***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** | CCC, Comptuter Programmer |
| **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 – 3 credits  CGS 1100, Computer Applications for Business– 3 credits  CGS 2260, Computer Hardware and Software Maintenance– 3 credits  Added:  CGS 2108, Computer Applications With Flowcharting– 3 credits  CTS 1131, A+ Hardware– 3 credits  CTS 1133, A+ Software– 3 credits | |
| **List below, any changes to the program or certificate Elective requirements. Include course titles and credits if applicable.** | |
| N/A | |
| **List below, any other changes to the program or certificate requirements.** | |
| N/A | |
| **Change to program length (credits or clock hours to complete)** | N/A |

**Section II, Justification for proposal**

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| --- |
| **Provide justification (below) for each change on this proposed curriculum action** |
| The course changes proposed herein are to align with the proposed changes for the overarching degree, the AS Computer Programming and Analysis degree. |

**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.

|  |  |
| --- | --- |
| **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..***

**CCC, Computer Programmer**

**Purpose**

This certificate program is part of the Computer Programming and Analysis AS degree program.

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS degree program and prepares students for entry into employment.

The College Credit Certificate (CCC) Computer Programmer 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 in the Information Technology field.

The content covers concepts necessary 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 certificate program.

**Program Structure**

This program is a planned sequence of instruction consisting of 33 credit hours of Computer Programming Core Requirements. Students completing this College Credit Certificate can transfer the credits directly to the AS Computer Programming & 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.

**Certificate Completion/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 1500 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 certificate, and participation in the commencement ceremony.

**Computer Programmer Certificate Requirements: 33 Credit Hours**

CGS 2108 – Computer Applications With Flowcharting – 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

Any 1000 or 2000 level computer course with a COP 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 Certificate Requirements: 33 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)**.**