Community Colleges of Spokane

Spokane Falls Community College

Bachelor of Applied Science Degree in Information Systems and Technology

Program Proposal
November 2014

Forms C and D

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Form C: Cover Sheet New Degree Program Proposal

Program Information

Institution Name: Spokane Falls Community College (SFCC)

Degree Name: BAS Information Systems and Technology   **CIP Code:** 11.0103

Name(s) of existing technical associate degree(s) that will serve as the foundation for this program:

Degree: AAS Information Technology   **CIP Code:** 11.1006   **Year Began:** 1996

Proposed Start Implementation Date: Fall 2015

Contact Information (Academic Department Representative)

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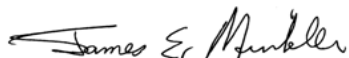
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James E. Minkler

November 21, 2014

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Chief Academic Officer   **Date**

Introduction

Spokane Falls Community College's bachelor of applied science degree in Information Systems and Technology (BAS IST) has been designed to meet the growing demand for appropriately qualified workers in the field of information systems and technology. The entry level education for many information technology jobs is becoming a four year degree. As entry level educational requirements rise, more current students will need to continue through the bachelor's level, and many current professionals will need additional training and education. For example, the Bureau of Labor Statistics considers a bachelor's degree as entry level education for the following IT occupations: computer network architect, computer programmer, computer support specialist, computer systems analyst, database administrator, information security analyst, web developer, network and computer system administrator and software developer.[1]

Spokane Falls Community College's proposed IST degree will be designed to meet the explicit needs that employers have identified for network and computer systems administrators, information security analysts, data specialists and computer network support specialists through providing a pathway to the baccalaureate for students with two year technical degrees in IT.

Graduates of the BAS IST will have a broad base of theoretical and technical knowledge, as well as specialized knowledge in areas such as systems administration, security, database administration, virtualization and storage.

Criteria 1:   Curriculum Demonstrates Baccalaureate Level Rigor.

Program Learning Outcomes.

The baccalaureate in IST builds on technical skills that entering students bring from their associate degrees, adding theoretical knowledge, general education, and advanced technical skills. Successful graduates of the Information Systems and Technology degree will be able to:
- Apply a broad understanding of information systems and technology, creative problem solving techniques and systems thinking to develop organizational solutions.
- Apply core competencies learned to function as a successful professional in the field of Information Systems and Technology.
- Work independently and cooperatively to deliver reports, programs, projects, and other deliverables that document a business organization's information technology requirements.
- Demonstrate proficiency in selecting, implementing, and operating information technology solutions to meet organizational requirements.
- Demonstrate the ability to search, analyze, and synthesize current information and solutions in the rapidly changing information technology profession.

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[1] United States Department of Labor, Bureau of Labor Statistics (2014, January 8). Retrieved from
http://www.bls.gov/ooh/computer-and-information-technology/home.htm

- Base decisions and actions on the legal, ethical, and professional guidelines and practices of the information technology field.
- Engage in continuing professional development through lifelong learning.
- Analyze and apply sustainable business practices.
- Demonstrate the breadth and depth of the educational preparation through the completion of an internship/capstone project.

Program Evaluation Criteria and Process.

Spokane Falls Community College offers AAS degrees, AAS-T degrees, and Certificates in twenty career/technical programs and each program conducts regular assessment. Faculty teams design, implement, and refine their assessment models and tools, assessing program goals and related instruction outcomes annually. Career and technical program assessment also utilizes data collected from a variety of sources, including employers, current students, practicum supervisors, and portfolios.

SFCC has suggested the following set of college goals for professional technical / educational assessment.

- Meet the diverse educational needs of all students through a variety of programs, multiple teaching/learning/delivery methodologies, and diverse course offerings.
- Provide opportunities for students to achieve personal enrichment goals.
- Deliver high-quality learning opportunities, academic services, advising, and co-curricular activities for all students, especially those in their first year.
- Develop and implement strategies to improve students' completion of their degrees and certificates.
- Foster and promote a safe, affirming, and healthy learning and working environment.
- Provide opportunities for all voices to be heard and valued.
- Cultivate an appreciation for diversity among students, faculty, and staff.
- Promote and underscore the relevance of SFCC's wide range of educational programs and available community resources throughout our regional community.
- Implement collaborative, student-centered strategies to strengthen the efficiency of instructional programs, student support services, and administrative services.
- Infuse appropriate technological innovations in all college operations.
- Incorporate and contribute to industry-standard and emerging equipment and technologies.
- Build strong, collaborative partnerships with business, community, government, education and human service organizations throughout our region.
- Respond quickly to changing educational, training, social, and employment needs.

The Career Technical Program Review tracking matrix[2] contains the items collected annually to document continuous improvement including the five-column Nichols Model and summary of Advisory Committee, Current Student, Graduate, and Employer surveys. Program faculty and advisory committees

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[2] https://intranet.spokanefalls.edu/default.asp?s=1304&w=201&p=5283 11.12.2014

use these results to inform and implement changes to courses and programs.

The Bachelor of Applied Science in Information Systems and Technology process is modeled after existing program assessment at Spokane Falls Community College and is designed to ensure the following:

- The program remains aligned with the college's mission, core themes and values.
- The program goals clearly describe and define the expected abilities, knowledge, values, and attitudes of the graduates of the program.
- Program goals are simply stated.
- Accurate and reliable data for each program goal can be collected.
- The program goals are distinctive and specific to the program.
- The program goals are stated so more than one measurement method can be used. (One measurement method is acceptable; multiple methods are better).
- The program goals are stated so they can be used to identify areas that need improvement or modification.
- The program goals describe or identify student rather than instructor behaviors.
- The program goals language describes a learning outcome, not a process.

A complete program evaluation will be conducted every three years, although many components will be evaluated on an annual basis. Working in cooperation with internal assessment committees and department faculty, the advisory committee's role will be to advise the program as to recommended curriculum improvements; help keep the program abreast of changes in the field; assist in student recruitment and placement; and make recommendations for other changes that will keep the program current. Experts from information technology and higher education will be engaged throughout the full curriculum development and implementation phase to ensure rigor of the content and learning methodologies.

External experts with experience in IT and in higher education will assess the overall curriculum and the courses to ensure rigor, consistency and quality.

Course preparation needed by students transferring with a technical associate degree.

The BAS IST has been designed for individuals who have earned a career technical degree in an IT related area. Students who hold technical associate degrees in information systems and technology, particularly those who have earned an AAS IT degree, will typically be able to complete the BAS IST in two years of fulltime study.

In addition to holding a technical associate degree in an IT related area, applicants to the BAS IST will need to meet the minimum requirements outlined in the following table. In keeping with the open access mission of the community college, admission requirements have been designed to provide access to many and to ensure that prospective applicants are prepared for success once they enter the program.

Table 1 Entry requirements for SFCC BAS IST

Prerequisites	Notes	Credits
Technical Associates degrees in IT related	From an accredited institution	90
Cumulative GPA of 2.5	In all college courses	
Minimum grade of 2.0 in all required courses.	Courses required for associate degree in IT	
General education courses	At least 15 credits, as outlined in table 2, general education requirements	Included in 90 above

General education components.

General education is an important component of all applied baccalaureate degrees, providing students and graduates with a baseline of understanding in the social sciences, humanities, and sciences. Spokane Falls Community College has planned carefully to ensure that general education credits and courses meet state guidelines for general education in applied baccalaureate degrees.[3] Within the four years of an applied baccalaureate degree, general education credits must include a minimum of:

- Ten (10) credits of communication skills, including one English composition course, e.g. ENGL& 101;
- Five (5) credits of quantitative/symbolic reasoning skills;
- Ten (10) credits of humanities;
- Ten (10) credits of social sciences;
- Ten (10) credits of natural science, including at least five (5) credits in physical, biological and/or earth sciences, including at least one course with a lab.
- 15 credits of remaining general education courses to achieve the required 60 credits.

The graduate of the BAS IST will have the balance and breadth of knowledge provided by 60 credits of general education as well as the technical knowledge developed throughout all four years of their degree pathway.

Typically, at least 15 general education credits are satisfied at the associate degree level as confirmed by entrance pre-requisites, and the remaining 45 credits are satisfied with courses in quantitative skills, humanities, social sciences and natural sciences. General education requirements and courses recommendation are outlined in the following table. Most of these classes are offered in a classroom

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[3] http://www.sbctc.edu/college/e_appliedbaccalaureates.aspx 09.17.2014

setting and online. Spokane Falls Community College course numbers are used in the table; equivalent courses from other colleges fulfill the requirements.

Table 2 General education Requirements BAS IST

Subject	Credits	Course		Typical Completion
Communication Skills (must include English composition)	10	ENGL& 101 English Composition		Associate
		ENGL 335 Technical Writing & Research Methods		BAS
Quantitative Skills (college level math)	5	MATH& 107 or BUS 345 Statistics for the Business Manager (pre-requisite college level math)		BAS
Humanities (recommended Courses)	10	CMST 227 Intercultural Communication		BAS
		PHIL& 120 Symbolic Logic or BUS 3XX Business Ethics		BAS
Social Sciences (recommended courses)	10	PSYC& 100 General Psychology		BAS
		CMST 320 _Organizational Communication		BAS
Natural Sciences(one lab) (recommended courses)	10	PHYS 100 Introductory Physics (Lab course)		Associate
		GEOL& 100 Survey of Earth Science		BAS
Other allocates per program (recommended courses)	5	BUS& 101 Intro to Business		BAS
	5	BUS 217 Business Statistics		BAS
	5	ECON& 202 Macro Economics or BUS 3XX Applied Business Finance		BAS
Total required	**60**			

Course Work needed at junior and senior level in the BAS.

The Information Systems Computer Science department, with the assistance of the Bachelor of Applied Science Development faculty coordinator, will work with departments across the academic disciplines to develop a robust upper division curriculum. Currently courses are being developed in Business, English, and Communication Studies. As other BAS degree programs are developed (pending State approvals), the college will make continuous efforts to expand and improve the upper division coursework.

Core Technical Knowledge

All graduates of the IST baccalaureate program are expected to have core technical knowledge across the information systems and technology space. The next table shows the subject areas a BAS IST candidate should have obtained over the course of their Associate program. This knowledge has to be acquired before entering the BAS IST program. Candidates' core technical knowledge would be assessed through their transcripts provided to SFCC or through the Prior Learning Assessment office if candidates pursue credit by PLA portfolio[4].

Table 3 Core Technical requirements BAS IST

Subject	Credits	Course	Typical Completion
Unix / Linux Skills	5	CS 121 Unix / Linux or equivalent	Associate
Programming Skills	5	CS 223 Programming for IT or equivalent	Associate
Ethics & Law	5	IS 132 Computer Ethics & Law or equivalent	Associate
Database Skills	5	IS 260 Database Theory or equivalent	Associate
Networking Knowledge	5	IS 262 Network Management or equivalent	Associate
Security Knowledge	5	IS 245 Network Security II or equivalent	Associate
Total required	**30**		

The following table shows junior / senior coursework, including information systems and technology courses, IST related courses, general education, and electives.

Table 4 BAS IST Junior/Senior Major Specific Coursework

Courses	Credits
IST Upper Division Core Classes	**45**
MMGT 342 Project Management	5
IST 310 Routing and Switching in the Enterprise	5
IST 332 Data Warehousing	5
IST 344 Virtualization and Storage	5

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[4] http://www.spokanefalls.edu/admissions/pla.aspx?page=PV3 11.12.2014

IST 360 Database Application Development	5
IST 410 Enterprise Server Administration	5
IST 444 Automation Configuration and Management	5
IST 470 System Analysis and Design	5
IST 475 Capstone/Internship	5

A student attending full-time with 15 credits per quarter is able to complete the degree in 6 quarters (2 years), depending on time of entry. A full-time and part-time student sample schedule is shown in the following table.

Table 5 Example Schedules BAS IST

Full-time schedule			
Fall – Year 1	**Winter – Year 1**	**Spring – Year 1**	**Summer – Year 1**
IST Core Class	IST Core Class	IST Core Class	General Education if needed
IST Core Class	General Education	IST Core Class	
General Education	General Education	General education	
Fall – Year 2	**Winter – Year 2**	**Spring – Year 2**	**Summer – Year 2**
IST Core Class	IST Core Class	IST 475 Capstone/Internship	General Education if needed
General Education	IST Core Class	General Education	
General Education	General Education	General education	
Part-time schedule			
Fall – Year 1	**Winter – Year 1**	**Spring – Year 1**	**Summer – Year 1**
IST Core Class	IST Core Class	IST Core Class	General Education if needed
General Education	General Education	General Education	
Fall – Year 2	**Winter – Year 2**	**Spring – Year 2**	**Summer – Year 2**
IST Core Class	IST Core Class	IST Core Class	General Education if needed
General Education	General Education	General Education	
Fall – Year 3	**Winter – Year 3**	**Spring – Year 3**	**Summer – Year 3**
IST Core Class	IST Core Class	IST 475 Capstone/Internship	General Education if needed
General Education	General Education	General Education	

The program coordinator and faculty will work with each student to develop an academic plan, ensuring that full-time and part-time students are able to efficiently meet their degree goals.

Criteria 2:   Qualified Faculty.

Spokane Falls Community College projects 15 FTE enrollment during the first operational year of the BAS IST, with full enrollment by 2020 with FTE of 30. To support this number of students, the program will need one new full-time equivalent faculty (FTEF) in year one and possibly a second FTEF no later than year 3. Faculty teaching general education courses will teach these courses as part of their ongoing load, so no additional faculty will be required in areas outside Information Technology.

Faculty teaching in the program will typically be required to hold a minimum of a master's degree. Some exceptions may be made for tech-focused systems administration courses, based on a combination of baccalaureate degree and industry experience, since the master's degree is not typically acquired by information technicians and systems administrators.

Total FTEF assigned to the program will be 2.0 – faculty will teach in both the baccalaureate and associate degree programs to ensure continuity and consistency across curricula.

Table 6 Faculty Profiles

Faculty Name	Credentials	Status	Courses
Brent Booth	PhD	FT, Department Chair	Business Management
Max Josquin	MEd	FT, Department Chair	Associate, BAS
John Mill	MS	FT	Associate, BAS
Mark Neufville	MEd (Spring 2015)	PT	Associate, BAS
Brady Nielsen	MBA	FT	Associate, BAS
Kris Townsend	MA	FT	Associate, BAS
Rick Udlock	MS	PT	Associate, BAS
New FTE 1	TBD, Ph.D. preferred	FT – To be hired 2015	Associate, BAS
New FTE 2	TBD, Ph.D. preferred	FT – To be hired 2018	Associate, BAS

Criteria 3:   Selective Admissions Process Consistent with Open Door Institution.

In keeping with the open access mission of the community college, admission requirements have been designed to provide access to many and to ensure that prospective applicants are prepared for success once they enter the program. In addition to holding a technical associate degree in an Information Technology related area, applicants to the BAS IST will need to meet the minimum program requirements outlined in Table 1. These requirements include an overall college GPA of 2.5, a minimum grade of 2.0 in all courses required for the degree, and at least 15 credits of general education.   Students failing to meet the minimum qualifications may be considered for provisional admission (if space allows) based on a student statement of intent to pursue the BAS degree (including a statement of professional goals) and two letters of recommendation for admission from faculty members outside the Information Systems Computer Science department.

During the selection for admission of candidates to the BAS IST, preference will be given to current SFCC Information Systems Computer Science (ISCS) students approaching the near completion of the AAS Information Technology degree. For example, if a candidate is expected to receive the SFCC AAS IT degree at the end of spring quarter and is applying for the BAS IST program for the following fall quarter, precedence over external applications will be implemented.

To help ensure inclusion of students from underrepresented populations as potential BAS degree candidates, the Information Systems Computer Science department grants admission to the AAS program of study to all students who meet program requirements. The Information Systems Computer Science department recently received a grant from the National Science Federation which identifies as one of its priorities the marketing of IT degree opportunities for students from underrepresented populations. Once admitted to the AAS program, those students from underrepresented populations will be encouraged to continue their studies in the BAS degree program.

SFCC will also rely on relationships with area high schools and the sister college, Spokane Community College, and the college's multicultural services to identify and recruit potential degree candidates from underrepresented populations to consider pursuing a BAS at our college. SFCC's current demographic profile is evidence of the ability to attract and retain students from underrepresented populations.

Recent announcements from large IT companies about their efforts to increase diversity within their workforce provide a firm foundation of credibility for messages targeted toward students from underrepresented populations. SFCC will capitalize on this trend by designing visual and textual recruiting materials with maximum exposure to the opportunities for this group of students.

Should there be more qualified applicants than there are openings in the program, the college will consider offering additional course sections, as feasible. For example, if there were 48 qualified applicants and 24 openings, the college would consider adding a section, if appropriate faculty are available, so that all qualified students would be admitted.

If there are more qualified applicants than there are openings, but not enough applicants to add an additional section, the college will place students on a wait list, based on the following process:

1. Qualified applicants will be admitted based on time of application. If 35 qualified applicants apply by the deadline and there are 24 slots, the first 24 qualified applicants will be admitted.
2. The remaining 11 will be placed on a wait list for admission at earliest possible convenience.

The program will assess this process each year and determine if changes need to be made, based on student progress and retention, diversity of student group, and other factors as they emerge.

Diverse student population

Spokane Falls Community College meets the needs of its community by advancing student achievement through quality, accessible learning opportunities that embrace diversity, promote equity, and foster

global awareness. SFCC fulfills its mission through five core themes. SFCC advances diversity, promotes equity, and prepares students to live responsibly in an increasingly global civilization through the Diversity, Equity, and Global Awareness core theme. The latest related, strategic goals adopted by SFCC advance diversity by:

- Cultivate an appreciation for diversity among students, faculty, and staff.
- Ensure equity among students, faculty, and staff.
- Increase the diversity of the student body, faculty, and staff

This theme supports SFCC's mission and goals to respect and advance diversity, promote equity, and to prepare students to live responsibly in an increasingly global civilization. The theme supports the college core value of diversity. In this context, diversity refers to differences and similarities across groups, including, but not limited to race, ethnicity, age, gender identity, sexual orientation, religion, physical and psychological capabilities, learning ability, class, and other socioeconomic factors.

The bachelor's program will employ practices implemented by the SFCC Diversity and Equity Committee to attract a diverse student population to the college and its programs. As noted above (pg. 12) the Information Systems Computer Science department will use NSF grant funds to actively recruit students from underrepresented populations to enter the AAS $\rightarrow$ BAS programs of study.

Criteria 4:   Appropriate Student Services Plan.

Spokane Falls Community College is one of two community colleges that serve the Spokane area and the eastern region of Washington State. Under the authority of the Community Colleges of Spokane (CCS), District 17, SFCC helps CCS fulfill the district mission to develop human potential through quality, relevant and affordable learning opportunities that result in improved social and economic well-being for students and the state. This commitment to student achievement is evident in the services provided by student services personnel and the student support services they manage. Each and every student at SFCC receives support services that are high-quality, student-centered, and easily assessable. Students in the BAS IST program will be supported by the same student service programs that all students receive. As Spokane Falls Community College implements new applied baccalaureate degrees, the college will evaluate the increased workload of departments within Student Services. However, at this time, capacity to serve this new program exists with current staffing and responsibilities pertaining to the applied baccalaureate program have been assigned to specific personnel.

Access to student services
We project that most students in the BAS IST program will be former or current SFCC AAS IT students and working professionals. These students will be taking hybrid delivery classes scheduled in the late afternoon and evening. A typical full time student would come to campus perhaps two or three times each week. In order to ensure access to program advising, the program coordinator will be available for late afternoon appointments, in addition to availability by email. The program coordinator is the single point of contact for BAS students, from pre-admission, through the program, and into transition to master's degrees for those who wish to continue to graduate school. To provide convenient access to

BAS students, SFCC has numerous services available electronically, including: online registration each quarter; online tutoring; 24/7 access to librarians through "ask a librarian"; extensive research databases suitable for baccalaureate-level research; KHAN academy links; degree audit and transcript request, and more.

To assist students visiting campus after regular business hours, SFCC offers many different services with evening and/or weekend hours, including: the peer tutoring center, counseling, disability support services, testing, financial aid, and the library.

SFCC provides accessible and fully integrated student services to support a new baccalaureate degree in Information Systems and Technology.

The following services will be those most frequently used by baccalaureate students:

Counseling and Student Advising: Student Achievement is a core value at SFCC and ensuring students complete the educational process is a major responsibility of the SFCC faculty counselors and academic consultants.

The system in place at SFCC is very similar to the model that will be used to support the baccalaureate programs. Within the BAS IST degree, a program coordinator working in concert with a full-time completion coach, shared with other programs offering bachelors at SFCC, will work one-on-one with students to ensure these students are getting adequate support to be successful in the program. The BAS support team of the program coordinator and the completion coach, in collaboration with faculty counselors, will assist students with their educational planning and progress towards degree completion. Regular audits of progress toward degree will be conducted for every student enrolled in the program. Students who "stop out" will be offered multiple opportunities to re-enter the program and continue toward degree completion. Each student will have an individualized schedule and advising plan. Program faculty will work with students who need additional assistance to develop personalized student success strategies or work with the tutoring center to ensure students have adequate support to be successful.

Students can also use internet advising services and degree planning worksheets to access their information. The online degree planning tool helps faculty advisors and students evaluate, monitor and track the student's progress toward completion of a degree.

Computer Labs: SFCC provides access to a variety of specialized computer and learning labs. A list of Computer Labs and Instructional Labs including location and hours of operation is located on the college website[5].

Credentials Evaluation: SFCC's credentials evaluators have extensive experience evaluating transcripts from accredited institutions. They will evaluate incoming students for compliance with admission requirements and review student records for all degree requirements when students near graduation. Program faculty will evaluate all transfer or prior learning requests for core courses.

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[5] http://www.spokanefalls.edu/Resources/OnlineResources.aspx?page=PV4. 11.5.2014

Disability Support Services (DSS): The DSS office provides assessment and accommodations for students with documented disabilities. They provide specialized course materials via E-text, braille and closed caption; coordinate alternate testing for students, and assist faculty to provide appropriate accommodation.

Financial Aid: The financial aid office prepares and disburses federal, state, and institutional aid for all SFCC students. Students can monitor the status of their application online by accessing the student portal[6].

Job Placement: Providing help with career advancement and job placement will be priorities for BAS IST program faculty and career center staff. The advisory board, comprised of industry professionals, will help to identify jobs. Through the required internship/capstone course, students will develop potential job contacts. When the program chair networks with businesses to market the new degree program, it will create awareness of the program and opportunities for information on new employment. The SFCC Career Center has been successful in helping students find jobs by providing comprehensive career services including career planning and exploration, job search and placement assistance, career fairs, work-study, internships, and service learning opportunities.

Multicultural Services: The SFCC Multicultural Center offer students of every culture assistance with counseling, financing, tutoring and mentoring. These essential services empower students of color to identify, pursue, and complete educational and personal objectives aligned with their career and life goals.

Library and Other Online Services: All students have access to a full slate of services and information via the web. Through the *myBigfoot Student Portal[7],* students can access the book store, records and grades, transcripts, registration, advising, faculty communication, and library services. The library has extensive research databases which are able to support the proposed baccalaureate degree disciplines. Cooperative agreements with local baccalaureate institutions allow students access to research materials which may not be housed with our libraries. As a member of WIN (Washington Idaho Network), SFCC students and staff are able to borrow books and other research materials through a cooperative agreement with Gonzaga University, Spokane Community College, North Idaho College, Lewis and Clark State College, and Whitworth University. Materials borrowed through the cooperative take one to three days to arrive. The "ask a librarian" online research assistance program allows students access to research and information literacy guidance 24/7. The distance education office provides extensive technology assistance and student services for all online students[8].

Peer Tutoring Center: The Peer Tutoring Center assists students in successfully completing their college courses through one-on-one and group tutoring, workshops, classes and open labs in a variety of subjects including reading, writing, math, accounting, biology, and business technology. Students may also access enhanced services in the center including Cranium Café, eTutoring and the KHAN Academy. In addition, the center manager has worked closely with program managers to align tutoring services

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[6] http://www.spokanefalls.edu/Admissions/FinancialAid/Home.aspx 11.5.2014
[7] https://mybigfoot.spokane.edu/ 11.05.2014
[8] http://ccsonline.spokane.edu/ 11.05.2014

with course curriculum. The tutoring center currently employs students from local baccalaureate institutions who will be available to tutor upper-division students.

Veterans Services: The Veterans Services Office assists all eligible veterans, reservists, dependents, and VA chapter 31 students. Relevant military credit is awarded once a student has earned 10 college level credits and has applied for assessment through the established PLA process.

Prior Learning Assessment: The Prior Learning Assessment faculty coordinator (currently, Craig Rickett) works as a liaison between students and BAS faculty and program coordinator. Those students who have acquired significant levels of college level learning based on job training and competencies learned on the job may choose to petition BAS faculty for college credit. The Prior Learning Assessment coordinator will provide instruction in the compilation of the student's prior learning portfolio and will guide the student through the petitioning process. Students interested in developing a prior learning portfolio will be required to enroll in General Studies 105, Prior Learning Portfolio Development (or its equivalent).

Criteria 5:   Commitment to Build and Sustain a High Quality Program.

Funding and administrative support of the BAS Information Systems and Technology will include budgeting for estimated program expenses (see Table 7: Estimated Program Expenses) through the first five years of the program's development.

On site BAS courses will be offered as hybrid courses and scheduled at times convenient to working professionals. At this time, no new classroom facilities should be necessary to support the BAS program.

Additional Personnel and Benefits: Spokane Falls Community College will support the BAS IST program with two new administrative positions (program coordinator and a completion coach) which will be shared with the planned BAS program in Applied Management (pending state approvals). The Program Coordinator will serve in a dual capacity for the first two years until such time as enrollments warrant hiring a completion coach (projected in year 3). The Program Coordinator will work under the direction of the Dean of Instruction for Computing, Math & Science, Social Science, Accounting & Economics, Human Services (currently Jim Brady) – who will have program oversight and who reports to the Vice President of Learning. The program coordinator will work as support personnel for the BAS program Deans and faculty. With the addition of the completion coach, the program manager will focus attention on student recruitment, advising and admissions, and program evaluation and development. In addition, one full time faculty position will be added within the Information Systems and Computer Science department during year one, and another full time faculty position added year three. Benefits and salary increases are calculated according to typical pay-scale advancement over a period of five years.

Table 7 Administration and staff

Name	Title	Responsibilities	Admin Effort
TBD	Program Coordinator	Provides administrative support to	50 %

		chair, faculty and students. Provides student services assistance to applicants and students to promote student success.	
TBD	Completion Coach (year 3)	Assists in the delivery of comprehensive specialized services to enhance the retention and completion results of students.	50%
		Total Staff FTE	1.00

Curriculum: SFCC supports the development of nine upper division class curriculums with stipends of one thousand dollars for each, provided the course serves the BAS programs needs and gains approval through the appropriate curriculum committee processes.

Professional Development: Faculty and administrative personnel are provided professional development opportunities which prepare them to be more serviceable to our students. Each full-time faculty member may access one thousand dollars per three year period, and has access to other discretionary faculty development funds through faculty development and/or foundation grants.

Equipment, Goods and Services: Hardware, software acquisition and upgrades necessary to teach upper division IST courses will be supported through Information Systems Computer Science department goods and services budgets, district innovation funds, and student technology fee allocations.

Consulting and Accreditation Fees: These one-time fees will be paid to the NWCCU for evaluating substantive changes to SFCC's program and degree offerings. In addition, the college will pay Information Technology professionals to independently assess the program proposal according to its perceived ability to serve students and meet the expectations of employers in the Information Technology industry.

Library Support: Subscription and e-book collections are currently adequate to meet the expected demands of the BAS IST program. As more BAS programs are added (pending state approvals), additional staffing in the library will be necessary to support students' information and research needs. Library hours will be gradually extended to accommodate the needs of the BAS students.

The following table indicates the projected student enrollment and is the base to draft the estimated program expenses and revenues.

Table 8 Student Enrollment Projections

BAS in Information Systems and Technology Enrollment Projections					
Year	**1** **2015-16**	**2** **2016-17**	**3** **2017-18**	**4** **2018-19**	**5** **2019-20**
Headcount	15	19	23	28	33
FTES	11	14.6	18.3	22.9	27.5
Graduates	0	9	11	14	17

Table 9 Estimated Program Expenses

Bas in IS&T Projected Program Expenses						
	Year 0 (FY 14)	Year 1 (FY 15-16)	Year 2 (FY 16-17)	Year 3 (FY17-18)	Year 4 (FY18-19)	Year 5 (FY19-20)
Administrative Salaries (50% FTE) – Program Coordinator		15,240	15,966	16,737	17,547	18,387
Administrative Salaries (50% FTE) – Completion Coach				20,838	20,838	21,706
Full-time Faculty Salaries (1 FTE year 1 and 2 FTE year 4 and beyond plus 25% Faculty Coordinator)		55,913	55,913	57,250	101,980	103,317
Honorarium Stipends	1,000					
Curriculum Development Stipends	9,000					
Benefits	1,620	41,406	42,109	55,265	74,796	76,149
Goods and Services (to include Library support)	1,500	1,750	1,750	1,800	1,800	1,900
Travel/Prof Dev	1,000	1,000	1,000	1,000	2,000	2,000
Computer Systems		22,500	22,500			24,000
Computer Software/Hardware		10,000	10,000			
Marketing	1,800	600	600	800	600	600
Indirect Administrative Costs (4% each year)		5,936	5,994	6,148	8,742	9,882
Total Costs	15,920	154,345	155,832	159,838	228,303	257,941

Estimated Program Revenues: Costs associated with the development and implementation of the BAS degree in Information Systems and Technology will be offset by the additional tuition and fees generated by the program. In addition, SFCC administration will seek funding from CCS district sources during the

early years of program launch.

Table 10 Projected Program Income

BAS in Information Systems and Technology: Projected Program Income & Total Expenses (Profit/loss)						
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Program Revenue -Tuition and Fees (excluding Lab/Course Fee)		74,566	131,193	180,801	226,901	276,184
Program Expenses		(154,345)	(155,832)	(159,838)	(228,303)	(257,941)
Net		(79,779)	(24,639)	20,963	(1,402)	18,243
Balance to re-invest (25% Percentage of Net)				5,241		4,561
Lab and Course Fee		6,000	10,000	11,600	12,000	12,000
Program Reinvestment after Expenses						
				5,241		4,561

Criteria 6: Program Specific Accreditation.

At this time, the college does not plan to seek specialized program accreditation, in large part because an appropriate accrediting organization is not available.

Baccalaureate programs in applied computer science may be accredited under ABET's Computer Science Accreditation Board (CSAB)[9]. However, programs accredited by ABET's CSAB are typically traditional computer science programs, often housed in engineering departments, given the roots of ABET in engineering.

Faculty and staff will pursue accreditation for the BAS IST should an appropriate accrediting body be identified.

The regional accreditation for SFCC was reaffirmed by the Northwest Commission on Colleges and Universities (NWCCU) on January 31, 2014, on the basis of the Fall 2013 Year Seven *Mission Fulfillment and Sustainability* Evaluation. The BAS IST will be included in SFCC's NWCCU Mid-cycle Evaluation scheduled for Fall 2016.

Criteria 7: Pathway Options beyond Baccalaureate Degree.

Graduates of the BAS IST program who are interested in obtaining a graduate degree will have at least

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[9] http://main.abet.org/aps/Accreditedprogramsearch.aspx 10.01.2014

two local options.

Western Governors University (WGU) Washington offers three Information Technology related degrees[10]: M.S. Information Security and Assurance, M.S Information Technology Management and MBA Information Technology Management. The admission to these programs requires a bachelor's degree from a regionally accredited institution and demonstrates IT networking experience through certifications, job related experience or a bachelor's degree in information systems or information technology such as the BAS IST degree described in this documentation.

Starting this 2014 fall, Central Washington University (CWU) is offering a Master of Science Information Technology and Administrative Management[11]. MS-ITAM is a unique degree that bridges the gap between information technology and administrative management. The program focuses on leadership, communications, supervision, budget planning, entrepreneurship, and ethics, as well as applied IT management skills in emerging technologies. Representatives from Spokane Falls Community College consulted with Dr. Natalie Lupton, Associate Dean of Graduate Studies and Research, to discuss a possible MOU for articulation between SFCC BAS IST and CWU MS-ITAM programs.

Criteria 8:   External Expert Evaluation of Program.

Spokane Falls Community College selected two experts, Mr. Geyer and Mr. Tallegas, to provide external review of the proposed degree.

Terence Geyer is currently the program director for the Applied Technology Program in the Department of Engineering and Design at Eastern Washington University, a position he has held since 2008. This program has been in existence for more than 12 years and specializes in providing a transfer path to a bachelor's degree program for students who graduate from community colleges with 2-year technical degrees throughout Washington State. He also teaches classes in this program, and has, since 2006. This combination of roles has allowed him to gain a working knowledge of what it takes to insure the transferability of technical degrees into a bachelor's program, as well as what is necessary for a student to be successful in completing that process, both in the local classroom and at a distance.

From 1991 until 2001, Geyer worked at the Mead SD #354 as a Technology Technician setting up labs and networks, as well as staff in-service training. Mr. Geyer also taught part time as a Computer Education Instructor for the Community Colleges of Spokane, Institute for Extended Learning, from 1993 to 2000. He has also served as a board member of Information Systems Computer Science (ISCS) SFCC Advisory Committee, from 2009 through 2014.

Mr. Geyer has a M.Ed. in Adult Education and B.S degree in Technology: Manufacturing from Eastern Washington University, as well as an A.A.S. in Visual Media Technology from Spokane Falls Community College.

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[10] College of Information Technology at WGU Washington 09.29.2014
[11] Central Washington University MS-ITAM 09.29.2014

The following paragraphs are from Mr. Geyer preliminary review:

"I have reviewed the draft proposal for Spokane Falls Community College's BAS Degree in Information Systems and Technology and think that you have put together a well thought out curriculum. You have balanced the need for technical content and the need for the key general education requirements. This is a critical step, which helps to insure the transferability of the degree beyond the Bachelor's level and into the Master's level programs.

There is an increasing need for the combination of technical skills combined with a bachelor's degree by the current employment market. In the past, a two-year technical degree was sufficient for a graduating student to get hired in the field of IT. This is no longer the case. I have personally worked with many students in Washington State, through my position at EWU, who had a two-year technical degree and several years of job experience, but could not compete or gain employment without a bachelor's degree. This need will not subside in the future as many employers are now requiring a bachelor's degree as the minimum hiring standard.

This degree, as proposed, represents a starting point that can be added to and modified over time. The working world of the IT field has not remained static, and we can expect continuing changes in how companies manage and handle all things relating to data, network, and security management. A time table should be set up for a program review, to help insure the proper timing for these inevitable changes.

This degree program will be very beneficial to the entire Spokane region. Current employers want their hires to have a well-balanced educational background along with technical skills. The IT skill set offered by this proposed program will be beneficial to many diverse companies because IT jobs are imbedded in all businesses."

Mathieu Tallegas is currently program director in Technology Realization in AT&T, for which he has been employed since 2007 in Seattle. Before his position in AT&T, Mr. Tallegas has worked for different start-up companies. Two of these start-ups were based in Spokane and both were very successful and were acquired each for hundreds of millions of dollars by large global telecommunication equipment providers. The first start-up was sold to Alcatel and the second to Ciena, which still operates its Spokane office.

Mr. Tallegas has held various key roles in his career from very technical, having been a software engineer, test engineer, network ASIC engineer and lead architect, to more business focused positions, having been director in charge of product management, product strategy, marketing or technical project management. He is co-inventor of six U.S. patents.

In his career, Mr. Tallegas has hired or helped interview countless new recruits in various technology-related opportunities.

Mr Tallegas has a Masters in Telecommunications and a B.S. degree in Computer Science from France. He also completed his education during his career by taking several business classes at Eastern Washington University in Spokane.

The following paragraphs are from Mr. Tallegas initial review:

"I have reviewed the proposal for a BAS Degree in Information Systems and Technology put forward by Spokane Falls Community College. I strongly support this initiative and believe the skillset taught in this curriculum will be key to the success of its students. The set of core classes covers several necessary topics from virtualization, to design and even includes a project management aspect too often overlooked. This will allow students to either pursue a Master level degree or to directly pursue employment opportunities after successfully completing this program.

As the telecommunication industry transitions to virtualized networks and Software Defined Networks (SDN), the need for graduates with the knowledge highlighted in this curriculum will only increase ten-fold. The lines between IT and telecommunications will blur and disappear within the decade. This will create a unique opportunity for the students graduating this program to pursue employment not only in Spokane, but also in the Seattle job markets and nation-wide.

This degree is a very strong example of what the Spokane technology community as a whole would benefit from, from local companies, hiring managers or motivated individual seeking to acquire the skillset needed for a successful new step in high technology environments."