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Missouri Department of Higher Education
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NEW PROGRAM PROPOSAL FORM

Sponsoring Institution(s): St. Louis Community College

Program Title: Network Engineering

Degree/Certificate: Certificate of Proficiency

Options: n/a

Delivery Site(s): St. Louis Community College—Forest Park

CIP Classification: 11.0901 (Please provide a CIP code)

Implementation Date: Spring 2012 or upon approval

Cooperative Partners: n/a

AUTHORIZATION:

Dr. Donna Dare Vice-Chancellor ASA — *Donna Dare* — 9/28/11
Name/Title of Institutional Officer Signature Date

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Person to Contact for More Information Telephone

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Form NP – New Program Proposal

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STUDENT ENROLLMENT PROJECTIONS

Year	1	2	3	4	5
Full Time	5	10	12	15	20
Part Time	35	40	50	65	80
Total	40	50	62	80	100

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PROGRAM STRUCTURE

A. Total credits required for graduation: 35 credit hours

B. Residency requirements, if any: Click here to enter text.

C. General education: Total credits: Click here to enter text.

Courses (specific courses OR distribution area and credits):

_____	____cr.	_____	____cr.	_____	____cr.
_____	____cr.	_____	____cr.	_____	____cr.
_____	____cr.	_____	____cr.	_____	____cr.
_____	____cr.	_____	____cr.	_____	____cr.
_____	____cr.	_____	____cr.	_____	____cr.

D. Major requirements: Total credits: 35

IS:130 Hardware and Software Support	3 cr.
IS:229 Unix/Linux I	3 cr.
IS:237 Fundamentals of Information Assurance/Security	3 cr.
IS:264 Unix/Linux II	3 cr.
IT:101 Cisco Networking Academy I: Networking Basics	5 cr.
IT:102 Desktop Client Support	3 cr.
IT:103 Windows Server Configuring Infrastructure	3 cr.
IT: 202 Cisco Networking Academy III:Switching Basics and Intermediate Routing	5 cr.
IT:210 Firewall and VPN Security	3 cr.
IT:211 Virtualization and Cloud Computing	4 cr.

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E. Free elective credits: none   (Sum of C, D, and E should equal A.)
F. Requirements for thesis, internship or other capstone experience:
none

G. Any unique features such as interdepartmental cooperation:
n/a

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Form PS – Program Structure

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PROGRAM CHARACTERISTICS AND PERFORMANCE GOALS

Institution Name   St. Louis Community College
Program Name   Network Engineering
Date   September 2011

(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.)
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.
  No special preparation will be required.

- Characteristics of a specific population to be served, if applicable.
  The Network Engineering Certificate of Proficiency is designed to meet the needs of multiple populations. Students will be traditional and non-traditional, recent high school graduates as well as working professionals seeking training to maintain current employment, promotion on the job, or the pursuit of new employment opportunities. The program will be of interest to unemployed and under-employed information technology professionals seeking new skills.

Faculty Characteristics
- Any special requirements (degree status, training, etc.) for assignment of teaching for this degree/certificate.
  Faculty members teaching courses that align to third party industry certifications (Cisco Networking, Microsoft, CompTIA, etc.) will have attained certification prior to teaching the course(s).

- 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.
  It is anticipated that full time faculty members will be assigned 70-85% of the Network Engineering required courses depending upon the semester offered.

- Expectations for professional activities, special student contact, teaching/learning innovation.

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Form PG – Program Characteristics and Performance Goals

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In addition to the professional activities expected of all St. Louis Community College faculty members, the Network Engineering faculty will maintain relevant industry certifications.

Enrollment Projections
- Student FTE majoring in program by the end of five years.
  60

- Percent of full time and part time enrollment by the end of five years.
  Full time 25% Part time 75%

Student and Program Outcomes
- Number of graduates per annum at three and five years after implementation.
  10, 25

- Special skills specific to the program.
  Students will develop the skills and knowledge necessary to attain the IT industry certifications mapped to the proposed curriculum.

- Proportion of students who will achieve licensing, certification, or registration.
  80%

- 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.
  The program is based on industry certifications and is the first in a series of planned programs following a nested or stackable credential framework within the networking and cyber security specialties of the IT career cluster. All courses or course tracks prepare students to obtain recognized industry certifications, e.g. CompTIA A+, Security+; Microsoft Certified Technology Specialist; VMware VCP; LCIP-1. The target is a student success rate of 75% on certification exams.

- Placement rates in related fields, in other fields, unemployed.
  Of those graduates seeking employment following graduation the target is 75% employed in a related field, 25% employed in an unrelated field, and 0% unemployed. Of the 25% employed in a related field, it is anticipated that the skills attained through the educational program will be fully utilized. In today's technology-driven workplace, IT skills are an essential component of many occupations that might not be considered "IT-related."

- Transfer rates, continuous study.

It is estimated that 40% of program graduates will transfer to a university or pursue continuous study at the community college. Graduates without a prior degree will be encouraged to continue their education at St. Louis Community College to attain an AAS degree. Information technology skills are continually changing as employers implement and deploy new and emerging technologies. Many of the IT students at the community college are working professionals as well as community college and/or university graduates attending specific classes or pursuing certificates to up-skill in an emerging technology. Graduates of the Network Engineering Certificate of Proficiency program will represent both groups, non-degreed traditional students and working professionals.

Program Accreditation
- Institutional plans for accreditation, if applicable, including accrediting agency and timeline. If there are no plans to seek specialized accreditation, please provide reasons. The Information Systems Department, St. Louis Community College-Forest Park, has been home to a regional Cisco Networking Academy since 1997 and continues to participate in the Academy program. Microsoft IT and VMware Academies were added within the past five years. The Network Engineering program includes courses that prepare students for Cisco, Microsoft and VMware certification exams.

Alumni and Employer Survey
- Expected satisfaction rates for alumni, including timing and method of surveys. Expected satisfaction rate of 90% for alumni. Graduates will be surveyed by the College's Career and Employment Services office 6 months after graduation.

- Expected satisfaction rates for employers, including timing and method of surveys. Expected satisfaction rate of 90% for employers. Employers will be surveyed on an annual basis using an online tool such as Survey Monkey.

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Form PG – Program Characteristics and Performance Goals