequisite: ENG 0900 or higher; and RDG 0800 or FYS 1010T or higher; or placement

Students in this course complete their first semester college-level composition course. Students focus on planning, organizing, and developing a variety of argumentative compositions. Students practice the conventions of written Standard American English, gain information literacy skills, and learn research and documentation techniques including conducting online and print research and documenting sources. By the end of the semester, students demonstrate their ability to write a unified and coherent argument-based essay of

about one thousand words that incorporates research and is nearly free of grammatical, mechanical, and structural errors.

ECN-1015 INTRODUCTION TO BUSINESS IN A MARKET ECONOMY (3)
Prerequisite: ENG 0900 or higher; and RDG 0800 or FYS 1010T or higher

Students examine business in the United States as a social institution. Topics include economic systems, legal factors, government regulations, forms of ownership, management, employee relations, finance, accounting, and marketing.

ITS-1050 A+ COMPUTING ESSENTIALS (3) (NEW COURSE)
Prerequisite: RDG 0800 or FYS 1010T or higher

Students gain knowledge and practical experience with PC hardware and peripherals, mobile device hardware, networking and troubleshooting, and hardware and network connectivity issues. Students also gain practical experience installing and configuring popular operating systems. Students will be introduced to topics in security, the fundamentals of cloud computing, and operational procedures. This course helps students to prepare for the CompTIA A+ Certification.

ITS-1110 PROGRAM DESIGN AND DEVELOPMENT (3)
Prerequisite: RDG 0800 or FYS 1010T or higher

Students learn to solve business-oriented problems with emphasis on structured and object oriented programming techniques. Design tools are used to develop pseudo-code, flowcharting and 3D interactive environments. Students are introduced to several software packages that may be used to develop pseudo-code, flowcharts and interactive 3D environments.

MTH-2300 INTRODUCTION TO STATISTICS (3)
Prerequisite: MTH 0900T with permission of division chair or MTH 0940 or MTH 0970 or higher

In this introduction to descriptive and inferential statistics, students learn about presentation of data, measures of central tendency and dispersion, the binomial and normal probability distributions, sampling techniques, correlation and regression, and hypothesis testing (z-test, t-test, chi-squared). Examples are selected from education, business, and the social and natural sciences.

BAD-2070 BUSINESS LAW I (3)
Prerequisite: ENG 0900 or higher; and RDG 0800 or FYS 1010T or higher

Students will examine ways that laws, regulations, and policies affect business. Students will analyze legal issues and develop arguments from different points of view. Topics include business ethics, Constitutional law affecting business, contract law, business organizations (including sole proprietorships, partnerships, corporations, and limited liability companies), tort law affecting business, product liability, crimes affecting business, and criminal procedure.

ITS-1040 SYSTEMS ANALYSIS AND DESIGN (3)
Prerequisite: ITS 1015

Students learn about the tools and skills a systems analyst uses to analyze, design, install and maintain a computer system using the system development life cycle. A case study with group work highlights major topics discussed. For students who plan to use personal computers, this course may have specific computing requirements.

ITS-1120 INTRODUCTION TO DATABASE (3)
Prerequisite: ITS 1015 and ITS 1020

Students learn how to use a relational Database Management Systems (DBMS). Topics include building, modifying, implementing, management and administration of a relational DBMS using Microsoft Access. Students will learn how to create tables, queries, forms, reports, and relationships according to project requirements. This course uses lecture and a hands-on format. For students who plan to use personal computers, this course may have specific computing requirements.

ITS-2120 LOCAL AREA NETWORK ADMINISTRATION (3)
Prerequisite: ITS 1015
Corequisite: ITS 1020

Students learn networking fundamentals as applied to the Local Area Network (LAN) environment. Students are introduced to networking hardware, architecture, media, and software. Students gain an understanding of network functions in an integrated information system and the supervision of network operation. Various networking protocols and network security issues are discussed. For students who plan to use personal computers, this course may have specific computing requirements.

ACC-2010 PRINCIPLES OF ACCOUNTING I (3)
Prerequisite: MTH 0900T or MTH 0940 or higher; and RDG 0800 or FYS 1010T or higher

Basic Accounting principles are applied to the single proprietorship with emphasis on the logic of the accounting cycle. Topics include journals, ledgers, receivables, payables, inventory valuation, deferrals, accruals, internal control, plant assets, and the preparation of financial statements.

ECN-2020 PRINCIPLES OF MICROECONOMICS (3)
Prerequisite: ECN 21015 and MTH 0900T or MTH 0940 or higher

In this introduction to microeconomics, students analyze producer decisions through examining consumer demand; producer costs; competitive and noncompetitive market models; and the producer's employment of labor and other resources. Also explored are areas affecting the producer's environment such as antitrust regulation, labor market issues, and international trade.

ENG-1020 COMPOSITION & LITERATURE (3)
Prerequisite: ENG 1010

Students in this course complete their second semester college-level composition course. Using critical literary analysis, students build on the planning, organizing, and critical analysis skills learned in ENG-1010, Composition and Rhetoric. Students use literature, such as short fiction, poetry, and drama as the basis of their critical analysis and to extend, deepen, and illuminate students' own experiences and connections with the larger world and contemporary issues. Students further master the conventions of written Standard American English, information literacy skills, and research and documentation techniques including conducting online and print research and documenting sources. By the end of the semester, students demonstrate their ability to write a unified, coherent argument-based essay of about one thousand words that is nearly free of grammatical, mechanical, and structural errors.

ENG-2050 BUSINESS AND TECHNICAL WRITING (3)
Prerequisite: ENG 1010

Students develop writing skills through composing a variety of clear, effective memos, letters, and reports. Subject matter for the papers may come from the student's occupation or interests, whether scientific, technical, or non-technical.

ITS-2300 INTRODUCTION TO PROJECT MANAGEMENT (3)
Prerequisite: ENG 1010, ITS 1015, AND ITS 1040

This course has been recommended by business leaders all over Southern Maryland. Students will be introduced to the concept of project management and will investigate key elements of the project management framework. Specific knowledge in several of the project management knowledge areas such as project scope, project time, project cost and project quality management will be covered. Students will sample several popular project management software packages in order to compare their features.

ITS-2480 DATA ANALYTICS (3) (NEW COURSE)
Prerequisite: ITS 1110, ITS 1120, AND MTH 2300

The emergence of new data sources is transforming the role of the data analyst from one who simply reports information to one who is charged with making sense of the available data and distilling it for a given audience. This course emphasizes fundamental coursework on the standards and practices for collecting, organizing, managing, exploring, and using data. Topics include preparation, analysis, and visualization of data and creating analysis tools for larger data sets..

ACC-2020 PRINCIPLES OF ACCOUNTING II (3)
Prerequisite: ACC 2010

Basic accounting principles are applied to the partnership and corporate entities with emphasis on the structure of corporate financial statements. Topics include stockholders' equity, long-term liabilities, short-term investments, cash flows, financial statement analysis, and basic managerial accounting.

COM-1010 BASIC PRINCIPLES OF SPEECH COMMUNICATION (3)
Prerequisite: ENG 0900 and RDG 0800 or FYS 1010T

Basic accounting principles are applied to the partnership and corporate entities with emphasis on the structure of corporate financial statements. Topics include stockholders' equity, long-term liabilities, short-term investments, cash flows, financial statement analysis, and basic managerial accounting.

ECN-2025 PRINCIPLES OF MACROECONOMICS (3)
Prerequisite: ECN 2020

In this introduction to modern macroeconomics, students examine the scarcity of resources; aggregate supply and demand; the private and public sectors; gross domestic product; unemployment and inflation; and fiscal and monetary policies for correcting the economy. Also covered are the successes and problems of some recent economic policies as well as the impact of international trade and a global economy.

ITS-2090 COMPUTER SECURITY (3)
Prerequisite: ITS 1015

ITS-2090 covers the fundamentals of operational security, network security, managing a public key infrastructure (PKI), authentication, access control, external attack, and cryptography. Students learn about the security procedures to protect data in computer environments, the different network attack scenarios, the many tools and procedures used by organizations to protect their resources, and the ethical issues raised by computer security in the business world. This course helps prepare students for the CompTIA Security+ exam.

ITS-2900 CAPSTONE EXPERIENCE (3)
Prerequisite: Completion of 45 credits towards the Information Services Technology or Information Systems Security or Computer Information Systems degree, in which 21 credits must be ITS courses

This capstone course provides hands-on and problem solving experience in many areas of information technology. Students consolidate knowledge and skills gained in coursework in this capstone experience. This course focuses on working with actual business problems as represented in a major case study. Students will

be required to complete an individual project, system, program, or research paper which will enhance their skills and marketability.

ITS-2910 COOPERATIVE EDUCATION I: COMPUTER (3)
Prerequisite: Completion of 15 credits towards the Information Services Technology certificate or degree of which 12 credits must be ITS courses

Cooperative Education allows students to combine academic study with on-the-job experience by working on training assignments coordinated by departmental faculty. The major objective of Cooperative Education is the application of classroom theory in a work environment. This course is intended for students who are pursuing a degree in information Technology.

H. Adequacy of any articulation;

The existing articulation agreements with the Information Systems AAS program will be updated.

I. Adequacy of faculty resources consistent with Regulation .11 of this chapter;

The program will be supported by faculty in Business and Information Technology. The faculty credentials for the lead program faculty are below:

Faculty member name	Appointment Type	Terminal degree	Academic Title/Rank	Courses taught
Abdul-Karim, Barbara	Full-time	D.A.	Associate Professor	BAD-2700, ECN-1015
Bailey, Stacie	Full-time	M.S.	Instructor	ACC-2010, ACC-2020, ECN-1015
Green, Michael	Full-time	M.A.	Professor	ECN-2020, ECN-2025
Harrison, Bonnie	Full-time	M.A.S., C.P.A.	Professor	ACC-2010, ACC-2020
Jacobs, Ronda	Full-time	M.A.	Assistant Professor	ITS-2900
McNicholas, James	Full-time	M.S., M.B.A.	Assistant Professor	ITS-2090, ITS-1110
Powell, Daphne	Full-time	M.S.	Professor	ITS-2910
Stout, Anthony	Full-time	B.S.	Instructor	ITS-2300

White, Richard	Full-time	M.S., M.B.A.	Assistant Professor	ITS-1050, ITS-1110, ITS-2480
Wilson, John	Full-time	M.A.	Professor	ITS-1040, ITS-1120
Young, Richard	Part-time	M.S.	Adjunct Instructor	ITS-2120

J. Adequacy of library resources consistent with regulation .12 of this chapter

Students may borrow circulating materials from any of the three CSM library branches. Through the interlibrary loan program (ILL), students can order almost any book, periodical article, or ERIC document needed, generally available within one week of the request. Library resources also include audiovisual collections use in the library and classrooms only. Additionally, substantial material is available through online databases, including ProQuest and EBSCO.

The President assures that appropriate library resources are available to support the needs of this program.

K. Adequacy of physical facilities, infrastructure, and instructional equipment consistent with Regulation .13 of this chapter;

CSM is a leader among Maryland community colleges in offering courses which meet the busy schedules of our students, traditional weekday face to face courses, weekend and evening classes, Web-hybrid courses which offer a mix of online and traditional classroom face-to-face instruction and a popular online learning community. The college makes available state of the art facilities on three campuses to accomplish its mission in support of our community's academic, professional, and self-enrichment pursuits.

The Information Systems AAS degree program will be conducted primarily on the La Plata campus, in the ST building, home to the Business and Technology Division. Many classes will also be offered at the Leonardtown and Prince Frederick campuses. Many business classes are offered in the BU building. The ST and BU buildings house state of the art classrooms, conference rooms, faculty and administrative offices, computer labs, Student Computer Support department (help desk) and science laboratories.

"The President assures that appropriate physical facilities, infrastructure, and instructional equipment are available to support the needs of this program."

L. Adequacy of financial resources with documentation consistent with Regulation .14 of this chapter;

TABLE 1: RESOURCES					
Resource Categories	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
1. Reallocated Funds	0	0	0	0	0
2. Tuition/Fee Revenue (c + g below)	$163,080	$163,080	$163,080	$163,080	$163,080
a. Number of F/T Students	30	30	30	30	30
b. Annual Tuition/Fee Rate ($151 x 21 credits)*	$3,171	$3,171	$3,171	$3,171	$3,171
c. Total F/T Revenue (a x b)	$95,130	$95,130	$95,130	$95,130	$95,130
d. Number of P/T Students	30	30	30	30	30
e. Credit Hour Rate	$151	$151	$151	$151	$151
f. Annual Credit Hours Rate	15	15	15	15	15
g. Total P/T Revenue (d x e x f)	$67,950	$67,950	$67,950	$67,950	$67,950
3. Grants, Contracts & Other External Sources	0	0	0	0	0
4. Other Sources	0	0	0	0	0
TOTAL (Add 1 – 4)	$163,080	$163,080	$163,080	$163,080	$163,080
* The credit hour rate ($151) is based upon CSM's current tuition rate of $123 plus 23% combined fee.					

TABLE 2: EXPENDITURES:					
Expenditure Categories	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
1. Faculty (b + c below)	$ 5000	$ 5000	$ 5000	$ 5000	$ 5000
a. # FTE	2 courses @$2500 per course	2 courses @$2500 per course	2 courses @$2500 per course	2 courses @$2500 per course	2 courses @$2500 per course
b. Total Salary	$ 5000	$ 5000	$ 5000	$ 5000	$ 5000
c. Total Benefits	0	0	0	0	0
2. Admin. Staff (b + c below)	0	0	0	0	0
a. # FTE	0	0	0	0	0
b. Total Salary	0	0	0	0	0
c. Total Benefits	0	0	0	0	0
3. Support Staff (b + c below)	0	0	0	0	0
a. # FTE	0	0	0	0	0
b. Total Salary	0	0	0	0	0
c. Total Benefits	0	0	0	0	0
4. Equipment	0	0	0	0	0
5. Library	0	0	0	0	0
6. New or Renovated Space	0	0	0	0	0
7. Other Expenses	0	0	0	0	0
TOTAL (Add 1 – 7)	$ 5000	$ 5000	$ 5000	$ 5000	$ 5000

No new faculty required to meet the Information Systems AAS program needs. All but two courses currently exist. The two new ITS courses are replacing two retired ITS courses. Because the number of courses in the Business and Technology Division remain unchanged, course assignments can be met by reassigning current faculty as needed. The expenses listed are additional funds that ***may*** be needed to hire adjunct faculty or allowing current faculty to teach on an overload basis.

M. Adequacy of provisions for evaluation of program consistent with Regulation .15 of this chapter;

Discuss procedures for evaluating courses, faculty and student learning outcomes.

SLOAP's focus is the primary mission of the college: to provide quality opportunities for intellectual development that result in student learning. The SLOAP outlines the process of collecting information to determine whether CSM's academic offerings are having the appropriate educational impact on students. Student Learning Outcomes Assessment (SLOA) is defined as the systematic collection of information about academic offerings and analysis thereof, for the purpose of improving student learning.

Program Assessment at CSM is a cyclical process that includes:

1. Program Reviews conducted every five-six years, or more often as needed.
2. Academic certificate programs are included within the review of degree programs.
3. Program Monitoring conducted every other year (except in the year of a Program Review).
4. Program Assessments of Student Learning conducted on a cycle established by faculty.

In addition, CSM conducts course evaluations every semester or, more often when deemed necessary.

N. Consistency with the Commission's minority student achievement goals; and

One of CSM's Values/Guiding Principles is Diversity. The Institutional Equity and Diversity Office works to "create an environment that instills an appreciation and understanding of the diverse qualities each of us brings to this campus; where our students, staff, and faculty mirror the community we serve and are free from discrimination and harassment."

Additionally, CSM defines civility as "the demonstration of respect for others through basic courtesy and the practice of behaviors that contribute toward a positive environment for learning and working."

As is true of CSM, the Information Systems AAS Program is open to all students with no restrictions reference to age, gender, or ethnic background. As such, any student meeting the eligibility requirements of the college admissions process is entitled to enroll in this discipline of study. Furthermore, CSM, the Business & Technology Division, and representatives of the Information Systems AAS Program all participate in events, programs, orientations, and information sessions sponsored internally or by external advocates in order to reach all students seeking information on the college's programs and the professional opportunities that result from that education and training.

CSM's marketing department is developing a comprehensive marketing plan for this new program. These resources include the designing and printing of brochures, assistance with marketing campaigns (web and traditional news media), and development of other recruitment materials. CSM is committed to ensuring new programs are marketed to diverse populations, as demonstrated by the organizational values, which include

valuing diversity. Marketing plans will include activities specifically designed to market the program to the diverse population of the tri-county region.

Diversity and multiculturalism are vitally important issues for future leaders. As such, the representatives of this new program at CSM intend to make contact with multiple professional associations, national, regional and local employers, secondary and postsecondary institutions to create partnerships that will lead to the diversity of our student population and graduates of our programs.

O. Relationship to low productivity programs identified by the Commission.

The proposed degree is not directly related to an identified low productivity program identified by the Commission.

P. If proposing a distance education program, please provide evidence of the Principles of Good Practice (as outlined in COMAR 13B.02.03.22C)

This program is not designed as a distance education program.