



NEW PROGRAM PROPOSAL FORM

Sponsoring Institution(s): St. Louis Community College

Program Title: Cybersecurity

Degree/Certificate: Associate of Applied Science

Options: Click here to enter text.

Delivery Site(s): St. Louis Community College

CIP Classification: CIP Code 11.1003 – Computer and Information Systems Security/Information Assurance

*CIP code can be cross-referenced with programs offered in your region on MDHE's program inventory highered.mo.gov/ProgramInventory/search.jsp

Implementation Date: August 2016

Cooperative Partners: N/A

*If this is a collaborative program, form CL must be included with this proposal

AUTHORIZATION:

Dr. Andrew Langrehr / Vice Chancellor Academic Affairs

Handwritten signature 3/30/16

Name/Title of Institutional Officer

Signature

Date

Dr. Joyce Johnson / Director Curriculum & Assessment

314-539-5162

Person to Contact for More Information

Telephone



PROGRAM CHARACTERISTICS AND PERFORMANCE GOALS

Institution Name St. Louis Community College
Program Name Cybersecurity
Date 3/11/2016

(Although all of the following guidelines may not be applicable to the proposed program, please carefully consider the elements in each area and respond as completely as possible in the format below. Quantification of performance goals should be included wherever possible.)

1. Student Preparation

- Any special admissions procedures or student qualifications required for this program which exceed regular university admissions, standards, e.g., ACT score, completion of core curriculum, portfolio, personal interview, etc. Please note if no special preparation will be required.
N/A
- Characteristics of a specific population to be served, if applicable.
Students interested in a computer career and/or specifically IT Help Desk, Network Engineering, Software Development, web development, Information Assurance, and overall cybersecurity career paths would benefit from the Cybersecurity program. Individually, the cybersecurity courses would enhance any student's resume from majors such as financial accounting, business, management, and marketing. IT Essentials (IS:130 & IT:102) for CompTIA A+ and IS:237 for Security+ could be marketed in the high schools for dual credit. High school instructors would go through our instructor training or have the appropriate industry certifications to teach the dual credit courses.

2. Faculty Characteristics

- Any special requirements (degree status, training, etc.) for assignment of teaching for this degree/certificate.
Faculty are required to have a master's degree with at least 18 hours of graduate credit in the specialized area being taught.
- Estimated percentage of credit hours that will be assigned to full time faculty. Please use the term "full time faculty" (and not FTE) in your descriptions here.
25-50% of courses are expected to be taught by full time faculty.
- Expectations for professional activities, special student contact, teaching/learning innovation.

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Full time faculty have annual professional development funds available to them to maintain and upgrade their skill set. All faculty provide office hours to meet with students. Special computer labs have been established to facilitate the offering of programs that have extensive computing needs.

3. Enrollment Projections

- Student FTE majoring in program by the end of five years.
At the end of five years the FTE is expected to be around 95 students.
- Percent of full time and part time enrollment by the end of five years.
30% full-time and 70% part-time

4. Student and Program Outcomes

- Number of graduates per annum at three and five years after implementation.
Year Three: 5; Year Five: 8-10
- Special skills specific to the program.
Computer aptitude
- Proportion of students who will achieve licensing, certification, or registration.
75% of students will seek certifications for Certified Ethical Hacker (through the International Council of Electronic Commerce Consultants (EC-Council) and/or Systems Security Certified Practitioner (through the International Information Systems Security Consortium).
- Performance on national and/or local assessments, e.g., percent of students scoring above the 50th percentile on normed tests; percent of students achieving minimal cut-scores on criterion-referenced tests. Include expected results on assessments of general education and on exit assessments in a particular discipline as well as the name of any nationally recognized assessments used.
75% of students will pass program-specific assessments embedded in courses as identified on the program's assessment plan.
- Placement rates in related fields, in other fields, unemployed.
80% employed in closely related field; 20% other
- Transfer rates, continuous study.
While this is an AAS program and prepares students for immediate employment, some students may elect to pursue bachelor's degrees at four-year institutions. We are anticipating establishing articulation agreements with four-year partners at this time.

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5. Program Accreditation

- Institutional plans for accreditation, if applicable, including accrediting agency and timeline. If there are no plans to seek specialized accreditation, please provide a rationale.

There is not an appropriate accreditor for this academic program.

6. Alumni and Employer Survey

- Expected satisfaction rates for alumni, *including timing and method of surveys*. We anticipate that the alumni satisfaction rate will compare favorably with other computer-related programs at the college; 70% or more of alumni will be satisfied or very satisfied with their educational preparation for this occupation. 180-day surveys are distributed within six months of graduation. Other surveys are disseminated as needed.
- Expected satisfaction rates for employers, including timing and method of surveys. We anticipate that the employer satisfaction rate will compare favorably with other computer-related programs at the college; 70% or more of employers will be satisfied or very satisfied with the performance of their employees. Surveys are disseminated as needed depending on program review schedules.

7. Institutional Characteristics

- Characteristics demonstrating why your institution is particularly well-equipped to support the program.

Our geographic location allows students to pursue this degree part-time while they are employed. STLCC faculty are skilled practitioners in this field, and there are many full-time workers in the St. Louis region who can serve as adjunct instructors and advisory board members to ensure this program remains up-to-date.

E. Free elective credits:

0

(Sum of C, D, and E should equal A.)

F. Requirements for thesis, internship or other capstone experience:

N/A

G. Any unique features such as interdepartmental cooperation:

N/A



STUDENT ENROLLMENT PROJECTIONS

Year	1	2	3	4	5
Full Time	5	6	7	8	9
Part Time	10	11	12	13	14
Total	15	17	19	21	23

Please provide a rationale regarding how student enrollment projections were calculated:

We currently have over 170 IT Help Desk/End User, Network Engineering, and Software Developer majors that are interested in taking courses in information assurance/security. The community interest in cybersecurity courses is increasing as the need for cyber defense is growing for the user as well as for already employed IT professionals, and for our students seeking entry level job opportunities. More and more requirements include information assurance/security job skills and knowledge.

Provide a rationale for proposing this program, including evidence of market demand and societal need supported by research:

The job market is growing. Information Assurance is part of everyone's everyday life. Companies are spending billions of dollars to protect data and their computer systems. The NSA and DoD initiative for community colleges to provide nationally aligned curriculum began in 2002. The development of Centers of Academic Excellence In Information Assurance - 2 Year Colleges began in 2008 ... this designation (which we want to work towards) will give STLCC-FP a national recognition for excellence in IA education. Our graduates would have a strong foundation to seek employment in our region.