***Note required information:*** *Program or certificate changes require a change to the catalog page. All change of program or certificate proposals must include the new catalog page, with all proposed changes, at the end of this document. All changes that affect the courses, words, numbers, symbols, program description, admissions requirements, and graduation requirements as presented in the 2013-2014 catalog must be documented. Note before completing this proposal that all new courses and current prerequisite, corequisite, core, or electivecourses changes must have already been reviewed (or submitted for the same meeting) by the Curriculum Committee and approved by the Provost and Vice President of Academic Affairs. The Track Changes feature in Word must be used to illustrate all changes to the catalog page.*

|  |  |
| --- | --- |
| **School or Division** | School of Business and Technology |
| **Program or Certificate** | AS, Computer Programming and Analysis |
| **Proposed by (faculty only)** | Andrew Blitz, Jennifer Cohen, Vincent Butler, Deborah Johnson |
| **Presenter (faculty only)** | Andrew Blitz |
| Note that the presenter (faculty) listed above must be present at the Curriculum Committee meeting or the proposal will be returned to the School or Division and be resubmitted for a later date. | |
| **Submission date** | 1/8/2015 |

**Section I, Proposed Changes**

|  |  |
| --- | --- |
| **Change of School, Division, or Department** | N/A |
| **Change to program or certificate name** | N/A |
| **List below, any changes to the program or certificate prerequisites. Include course titles and credits if applicable.** | |
| N/A | |
| **List below, any changes to the General Education requirements. Include course titles and credits if applicable.** | |
| N/A | |
| **List below, any changes to the program or certificate Core requirements. Include course titles and credits if applicable.** | |
| Deleted:  CGS 1000, Computer Literacy  CGS 1100, Computer Applications for Business  CGS 2260, Computer Hardware and Software Maintenance  Added:  CGS 2108, Computer Applications With Flowcharting  CTS 1131, A+ Hardware  CTS 1133, A+ Software  SLS 1515 as an “OR” statement with SLS 1331 | |
| **List below, any changes to the program or certificate Elective requirements. Include course titles and credits if applicable.** | |
| Added CTS to COP as an approved elective. | |
| **List below, any other changes to the program or certificate requirements.** | |
| N/A | |
| **Change to program length (credits or clock hours to complete)** | From: 63  To: 60  Note: Every indication is that FLDOE will be reducing the AS Computer Programming and Analysis degree from 63 to 60 credit hours, but the reduced-hour framework is still in draft form as of the date of this submission. In the event that the degree remains at 63 credit hours for another year, the faculty request that this curriculum action be accepted as is with the addition of 3 open elective credit hours. |

**Section II, Justification for proposal**

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| **Provide justification (below) for each change on this proposed curriculum action** |
| The proposed changes allow for improved student learning outcomes and the opportunity for students to achieve higher levels of industry certification. The faculty believe that the CGS 1000 requirement of computer science students is redundant and suggest using those credits to split the CGS 2260 (A+ certification) course into two separate classes, CTS 1131 and CTS 1133 as the A+ certification is earned when the student passes two separate tests – one on hardware and one of software. Additionally, the faculty favor the creation of a computer science dedicated computer applications (MSOffice) course that includes elements such as flowcharting that are applicable to the discipline. Lastly, SLS 1515 has been improved in the area of employability skills and the content is now sufficient to meet the employability skills outcomes required in the framework. Therefore, the faculty support allowing students to choose either SLS 1331 or SLS 1515 as part of the core requirement.  In addition, FLDOE has published a draft framework reducing the degree from 63 credit hours to 60 and expects to have the framework finalized in March for a fall adoption. This proposal ensures compliance with the proposed framework both in outcomes and in overall program length. |

**Section III, Important Dates and Endorsements Required**

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| --- |
| **List all faculty endorsements below. (Note that proposals will be returned to the School or Division if faculty endorsements are not provided).** |
| Andrew Blitz, Jennifer Cohen, Vincent Butler, Deborah Johnson |

**nOTE:**Changes for the Fall 2015term must be submitted to the Dropbox by the January 3, 2015 deadline and approved no later than the February 28, 2015 Curriculum Committee meeting. Changes during mid-school year are NOT permitted. Extreme circumstances will require approval from the appropriate Dean or Assistant Vice President as well as the Provost and Vice President of Academic Affairs to begin in either the Spring 2015 or Summer 2015 term.

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| --- | --- |
| **Term in which approved action will take place** | Fall 2015 |

|  |  |  |
| --- | --- | --- |
| **Required Endorsements** | **Type in Name** | **Select Date** |
| **Department Chair or Program Coordinator** | Andrew Blitz | 1/8/2015 |
| **Academic Dean or Assistant Vice President** | Dr. John Meyer | 1/8/2015 |
| **Dean’s Council Representative** | Dr. Mary Myers | 2/3/2015 |

|  |  |
| --- | --- |
| **Select Curriculum Committee Meeting Date** | February 27, 2015 |

Completed curriculum proposals must be uploaded to Dropbox by the deadline. Please refer to the *Curriculum Committee Critical Dates for Submission of Proposals* document available in the document manager in the FSW Portal:

* Document Manager
* VP Academic Affairs
* Curriculum Process Documents

**Important Note to Faculty, Department Chairs or Program Coordinators, and Deans or an Assistant Vice President:**

Incomplete proposals or proposals requiring corrections will be returned to the School or Division. If a proposal is incomplete or requires multiple corrections, the proposal will need to be completed or corrected and **resubmitted to the Dropbox for the next Curriculum Committee meeting** (no later than January 9, 2015 to be effective for the Fall 2015 term). All Curriculum proposals require approval of the Provost and Vice President of Academic Affairs. Final approval or denial of a proposal is reflected on the completed and signed Summary Report.

***Include complete new catalog page below. A separate document will not be accepted.***

**AS, Computer Programming and Analysis**

**Purpose**

The Associate in Science (AS) in Computer Programming and Analysis program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers such as entry level programmers, programmer specialists, computer programmers, senior programmers, chief business programmers, programmer analysts, and information systems programmers.

The content prepares individuals to analyze business situations and to design, develop and write computer programs; to store, locate, and retrieve specific documents, data, and information; analyze problems using logic/analysis tools, code into computer language; test, monitor, debug, document and maintain computer programs. More than one programming language is addressed in this degree program.

**Program Structure**

This program is a planned sequence of instruction consisting of 60 credit hours in the following areas: 18 credit hours of General Education Requirements, and 42 credit hours of Computer Programming and Analysis Core Requirements (which includes 6 credit hours of a Programming Language)...

The Computer Programmer Certificate is a 33 credit hour certificate and the Computer Programming Specialist Certificate is an 18 credit hour certificate; both of which prepare students for entry into employment and are comprised of core courses in the AS Computer Programming and Analysis degree. As such, they can be earned before the student has earned the AS Computer Programming and Analysis degree.

**Course Prerequisites**

***Many courses require prerequisites.*** Check the description of each course in the list below to check for prerequisites, minimum grade requirements, and other restrictions related to the course. Students must complete all prerequisites for a course prior to registering for it.

**Graduation**

Students must fulfill all requirements of their program major after which, students must complete an application for graduation through the Office of the Registrar and enroll in the GRD 2000 course the semester in which they intend to graduate. Students must apply for graduation ***by the published deadline*** to be assured of final clearance for graduation, timely receipt of their diploma, and participation in the commencement ceremony.

**General Education Requirements: 18 Credit Hours**

ENC 1101 - Composition I - 3 credits

ENC 1102 - Composition II - 3 credits

SPC 1017 - Fundamentals of Speech Communication - 3 credits

**OR**

SPC 2608 - Introduction to Public Speaking - 3 credits

PHI 2100 - Logic: Reasoning and Critical Thinking - 3 credits

Any General Education Mathematics Course (MAC 1105-College Algebra or STA 2023-Statistical Methods I recommended) - 3 credits

Any General Education Social Sciences Course (ECO 2013 - Economics I recommended) - 3 credits

**Computer Programming and Analysis Core Requirements: 42 Credit Hours**

CGS 2108 – Computer Applications With Flowcharting – 3 credits

CIS 2321 - Systems Analysis and Design - 3 credits

CNT 1000 - Computer Networking Essentials - 3 credits

COP 1000 - Introduction to Computer Programming - 3 credits

COP 1822 - Internet Programming HTML - 3 credits

COP 2800 - Java Programming - 3 credits

COP 2823 - Advanced Microsoft Web Development - 3 credits

**OR**

COP 2830 - Internet Programming HTML II - 3 credits

CTS 1131 – A+ hardware – 3 credits

CTS 1133 A+ Software – 3 credits

MAN 2021 – Management Principles – 3 credits

SLS 1331 – Personal Business Skills – 3 credits

**OR**

SLS 1515 – Cornerstone Experience – 3 credits

Any 1000 or 2000 level computer course with a COP or CTS prefix – 3 credits

**Choose *one* two-course language sequence from the groupings below:**

**Visual Basic Sequence – 6 credits**

COP 1170 - Visual Basic Programming I - 3 credits

COP 2171 - Visual Basic Programming II - 3 credits

**OR C++ Sequence – 6 credits**

COP 1224 - Programming with C++ - 3 credits

COP 2228 - Advanced Programming with C++ - 3 credits

**OR C# Sequence – 6 credits**

COP 2360 - C# Programming I - 3 credits

COP 2362 - C# Programming II - 3 credits

**Total Degree Requirements: 60 Credit Hours**

**Information is available online at:** [**www.fsw.edu/academics/**](http://www.fsw.edu/academics/)**or on the School of Business and Technology Home Page at:** [**www.fsw.edu/sobt**](http://www.fsw.edu/sobt)