New Program Proposal

Certificate in Computer Programming

The undergraduate Certificate in Computer Programming is an 18 credit hour program. It is designed to provide a quick, yet broad training in technologies leading to secure and interesting careers in computer programming or education. Students majoring or minoring in Computer Science may not earn this certificate.

A minimum GPA of 2.5 is required for admission.

A minimum of four courses (12 hours) must be taken in residence at UMSL. Courses may be substituted with the permission of the department. For more information, students can contact the department chair or email info@arch.edu.

Required Courses		
CMP SCI 1250	Introduction to Computing	3
CMP SCI 2250	Programming and Data Structures	3
CMP SCI 2261	Object-Oriented Programming	3
Elective Courses		9
Choose two of the following:		
CMP SCI 2700	Computer Organization and Architecture	
CMP SCI 2750	System Programming and Tools	
CMP SCI 3010	Web Programming	
CMP SCI 3130	Design and Analysis of Algorithms	
CMP SCI 3760	Cyber Threats and Defense	
CMP SCI 4010	Advanced Web Development with Java	
CMP SCI 4011	Client-Side Technologies	
CMP SCI 4020	Introduction to Android Apps: Android	
CMP SCI 4220	Introduction to iOS Programming and Apps	

CMP SCI 4222	iOS Apps		
CMP SCI 4610	Database Management Systems		
INFSYS 3844	Developing Business Applications in .NET		
Total Hours			**18**

Sign-offs from other departments affected by this proposal

Department	Contact Person	Phone #	Objections
S005150	Dinesh Mirchandani	X7354	No
Rationale	This certificate is similar to our minor but being a certificate it can be advertised and directed toward different audience. It is useful for HS teachers wishing to move to teaching computer related courses, and for people in other fields wishing to enter the computer related workforce without completing a degree.		