

Computer and Information Technology, AS

Enhanced Comprehensive Academic Program Review 2015-16

Associate in Science Degrees:

*Computer Information Technology
Computer Networking
Computer Programming and Analysis
Cybersecurity
Web Development*

Certificates:

*Cisco Certified Network Associate
Computer Programmer
Computer Programming Specialist
Computer Support
Cybersecurity
Help Desk Support Specialist
Linux System Administrator
Microsoft Certified Solutions Associate
Web Development*



Academic Effectiveness and Assessment
St. Petersburg College

March 2016



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Executive Summary

Introduction

The program review process at St. Petersburg College (SPC) is a collaborative effort designed to continuously measure and improve the quality of educational services provided to the community.

Program Description

The Internet age has transformed how businesses operate. Today it's hard to find an industry or business that doesn't depend on digital information. At SPC, the College of Computer and Information Technology gives students guided pathways for degrees and certificates in a number of areas and a bachelor's degree in technology management. SPC offers state-of-the art laboratories, equipment and advanced and specialized classes in online or traditional classroom settings.

Degrees Offered

An Associate in Science Degree in Computer Information Technology, Computer Networking, Computer Programming and Analysis, Cybersecurity, and Web Development are offered at SPC. Certificates in Cisco Certified Network Associate, Computer Programmer, Computer Programming Specialist, Computer Support, Cybersecurity, Help Desk Support Specialist, Linux System Administrator, Microsoft Certified Solutions Associate, and Web Development are also offered at SPC.

Program Performance

- *Actual Course Enrollment* increased in 2014 (12,682) from the previous year (12,140).
- *Unduplicated Headcount* increased in 2014 (8,179) from the previous year (7,973).
- *SSH Enrollment* increased in 2014 (33,057) from the previous year (30,762).
- Comparisons between the Fall semesters indicated that the *Percent Full Metric* increased in Fall 2015 (99.3%) from Fall 2014 (92.8%).
- The *course success rate* decreased in 2014 (73%) from the previous year (75%).
- *Grade Distribution* indicated that the majority of students (79%) received an 'A', 'B' or 'C' during 2014 for COMPNET-AS. *Grade Distribution* indicated that the majority of students (72%) received an 'A', 'B' or 'C' during 2014 for CWPA-AS. *Grade Distribution* indicated that the majority of students (77%) received an 'A', 'B' or 'C' during 2014 for ITSC-AS. *Grade Distribution* indicated that the majority of students (75%) received an 'A', 'B' or 'C' during 2014 for TECMGT-AS. *Grade Distribution* indicated that the majority of students (72%) received an 'A', 'B' or 'C' during 2014 for WEBSDM-AS.
- The College of Computer and Information Technology has identified the following *industry certifications*: Cisco Certified Network Associate (CCNA), Cisco Certified Network Associate Security (CCNA Security), Cisco Certified Network Professional (CCNP) Routing & Switching, CompTIA A+ Certifications, CompTIA Linux+, CompTIA Network+, CompTIA Security+, Java Programming Associate, Microsoft Certified Solutions Associate (MCSA)- Windows Server 2012,

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Microsoft Excel, and Microsoft Access. Annual attainment goals for each industry certification are provided within the body of this document.

- *Internship Enrollment* for CIS 2940 remained the same (4) in Fall 2014 and Spring 2015, decreased to (2) students in Summer 2015, and increased to (3) students in Fall 2015. CGS 2940 consisted of (2) students in Fall 2014 and increased in Spring 2015 (3) and Summer 2015 (6), until it decreased in Fall 2015 (2). CNT 2940 consisted of (4) students in Fall 2014 and doubled in Spring 2015 (8) and Summer 2015 (8). In Fall 2015, the number of students more than doubled (9) from Fall 2014. COP 2940 consisted of (6) students in Fall 2014 and almost doubled in Spring 2015 (11). In summer 2015, the number of students decreased (8), but increased again in Fall 2015 (10). CTS 2940 consisted of (8) students in Fall 2014, (7) students in Spring 2015, (8) students in Summer 2015, and (6) in Fall 2015.
- *Program Plans Taken by Plan* revealed that less than half of students who were enrolled in the COMPNET-AS program during fall 2013, and had not graduated, remained in the program by fall 2014. By Fall 2015, less than one-quarter of the original (Fall 2013) COMPNET-AS students remained in the program. This measure does not display the number of students who graduated during any given term. *Program Plans Taken by Plan* revealed that less than half of students who were enrolled in the CWPA-AS program during fall 2013, and had not graduated, remained in the program by fall 2014. By Fall 2015, less than one-quarter of the original (Fall 2013) CWPA-AS students remained in the program. This measure does not display the number of students who graduated during any given term. *Program Plans Taken by Plan* revealed that less than half of students who were enrolled in the ITSC-AS program during fall 2013, and had not graduated, remained in the program by fall 2014. By Fall 2015, less than one-quarter of the original (Fall 2013) ITSC-AS students remained in the program. This measure does not display the number of students who graduated during any given term. *Program Plans Taken by Plan* revealed that about half of students who were enrolled in the TECMGT-AS program during fall 2013, and had not graduated, remained in the program by fall 2014. By Fall 2015, one-fifth of the original (Fall 2013) TECMGT-AS students remained in the program. This measure does not display the number of students who graduated during any given term. *Program Plans Taken by Plan* revealed that more than one-third of students who were enrolled in the WEBSDM-AS program during fall 2013, and had not graduated, remained in the program by fall 2014. By Fall 2015, less than one-fifth of the original (Fall 2013) WEBSDM-AS students remained in the program. This measure does not display the number of students who graduated during any given term.
- The number of *program graduates* in the Computer and Information Technology - AS program increased in 2014 for COMPNET (31), ITSC (16), and WEBSDM (11) from the previous year (21, 9, and 10, respectively). The number of graduates for CWPA (14) and TECMGT (14) decreased in 2014 from the previous year (27 and 15, respectively). There were no graduates reported in either 2013 or 2014 for COMPRG and WEBDS. The number of *program graduates* in the Computer and Information Technology - CT program increased in 2014 for APLS (20), CCNA

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(43), CPS (6), CWPS (7), ITSC (37), ITSEC (7), JAVA (13), MCITPS (18), VBNET (6), and WEBDS (20) from the previous year (6, 29, no data, 3, 21, 2, 6, 16, 2, and 16, respectively). The number of graduates decreased in 2014 for CSHARP (12) from the previous year (13). The number of graduates remained the same for APLUS (1), CPLUS (2), and LINXSA (6) for 2013 and 2014.

- *Fulltime Faculty* taught 46.9% of the ECHs in 2014-15 as compared to 52.3% in 2013-14. Adjunct Faculty taught 53.1% of the ECHs in 2014-15 as compared to 47.7% in 2013-14.
- The highest semester for Adjunct ECHs was Fall 2014-15 in which adjunct faculty taught 56.2% of the program's course load. The three-semester average for adjuncts (53.1%) in 2014-15 is not consistent with the College's general 55/45 Faculty/Adjunct Ratio guideline.

Occupation Profile

- Ten *occupation descriptions*, Information security analysts; Network and computer systems architects and administrators; Computer Network Support Specialists; Computer systems analysts; Computer User Support Specialists; Database Administrators; Web Developers; Computer programmers; Graphic Designers; and Multimedia artists and animators were located in the Florida Department of Economic Opportunity (DEO) for the Computer and Information Technology - AS program.
- The *2014 mean hourly earnings* for Information Security Analysts was \$39.87 in Florida and \$44.50 in Pinellas County. The *2014 mean hourly earnings* for Network and Computer Systems Architects and Administrators was \$38.62 in Florida and \$39.50 in Pinellas County. The *2014 mean hourly earnings* for Computer Network Support Specialists was \$26.58 in Florida and \$28.64 in Pinellas County. The *2014 mean hourly earnings* for Computer Systems Analysts was \$41.92 in Florida and \$41.25 in Pinellas County. The *2014 mean hourly earnings* for Computer User Support Specialists was \$21.55 in Florida and \$22.43 in Pinellas County. The *2014 mean hourly earnings* for Database Administrators was \$37.90 in Florida and \$40.73 in Pinellas County. The *2014 mean hourly earnings* for Web Developers was \$29.37 in Florida and \$29.59 in Pinellas County. The *2014 mean hourly earnings* for Computer Programmers was \$37.00 in Florida and \$36.57 in Pinellas County. The *2014 mean hourly earnings* for Graphic Designers was \$21.57 in Florida and \$19.60 in Pinellas County. The *2014 mean hourly earnings* for Multimedia Artists and Animators was \$25.21 in Florida and \$25.61 in Pinellas County.
- *Employment trend information* for Information Security Analysts showed an average annual increase (17.3% - 23.3%) for the period between 2014 and 2022 across the state and county. *Employment trend information* for Network and Computer Systems Architects and Administrators showed an average annual increase (19.9% - 20.2%) for the period between 2014 and 2022 across the state and county. *Employment trend information* for Computer Network Support Specialists showed an average annual increase (10.1% - 13.1%) for the period between 2014 and 2022 across the state and county. *Employment trend information* for Computer Systems Analysts showed an average annual increase

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(14.9% - 16.8%) for the period between 2014 and 2022 across the state and county. *Employment trend information* for Computer User Support Specialists showed an average annual increase (13.2% - 13.4%) for the period between 2014 and 2022 across the state and county. *Employment trend information* for Database Administrators showed an average annual increase (22.5% - 23.4%) for the period between 2014 and 2022 across the state and county. *Employment trend information* for Web Developers showed an average annual increase (14.3% - 16.8%) for the period between 2014 and 2022 across the state and county. *Employment trend information* for Computer Programmers showed an average annual increase (7.6% - 9.7%) for the period between 2014 and 2022 across the state and county. *Employment trend information* for Graphic Designers showed an average annual increase (8.5% - 10.2%) for the period between 2014 and 2022 across the state and county. *Employment trend information* for Multimedia Artists and Animators showed an average annual increase (6.6% - 6.8%) for the period between 2014 and 2022 across the state and county.

- Some of the *major employers* of the Computer and Information Technology - AS graduates include Cambridge International Systems, Inc.; CW Bill Young Veterans Hospital; Midway Services; PSCU; eIntelligent Solutions; Netwolves; City of St. Petersburg; Tampa Bay Lightning; Empath; St. Petersburg College; Brighthouse Network; and Raymond James.
- *Total Placement* in the Computer and Information Technology - AS program decreased in 2012-13 (80%) from the previous year (82%).
- *State Graduates data* indicated that one-hundred and nineteen students completed one of the seventeen state Computer Programming and Analysis - AS programs in 2012-13, of those 110 had some matching state data and were employed. Seventy-eight percent (78%) of those state graduates were employed at least a full quarter. Although the total number of students who completed one of the five state Information Technology Security - AS programs in 2012-13 was not fully available at the time of this report, *State Graduates data* indicated that 32 graduates had some matching state data and were employed. Ninety-seven percent (97%) of those state graduates were employed at least a full quarter. *State Graduates data* indicated that two-hundred and eighty-one students completed one of the seventeen state Networking Services (i.e., Computer Networking) - AS programs in 2012-13, of those 219 had some matching state data and were employed. Seventy-eight percent (78%) of those state graduates were employed at least a full quarter. *State Graduates data* indicated that ten students completed SPC's Technology Management - AS programs in 2012-13, of those 7 had some matching state data and were employed. Seventy-one percent (71%) of those state graduates were employed at least a full quarter. Although the total number of students who completed one of the twelve state Internet Services Technology (i.e., Web Development) - AS programs in 2012-13 was not fully available at the time of this report, *State Graduates data* indicated that 35 graduates had some matching state data and were employed. Eighty-three percent (83%) of those state graduates were employed at least a full quarter.

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Academics

- The *2014-15 Academic Program Assessment Reports* indicated that the desired results were met for all three Program Learning Outcomes (PLOs) assessed in the Computer Information Technology - AS Program; Computer Networking - AS Program; Computer Programming and Analysis - AS Program; Cybersecurity - AS Program; and Web Development - AS Program.
- The *2014-15 Academic Program Assessment Follow-Up Reports* have not yet been completed for any of the Computer and Information Technology - AS programs.

Stakeholder Perceptions

- All the individual average content area scores for the *Student Survey of Instruction (SSI)* were above the traditional threshold (an average of 5.0) used by the College for evaluating seven-point satisfaction scales. These results suggest general overall satisfaction with the courses within the Computer and Information Technology - AS program; specifically, as they relate to faculty engagement, preparation and organization, and course instruction.
- One-hundred and seventy-six *Recent Alumni surveys* were provided to the 2013-14 graduates of the Computer and Information Technology - AS program. Fourteen percent of the graduates responded to the survey (25 of the 176). Not all respondents answer every survey question; therefore, the percentages listed below represent the responses to each survey question in relation to the total number of responses received for each question.

Notable results include:

- o 32.0% of recent graduate survey respondents indicated their main goal in completing a degree or certificate at SPC was to “Continue my education”; 20.0% selected “Obtain Employment”; 16.0% “Other”; 12.0% selected “Earn more money”; 8.0% said “Change career fields”; another 8.0% said “Meet certification/training needs”; while the remaining 4.0% said “Get a promotion”.
- o 8.0% of recent graduate survey respondents indicated that SPC did “Exceptionally well” in helping them meet their goal; 52.0% selected “Very well”; while another 24.0% said “Adequately”.
- o 72.0% of recent graduate survey respondents would recommend SPC’s Computer and Information Technology, A.S. program to another.
- Four *employer surveys* were sent based on permissions provided by recent graduates in the 2013-14 recent alumni survey. Seventy-five percent of the employers surveyed responded to the survey.

Notable results include:

- o 100.0% of employers responding to the survey indicated they would hire another graduate from SPC.
- o 100.0% of employers responding to the survey had graduate employees who earned \$25.00 or more per hour (\$52,000 or more annually).

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- *Labor Insight/Jobs* reports indicated the majority of workforce openings during the past six months, for Information Security, Network Architects, Computer Systems Architects, and Computer network Support were in Tampa, FL. The top skills listed in the openings were Database Administration and SQL; and the top industry sector was 'professional, scientific, and technical services.

Dean's Perspective: Issues, Trends, and Recent Successes *Issues*

Computer and information technology is critical to virtually every business. Statewide and nationally, qualified IT workers remain in demand as employers are looking for employees with flexible and portable skills who can adapt to ever-changing IT processes. Also, those who specialize in technology's diverse applications may find opportunities in a number of fields and are highly valued.

The College of Computer and Information Technology (CCIT) consists of five Associate of Science degrees: Computer Information Technology, Computer Networking, Computer Programming and Analysis, Cybersecurity and Web Development. Faculty in the five degrees place a high value on preparing students for the workforce by assisting in providing career-ready opportunities, facilitating internships and developing and delivering an excellent IT curriculum.

A career-ready student will have a good grasp of the skills necessary for engaging in today's fast-paced IT world of employment. Managing transitions from school to work in some cases from one occupation along a career pathway to another are needed for students to be employable in the field of IT. These employability skills are acquired in a range of academic and workplace settings as today, most career pathways require some form of postsecondary education. A particular job might require a certificate, a two-year degree, a four-year degree, or even a handful of specialized courses to gain a particular piece of knowledge or a skill.

Career readiness also incorporates engaging in workplace experiences that allow a student to apply academic and technical learning to real-world projects and problems. This starts with career awareness and exploration and includes in many cases internships and or apprenticeships. According to Dr. Bill Law, President of St Petersburg College:

"In today's competitive job market, internships give our students an extra edge by providing valuable community contacts and focused work experience that can lead to full-time jobs. By partnering with St. Petersburg College, local employers help build our community's local workforce while developing well-prepared, new talent for their organization."

CCIT has maintained an up-to-date curriculum throughout the years by aligning its programs to state frameworks and industry trends and standards. Another area of alignment for the IT field is IT industry certification. IT industry certification is a certificate that validates a student's skills and knowledge in a specific area of study. Industry certificates are awarded by a professional group or a vendor and in many cases require periodic renewal making aligning curriculum to industry certifications difficult due to the continued changes.

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Trends

Industry certifications earned through secondary and postsecondary career and technical education programs and courses are an important component of Florida's public education system and in 2007 the Florida Legislature passed the Career and Professional Education Act. The purpose of the Act was to provide a statewide planning partnership between the business and education communities in order to attract, expand, and retain targeted, high-value industry and to sustain a strong, knowledge-based economy.

In a recent IT Career Exploration event hosted at SPC, a panel of local area CIOs and VPs stated that industry certifications were viewed as milestones for specialization and employment in the IT field. The group went on to say that although industry certifications do not demonstrate experience in the field, internships in the student's area of study will provide the entry-level experience.

Recent Successes

Industry Certification and the Curriculum

In the past faculty teaching and developing courses in the CCIT programs did not align curriculum directly to the designated IT industry certification as the state provides frameworks that faculty use to develop Major Learning Outcomes (MLO). These MLOs are used to assess student learning at the course level and faculty have developed instruments such as tests, projects, and/or rubrics for the assessment.

In the Computer Networking AS degree faculty develop MLOs based on industry standards for CompTIA A+, CCNA, and MCSA certification as they are CISCO and Microsoft Academies and are required to use the curriculum materials of those Academies. In other programs individual coursework require students to purchase materials to prepare for IT certification.

Currently CCIT is aligning and comparing the Industry Certification exams with the MLOs and have completed CompTIA A+, CompTIA Network+, CompTIA Linux +, CompTIA Security +, MOS: Microsoft Office Excel, MOS: Microsoft Office Access, and Oracle Java Associate Programmer. CCNA, CCNP and MCSA will be completed by end of year.

Faculty are embedding IT Certification into their courses and encouraging students throughout the course to work towards the industry certification by explaining the value of the certificate. Faculty are identifying the eligibility requirements for recommending students to take the exam such as:

- Pass associated courses with a grade of A or B
- Pass exam prep test in Certification Mode with 85% or better.
- Instructor Approval
- Attend a test prep session

Faculty are being asked also to research additional IT industry certifications that may be of value to be included in the curriculum. And, In addition to the academic requirements

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for course credentialing as specified in the most recent college guidelines, it is preferred that faculty have the current industry certifications associated with the courses in the SPC certificates they are teaching. This will insure that CCIT meets the certification requirements that are becoming a mandate of the state, and that students receive the highest level of instruction in the course content from the most competent instructors.

Career Readiness

To assist students and to provide a guide to success in preparing for workplace experiences, the Career Development Center created a series of twelve video on demand online workshops/webinars on how to search for a job, write a resume, fill out a job application, and prepare for an interview.

Also, to assist the student in tracking their career readiness, the Learning Management System, MyCourses at SPC provides students the ability to develop their own electronic portfolio. An ePortfolio is a collection of items such as course projects, files, images and resumes that allow the students to demonstrate the skills acquired through coursework, career workshops/webinars and internships or apprenticeships. ePortfolios, like traditional [portfolios](#), can facilitate students' reflection on their own learning as well as serve as a tool for storing and organizing the collection of items with the ability to share the items with peers, mentors and prospective employers.

Career Ready Preparedness Plan

CCIT is in the process of implementing a Career Ready Preparedness Program (CRPP) where students set up their ePortfolio and participate in 5 of the 12 online career workshops/webinars identified to prepare CCIT students for their required Internship. CCIT students who participate in the career workshops/webinars must take a quiz for each career workshop/webinar and upon receiving a grade of 70% or better on each quiz, a certificate is issued for the student to post to their ePortfolio.

The CRPP workshops/webinars will be available in selected courses throughout each A.S. program of study and aligned with the prerequisite courses required for the Internship. Each career workshop/webinar must be completed only once provided the certificate is uploaded to the student's ePortfolio. There may be times that students will be out of sequence due to scheduling so students need to take the workshop/webinar for which they do not have a certificate posted in their ePortfolio to meet the requirements of the Internship program.

Internship

All students in the five A.S. degree programs of CCIT are required to enroll in an Internship course. The course is designed to give the student a 'real world' experience with a major-related, supervised and evaluated practical work experience. Each A.S. program has a set of required support and major courses that must be completed with a 'C' or better prior to students being enrolled in the internship course. These courses set the foundation for the program competencies that students must meet at a 70% or higher level to demonstrate proficiency in the A.S. program. Once a student reaches the point in their coursework where they are ready to seek an internship, the student works on the following next step checklist:

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- Complete the internship prerequisite courses listed for your program.
- Complete the following workshops: Career Services Overview, Resume Exposure, How to Interview, Growing Connections, Interview Preparation, How to Get Hired.
- Complete the Application and submit with an employer ready resume to Internship Office before the deadline.
- Complete a disclosure form for a background check and submit to the Internship Office.
- Begin your Internship search after receiving approval from the Internship Office.
- Inform the Internship Office when you secure your internships and provide the Internship Coordinator with a position description.
- We will register you for the course.
- Attend the Internship Orientation and/or meet face to face with your instructor

End-of-Program Assessment

The implementation of a new structured End-of-Program assessment procedure that evaluates each Program Learning Outcome (PLO) will provide a more precise assessment of the A.S. programs in CCIT. Aligning PLOs to the curriculum and identifying specific areas that demonstrate whether students have met the criteria set forth, will be an asset to the programs continued evaluation and evolution.

Each A.S. program has a defined set of outcomes that students must demonstrate at the program level. These outcomes, program competencies and assessment methods are specific to each A.S. degree. In 2014-2015 the faculty in CCIT worked in disciplines to review and renew PLOs for each A.S. degree.

The faculty also developed a model for assessing the End of Program goals and outcomes, and designated the Internship course to host a rubric for the assessment as all students are required to take the Internship course. And, because the Internship course allows students to work with local industry, and can be used to validate the outcomes and quality of the program, each A.S. degree.



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Recommendations/Action Plan

Program Recommendations and action plans are compiled by the Dean and Program Administrators, and are located at the end of the document.



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SPC Mission Statement

The mission of St. Petersburg College is to promote student success and enrich our communities through education, career development and self-discovery. St. Petersburg College fulfills its mission led by an outstanding, diverse faculty and staff and enhanced by advanced technologies, distance learning, international education opportunities, innovative teaching techniques, comprehensive library and other information resources, continuous institutional self-evaluation, a climate for student success, and an enduring commitment to excellence.

Introduction

In a holistic approach, the effectiveness of any educational institution is the aggregate value of the education it provides to the community it serves. For over eighty-five years, St. Petersburg College (SPC) has provided a wide range of educational opportunities and services to a demographically diverse student body producing tens of thousands of alumni who have been on the forefront of building this county, state, and beyond. This is due, in large part, to the College's institutional effectiveness.

Institutional Effectiveness

Institutional Effectiveness is the integrated, systematic, explicit, and documented process of measuring performance against the SPC mission for the purposes of continuous improvement of academic programs, administrative services, and educational support services offered by the College.

Operationally, the institutional effectiveness process ensures that the stated purposes of the College are accomplished. In other words did the institution successfully execute its mission, goals, and objectives? At SPC, the Department of Academic Effectiveness works with all departments and units to establish measurable statements of intent that are used to analyze effectiveness and to guide continuous quality improvement efforts. Each of St. Petersburg College's units is required to participate in the institutional effectiveness process.

The bottom-line from SPC's institutional effectiveness process is improvement. Once SPC has identified what it is going to do then it acts through the process of teaching, researching, and managing to accomplish

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its desired outcomes. The level of success of SPC's actions is then evaluated. A straightforward assessment process requires a realistic consideration of the intended outcomes that the institution has set and a frank evaluation of the evidence that the institution is achieving that intent.

There is no single right or best way to measure success, improvement, or quality. Nevertheless, objectives must be established, data related to those objectives must be collected and analyzed, and the results of those findings must be used to improve the institution in the future. The educational assessment is a critical component of St. Petersburg College's institutional effectiveness process.

Educational Assessment

Educational programs use a variety of assessment methods to improve their effectiveness. Assessment and evaluation measures are used at various levels throughout the institution to provide provosts, deans, program managers, and faculty vital information on how successful our efforts have been.

While the focus of a particular educational assessment area may change, the assessment strategies remain consistent and integrated to the fullest extent possible. The focus of Associate in Arts degrees is students continuing on to four-year degree programs. The Associate in Science programs are targeted towards students seeking employable skills, which does not require but may include continuing on to a four-year program. The General Education based assessments focus on the general learning outcomes from all degree programs, while Program Review looks at the viability of the specific programs.

The individual reports unique by their individual nature are nevertheless written to address how the assessments and their associated action plans have improved learning in their program. The College has developed an Educational Assessment Website <http://www.spcollege.edu/edoutcomes/> to serve as repository for all SPC's educational outcomes reports and to systematically manage our assessment efforts.





Program Review Process

The program review process at St. Petersburg College is a collaborative effort to continuously measure and improve the quality of educational services provided to the community. The procedures described below go far beyond the “periodic review of existing programs” required by the Florida College System, and exceed the necessary guidelines within the Southern Association of Community Colleges and Schools Commission on Colleges (SACSCOC) review procedures.

State guidelines require institutions to conduct program reviews every seven years as mandated in chapter 1001.03(13) of the Florida Statutes, the State Board of Education (formerly the Florida Board of Education) must provide for the review of all academic programs.

(13) ...CYCLIC REVIEW OF POSTSECONDARY ACADEMIC PROGRAMS.--The State Board of Education shall provide for the cyclic review of all academic programs in Florida College System institutions at least every 7 years. Program reviews shall document how individual academic programs are achieving stated student learning and program objectives within the context of the institution's mission. The results of the program reviews shall inform strategic planning, program development, and budgeting decisions at the institutional level.

In addition, Rule 6A-14.060 (5) states that each community college shall:

(5) ...Develop a comprehensive, long-range program plan, including program and service priorities. Statements of expected outcomes shall be published, and facilities shall be used efficiently to achieve such outcomes. Periodic evaluations of programs and services shall use placement and follow-up data, shall determine whether expected outcomes are achieved, and shall be the basis for necessary improvements.

The recommended program review timeline at SPC is four years and is aligned with the long-standing three-year academic program assessment cycle, producing a coherent and integrated review process. Figure 1

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represents the relationship between program assessment, program review, and the viability report processes that comprise the academic program assessment cycle.

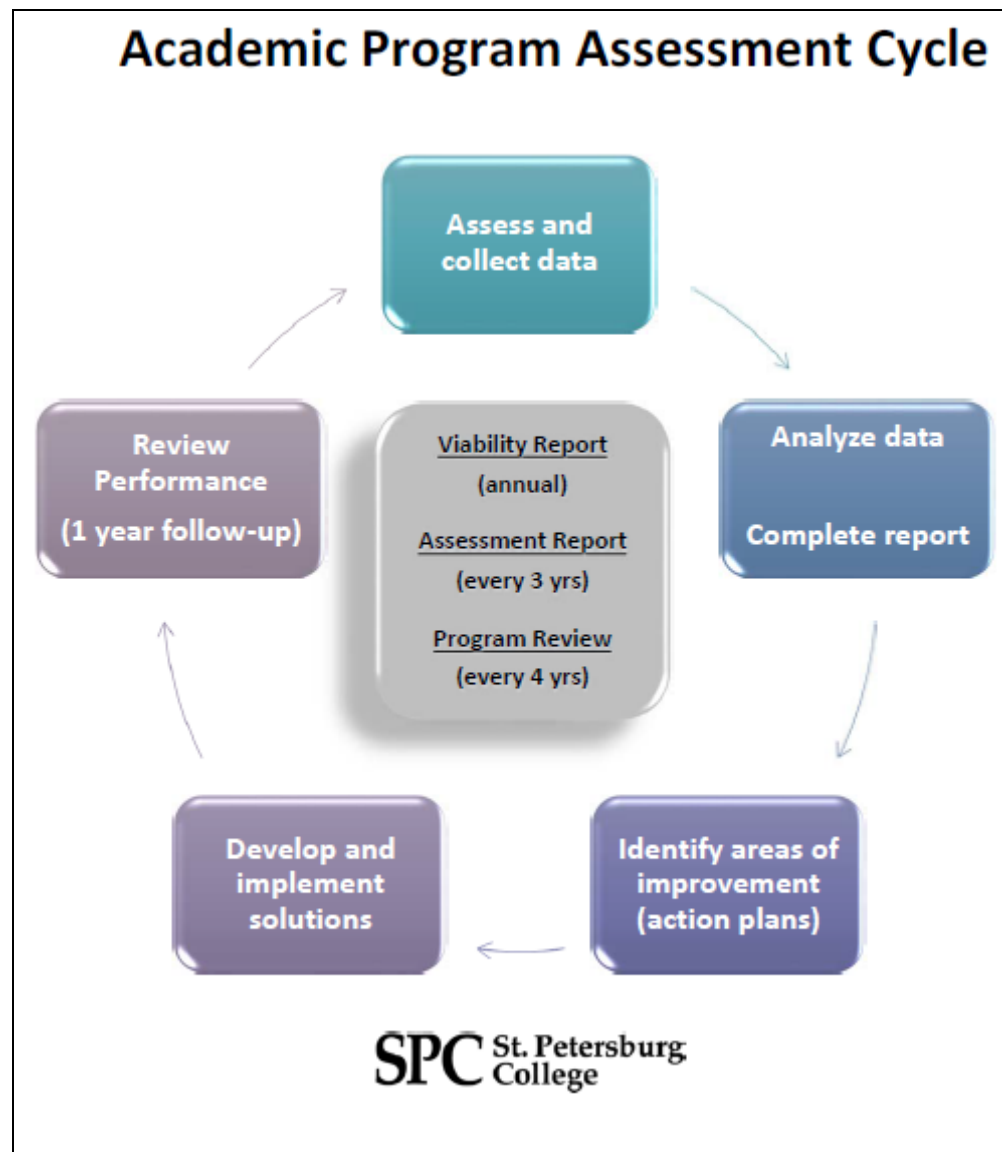


Figure 1: Academic Program Assessment Cycle

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Program Description

The Internet age has transformed how businesses operate. Today it's hard to find an industry or business that doesn't depend on digital information. At SPC, the College of Computer and Information Technology gives students guided pathways for degrees and certificates in a number of areas and a bachelor's degree in technology management. SPC offers state-of-the art laboratories, equipment and advanced and specialized classes in online or traditional classroom settings.

Degrees Offered

An Associate in Science Degree in Computer Information Technology, Computer Networking, Computer Programming and Analysis, Cybersecurity, and Web Development are offered at SPC. Certificates in Cisco Certified Network Associate, Computer Programmer, Computer Programming Specialist, Computer Support, Cybersecurity, Help Desk Support Specialist, Linux System Administrator, Microsoft Certified Solutions Associate, and Web Development are also offered at SPC.

For a complete listing of all courses within the Computer and Information Technology Program, please see Appendix A.

Accreditation

No accreditation information is on file for the Computer and Information Technology program.

Program Learning Outcomes

Computer Networking (AS)

1. Utilize analytical and critical thinking skills to provide technical support and troubleshooting services to end-users who need computer hardware or software assistance.
2. Identify network security threats and implement strategies to mitigate those threats within a diverse network environment.
3. Summarize and explain a "real-world" experience with a major related, supervised, and evaluated work experience internship.

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Computer Programming and Analysis (AS)

1. Develop dynamic web content and transaction-based web systems that work with multiple programming language platforms.
2. Develop strategies for managing data while in accordance with industry standards.
3. Summarize and explain a “real-world” experience with a major related, supervised, and evaluated work experience internship.

Cybersecurity (AS)

1. Develop an Information Technology Security infrastructure that offers a mix of technology and management processes.
2. Exhibit the characteristics needed of an Information Technology Security Specialist, including problem solving, analytical and technical skills.
3. Summarize and explain a “real-world” experience with a major related, supervised, and evaluated work experience internship.

Computer Information Technology (AS)

1. Apply contemporary technology resources that promote effective company management.
2. Using technology industry standard frameworks, evaluate technical problems and plans to identify solutions that enhance the success of a business enterprise.
3. Summarize and explain a “real-world” experience with a major related, supervised, and evaluated work experience internship.

Web Development (AS)

1. Create a web site structure that incorporates wireframe designs, functionality specifications, and organizational requirements.
2. Create an interactive flexible web site using current development technologies and languages.
3. Summarize and explain a “real-world” experience with a major related, supervised, and evaluated work experience internship.



Measure Descriptions

The CAPR reports include twenty-three measures designed to provide an overview of all the various elements pertaining to the program. The source of the information for nine of the first ten measures is the Program Review CAPR Dashboard in the SPC Pulse/Business Intelligence system. Sources for the remaining measures can be found within their measure description. Measures obtained from SPC Pulse/Business Intelligence were extracted between March 1 and July 1, 2015. Each measure is described in detail below.

Measure #1: *Actual Course Enrollment (Enrollment Count)*

Actual Course Enrollment is the sum of actual student enrollment for the courses within the specified Academic Organization during the selected academic years. This number is a duplicated headcount of students enrolled in the program's courses, and does not reflect the actual number of students enrolled in the program or its associated certificates (if applicable). The filters for the Actual Course Enrollment measure are as follows:

- **Academic Year - Term Desc - Multi:** 2011, 2012, 2013, 2014
- **Academic Plan - Multi:** Undergraduate
- **College - Group - Acad Org - Subject:** Academic Organization
- **All other filters:** All

Measure #2: *Unduplicated Headcount*

Unduplicated Headcount is the total number of unduplicated students enrolled in courses within the specified Academic Organization during the selected academic years. The filters for the Unduplicated Headcount measure are as follows:

- **Academic Year - Term Desc - Multi:** 2011, 2012, 2013, 2014
- **Academic Plan - Multi:** Undergraduate
- **College - Group - Acad Org - Subject:** Academic Organization
- **All other filters:** All

Measure #3: *SSH Enrollment*

Student Semester Hours (SSH) Enrollment is defined as the total number of student semester hours in the specified Academic Organization during the selected academic years. The filters for the SSH Enrollment measure are as follows:

- **Academic Year - Term Desc - Multi:** 2011, 2012, 2013, 2014
- **Academic Plan - Multi:** Undergraduate
- **College - Group - Acad Org - Subject:** Academic Organization

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- **All other filters:** All

Measure #4: Percent Full

The Percent Full metric is the actual enrollment count of the specified Academic Organization divided by the Standard Course Load (SCL) for the selected academic terms. The filters for the Percent Full metric are as follows:

- **Academic Year - Term Desc - Multi:** 2014-15 Fall, Spring, Summer; 2015-16 Fall
- **College - Group - Acad Org - Subject:** Academic Organization
- **Class Status:** Active, Full, Stop Further Enrollment
- **All other filters:** All

Measure #5: Course Success (Performance)

The Performance measure is defined as the number of students successfully completing a course with a grade of A, B, or C (success rate), divided by the total number of students enrolled in courses within the Academic Organization during the selected academic years. The filters for the Performance measure are as follows:

- **Academic Year - Term Desc - Multi:** 2011, 2012, 2013, 2014
- **Academic Plan - Multi:** Undergraduate
- **College - Group - Acad Org - Subject:** Academic Organization
- **All other filters:** All

Measure #6: Grade Distribution

The Grade Distribution measure reports the number of students receiving an A, B, C, D, F, N, W, or WF in courses within the academic program plan during the selected academic years. The filters for the Grade Distribution measure are as follows:

- **Academic Year - Term Desc - Multi:** 2011, 2012, 2013, 2014
- **Academic Plan - Multi:** Program Plan
- **All other filters:** All

Measure #7: Industry Certification Attainment

The Industry Certification Attainment measure reports the number of students in the program plan that have attained an industry certification or have passed a licensing exam. *Source: SPC Factbook, Table 9; Workforce database of student certifications.*

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Measure #8: Internship Enrollment (Course Groups)

The Internship Enrollment measure reports the number of students enrolled in clinical, practicum, or internship courses within the program plan during the selected academic years. The filters for the Internship Enrollment measure are as follows:

- **Academic Year - Term Desc - Multi:** 2014-15 Fall, Spring, Summer; 2015-16 Fall
- **Academic Plan - Multi:** Program Plan
- **All other filters:** All

Measure #9: Program Plans Taken by Plan

The Program Plans Taken by Plan measure reports the number of students in the specified program plan in a selected cohort (by Term) that have continued in the plan, and the number of students that have since transferred to other plans, for the selected academic terms or years. The filters for the Program Plans Taken by Plan measure are as follows:

- **Student Cohort Student Term History Academic Year-Term Desc:** 2013-14 Fall
- **Enroll History Acad Term Desc (must be same as above):** 2013-14 Fall
- **Student Term History Academic Plan:** Applicable Program plan
- **Comparison Filters**
Academic Year - Term Desc - Multi: 2013-14 Fall, Spring, Summer; 2014-15 Fall, Spring, Summer; 2015-16 Fall
- **All other filters:** All

Measure #10: Graduates

The Graduates measure depicts the total number of graduates within specified program plan(s) associated with the Academic Organization, for the selected academic years. The filters for the Graduates measure are as follows:

- **Academic Year - Term Desc - Multi:** 2011, 2012, 2013, 2014
- **Graduation Degree Plan Subplan - Multi:** All Applicable Program Plans
- **All other filters:** All

**Measure #11: Faculty/Adjunct Ratio**

The Faculty/Adjunct Ratio measure reports the number and percentage of program equated credit hours (ECHs) taught by the individual faculty classifications. Source: PeopleSoft Student Administration System: Faculty/Adjunct Ratio Report (S_FACRAT).

Measure #12: Revenue and Expenses (will be available by December 2016)**Measure #13: Capital Expenditures** (will be available by December 2016)**Measure #14: National, State, and County Trends and Wage Information**

Employment trend information is reported by state and county. Jobs (2014) refers to the average annual job openings due to growth and net replacement; % Change (2014-2022) depicts the percent change in the number of annual job openings during the eight-year period; and Mean Earnings refers to the average earnings for the specified job title. Source: Florida Department of Economic Opportunity (DEO) <http://www.floridajobs.org/labor-market-information/data-center/statistical-programs/employment-projections>

Measure #15: Major Employers

Major employers consist of the primary local employers of SPC graduates. These names are obtained from the Recent Alumni Survey Report and Program Administrators.

Measure #16: Total Placement

Total Placement is the percentage of students who have enlisted in the military, are continuing their education, or are employed in their field within the first year of graduation. Source: FETPIP Florida College System Vocational Reports <http://www.fldoe.org/accountability/fl-edu-training-placement-info-program/fl-college-system-vocational-reports.stml>.

Measure #17: State Graduates Outcomes

State graduates outcomes provide reference data for the employment trend data. Specifically, data on former students and program participants who have graduated, exited or completed a public or training program within the State of Florida are documented. Source: FETPIP Florida College System Vocational Reports <http://www.fldoe.org/accountability/fl-edu-training-placement-info-program/fl-college-system-vocational-reports.stml>.

Measure #18: Educational Outcomes

End-of-program assessment data that are reported in the program's most recent Academic Program Assessment Report (APAR) are summarized and reported with

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the program's learning outcomes, means of assessment, and information about the program's next assessment report.

Measure #19: *Three-Year Course Review* (will be available by December 2016)

Measure #20: *Student Survey of Instruction*

The Student Survey of Instruction (SSI) is electronically distributed to all students enrolled in traditional classroom sections, lab courses and self-paced or directed individual study, and online courses at the College. The purpose of the SSI is to acquire information on student perception of the quality of courses, faculty, and instruction, and to provide feedback information for improvement.

Measure #21: *Recent Alumni Survey*

Recent alumni surveys are administered to measure alumni satisfaction with SPC's education programs. The Recent Alumni Survey collects information related to career preparation, preparation for continuing education, and the current employment information and educational status of former students. Recent Alumni are surveyed six months after they graduate from SPC.

Measure #22: *Employer Survey*

Employer surveys are used to measure employer satisfaction with SPC graduates. Employers evaluate graduates from Bachelor of Science/Bachelor of Applied Science (BS/BAS), Associate in Science/Associate in Applied Science (AA/AS), and certificate programs. Surveys are sent to employers of recent graduates annually each spring semester.

Measure #23: *Labor Insight/Jobs*

Labor Insight/Jobs provides a variety of reports which are based on current workforce openings. Reports are available by occupations, top titles, education and experience, top skills, top industry sectors, top employers, salary distributions, and job counts. Filters allow the user to select a timeframe, geographic location, and job title. A license is required to access Burning Glass at <http://laborinsight.burning-glass.com/>



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Program Performance



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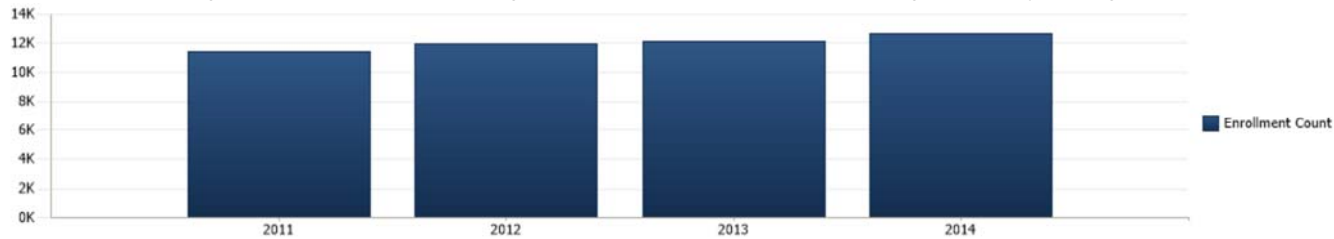
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CAPR > Enrollment

[Enrollment](#) | [Performance](#) | [Percent Full](#) | [Graduates](#) | [Grade Distribution](#) | [Course Groups](#) | [Program Plans Taken by Plan](#)

Enrollment Count Graph

Student Term Career - Program - Plan - Subplan: **UGRD**, Class College School Dept - Academic Group Desc - Academic Organization - Subject Catalog Nbr: **CIT-LD**, Class Academic ...



Enrollment Count

Student Term Career - Program - Plan - Subplan: **UGRD**, Class College School Dept - Academic Group Desc - Academic Organization - Subject Catalog Nbr: **CIT-LD**, Class Academic ...

Term Academic Year - Term Desc	Enrollment Count
▶ 2011	11,377
▶ 2012	11,979
▶ 2013	12,140
▶ 2014	12,682

Student System Cube Refresh

Last Refresh:	5/6/2016 7:01:27 AM
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Academic Year - Term Desc - Multi 2011, 2012, 2013, 2014Campus Description AllAcademic Plan - Multi AllCollege - Group - Acad Org - Subject CIT-LDCourse Instructional Method AllStudent Type (FTIC) AllClass Academic Group AllAge Group AllEthnic Group AllGender AllCustom Cohort AllStudent Group AllCourse Group All

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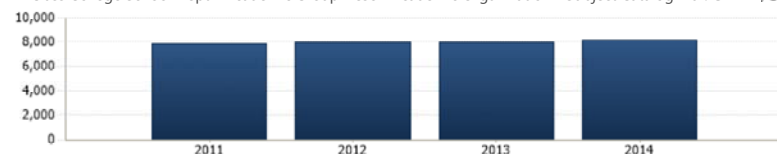
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Academic Program Viability Report > Enrollment

[Enrollment](#) | [Performance](#) | [Percent Full](#) | [Graduates](#) | [Course Groups](#)

Unduplicated Student Count Graph

Class College School Dept - Academic Group Desc - Academic Organization - Subject Catalog Nbr: **CIT-LD, St...**



Unduplicated Student Count

Class College School Dept - Academic Group Desc - Academic Organization - Subject Catalog Nbr: **CIT-LD, St...**

Term Academic Year - Term Desc	Unduplicated Student Count
▸ 2011	7,816
▸ 2012	7,979
▸ 2013	7,973
▸ 2014	8,179

Student System Cube Refresh

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Academic Year - Term Desc - Multi 2011, 2012, 2013, 2014 ▾

Campus Description All ▾

Career - Program - Plan - Subplan - Multi Undergraduate ▾

College - Group - Acad Org - Subject CIT-LD ▾

Course Instructional Method All ▾

Student Type (FTIC) All ▾

Age Group All ▾

Ethnic Group All ▾

Gender All ▾

Custom Cohort All ▾

Student Group All ▾

Course Group All ▾

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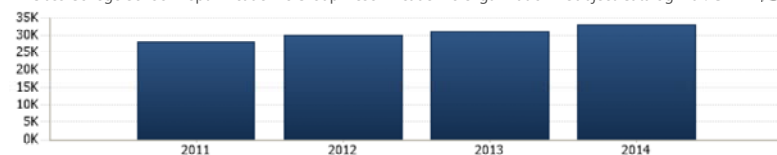
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Academic Program Viability Report > Enrollment

[Enrollment](#) | [Performance](#) | [Percent Full](#) | [Graduates](#) | [Course Groups](#)

SSH Enrollment Graph

Class College School Dept - Academic Group Desc - Academic Organization - Subject Catalog Nbr: **CIT-LD, St...**

SSH Enrollment

Class College School Dept - Academic Group Desc - Academic Organization - Subject Catalog Nbr: **CIT-LD, St...**

Term Academic Year - Term Desc	Units Taken
▸ 2011	27,676
▸ 2012	29,909
▸ 2013	30,762
▸ 2014	33,057

Student System Cube Refresh

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Academic Year - Term Desc - Multi 2011, 2012, 2013, 2014 ▾

Campus Description All ▾

Career - Program - Plan - Subplan - Multi Undergraduate ▾

College - Group - Acad Org - Subject CIT-LD ▾

Course Instructional Method All ▾

Student Type (FTIC) All ▾

Age Group All ▾

Ethnic Group All ▾

Gender All ▾

Custom Cohort All ▾

Student Group All ▾

Course Group All ▾

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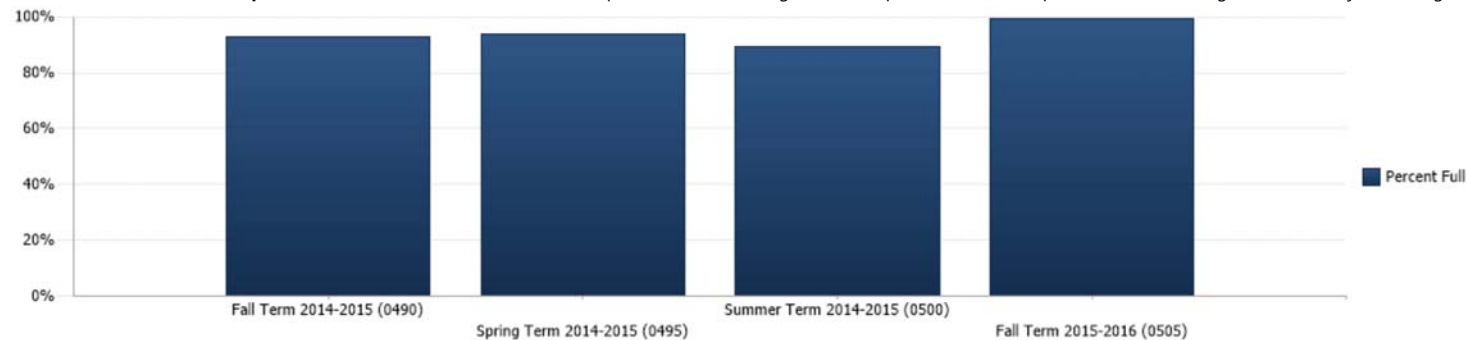
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Academic Program Viability Report > Percent Full

Enrollment | Performance | [Percent Full](#) | Graduates | Course Groups

Percent Full Metric Graph

Class Status: Active, Full, Stop Further Enrollment, Class Academic Group: **LD, UD**, Class College School Dept - Academic Group Desc - Academic Organization - Subject Catalog N...



Student System Cube Refresh

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Academic Year - Term Desc - Multi [Fall Term](#)

Campus Description [All](#)

College - Group - Acad Org - Subject [CIT-LD](#)

Course Instructional Method [All](#)

Class Status [Active, Full, Stop Further Enrollm](#)

Student Group [All](#)

Course Group [All](#)

Percent Full Metric by Instructional Method

Class Status: Active, Full, Stop Further Enrollment, Class Academic Group: **LD, UD**, Class College School Dept - Academic Group Desc - Academic Organization - Subject Catalog N...

Term Academic Year - Term Desc	Measures	All	Blended	Face-to-Face	Independent Study	Online
Fall Term 2014-2015 (0490)	Enrollment Count	5,331	903	832	2	3,594
Fall Term 2014-2015 (0490)	Standard Course Load	5,740	1,024	1,034	10	3,672
Fall Term 2014-2015 (0490)	Percent Full	92.8%	88.2%	80.5%	20.0%	97.8%
Spring Term 2014-2015 (0495)	Enrollment Count	5,139	856	702	3	3,578
Spring Term 2014-2015 (0495)	Standard Course Load	5,474	992	808	10	3,664
Spring Term 2014-2015 (0495)	Percent Full	93.9%	86.2%	86.9%	30.0%	97.7%
Summer Term 2014-2015 (0500)	Enrollment Count	2,213	196	494	4	1,519
Summer Term 2014-2015 (0500)	Standard Course Load	2,472	240	672	24	1,536
Summer Term 2014-2015 (0500)	Percent Full	89.5%	81.7%	73.5%	16.7%	98.9%
Fall Term 2015-2016 (0505)	Enrollment Count	6,217	989	985	5	4,238
Fall Term 2015-2016 (0505)	Standard Course Load	6,260	1,112	1,074	26	4,048
Fall Term 2015-2016 (0505)	Percent Full	99.3%	88.9%	91.7%	19.2%	104.7%

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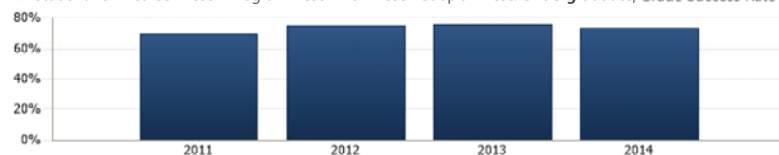
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Academic Program Viability Report > Performance

Enrollment | [Performance](#) | Percent Full | Graduates | Course Groups

Success Rate Graph

Student Term Career Desc - Program Desc - Plan Desc - Subplan Desc: **Undergraduate**, Grade Success Rate %...

Performance

Student Term Career Desc - Program Desc - Plan Desc - Subplan Desc: **Undergraduate**, Grade Success Rate %...

Term Academic Year - Term Desc	Enrollment Count	Success Rate	Withdrawal Rate	F Rate	WF Rate
2011	11,362	69.2%	10.9%	8.6%	7.2%
2012	11,969	74.2%	8.3%	7.4%	6.2%
2013	12,126	75.2%	8.1%	7.4%	6.4%
2014	12,673	73.2%	8.6%	8.0%	7.3%

Student System Cube Refresh

Last Refresh:	9/29/2015 4:59:21 AM
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Academic Year - Term Desc - Multi 2011, 2012, 2013, 2014

Campus Description All

Career - Program - Plan - Subplan - Multi Undergraduate

College - Group - Acad Org - Subject CIT-LD

Course Instructional Method All

Student Type (FTIC) All

Age Group All

Ethnic Group All

Gender All

Student Group All

Course Group All

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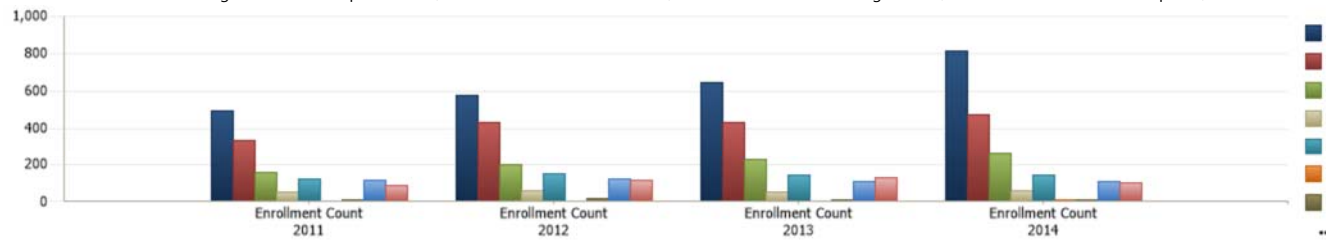
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CAPR > Grade Distribution

Enrollment | Performance | Percent Full | Graduates | [Grade Distribution](#) | Course Groups | Program Plans Taken by Plan

Student Grade Distribution Graph

Student Term Career - Program - Plan - Subplan: **UGRD**, Academic Plan: **COMPNET-AS**, Grade Success Rate Grading Basis: **Y**, Grade Success Rate Grade Input: **Y**, Class Academic Cal...

Student Grade Distribution

Student Term Career - Program - Plan - Subplan: **UGRD**, Academic Plan: **COMPNET-AS**, Grade Success Rate Grading Basis: **Y**, Grade Success Rate Grade Input: **Y**, Class Academic Cal...

	Enrollment Count									
	All									
Term Academic Year - Term Desc		A	B	C	D	F	I	N	W	WF
▶ 2011	1,373	494	338	154	51	124		8	116	88
▶ 2012	1,669	577	429	194	62	151		19	121	116
▶ 2013	1,745	649	430	226	51	144		11	107	127
▶ 2014	1,967	814	472	261	60	144	2	6	109	99

Student System Cube Refresh

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Academic Year - Term Desc - Multi 2011, 2012, 2013, 2014Campus Description AllAcademic Plan - Multi COMPNET-ASCourse Instructional Method AllStudent Type (FTIC) AllClass Academic Group AllAge Group AllEthnic Group AllGender AllStudent Group AllCourse Group All

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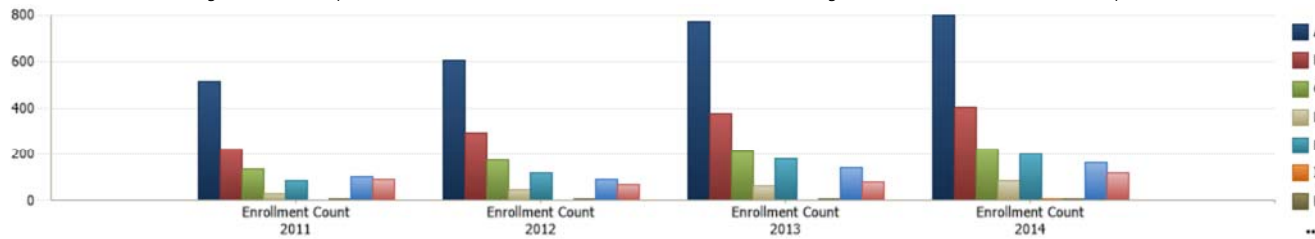
Strategic Initiatives

CAPR > Grade Distribution

Enrollment | Performance | Percent Full | Graduates | [Grade Distribution](#) | Course Groups | Program Plans Taken by Plan

Student Grade Distribution Graph

Student Term Career - Program - Plan - Subplan: **UGRD**, Academic Plan: **CWPA-AS**, Grade Success Rate Grading Basis: **Y**, Grade Success Rate Grade Input: **Y**, Class Academic Career...



Student Grade Distribution

Student Term Career - Program - Plan - Subplan: **UGRD**, Academic Plan: **CWPA-AS**, Grade Success Rate Grading Basis: **Y**, Grade Success Rate Grade Input: **Y**, Class Academic Career...

	Enrollment Count									
	All									
Term Academic Year - Term Desc		A	B	C	D	F	I	N	W	WF
▶ 2011	1,183	518	222	134	28	88		4	100	89
▶ 2012	1,408	605	297	176	49	121		3	90	67
▶ 2013	1,833	770	381	212	64	181		6	140	79
▶ 2014	1,997	797	408	223	84	200	3	3	162	117

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Last Refresh:	5/6/2016 7:01:27 AM
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Academic Year - Term Desc - Multi 2011, 2012, 2013, 2014

Campus Description All

Academic Plan - Multi CWPA-AS

Course Instructional Method All

Student Type (FTIC) All

Class Academic Group All

Age Group All

Ethnic Group All

Gender All

Student Group All

Course Group All

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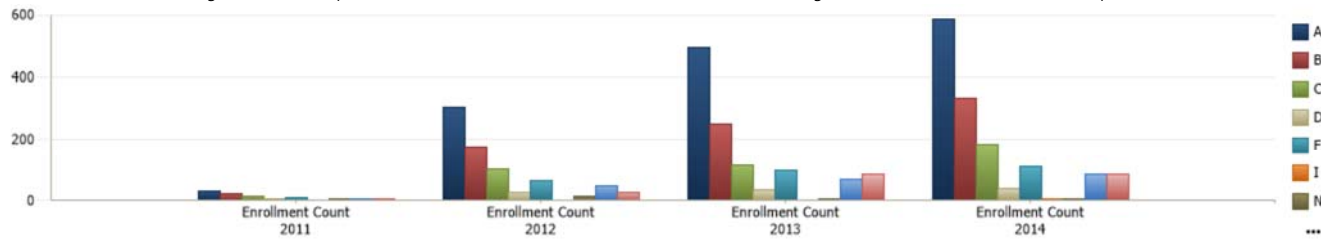
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CAPR > Grade Distribution

Enrollment | Performance | Percent Full | Graduates | [Grade Distribution](#) | Course Groups | Program Plans Taken by Plan

Student Grade Distribution Graph

Student Term Career - Program - Plan - Subplan: **UGRD**, Academic Plan: **ITSC-AS**, Grade Success Rate Grading Basis: **Y**, Grade Success Rate Grade Input: **Y**, Class Academic Career: **U...**

Student Grade Distribution

Student Term Career - Program - Plan - Subplan: **UGRD**, Academic Plan: **ITSC-AS**, Grade Success Rate Grading Basis: **Y**, Grade Success Rate Grade Input: **Y**, Class Academic Career: **U...**

	Enrollment Count									
	All									
Term Academic Year - Term Desc		A	B	C	D	F	I	N	W	WF
▶ 2011	96	30	22	13	6	12		1	6	6
▶ 2012	765	304	178	103	27	64		14	48	27
▶ 2013	1,155	494	250	116	37	98		6	70	84
▶ 2014	1,431	586	335	183	39	110	2	7	84	85

Student System Cube Refresh

Last Refresh:	5/6/2016 7:01:27 AM
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Academic Year - Term Desc - Multi **2011, 2012, 2013, 2014**Campus Description **All**Academic Plan - Multi **ITSC-AS**Course Instructional Method **All**Student Type (FTIC) **All**Class Academic Group **All**Age Group **All**Ethnic Group **All**Gender **All**Student Group **All**Course Group **All**

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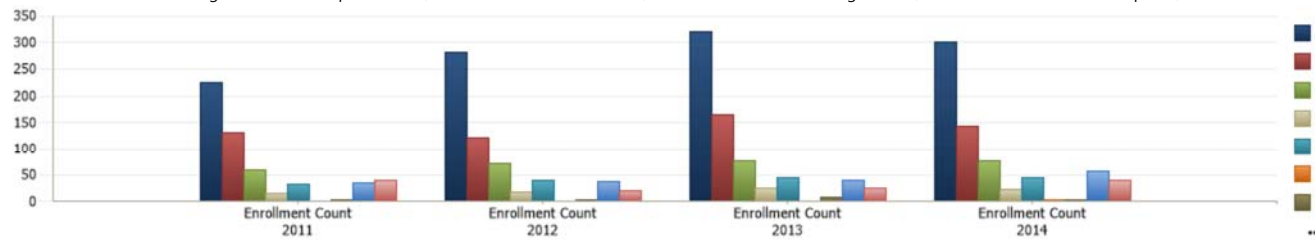
SPC-Business Intelligence

Strategic Initiatives

CAPR > Grade Distribution

Enrollment | Performance | Percent Full | Graduates | [Grade Distribution](#) | Course Groups | Program Plans Taken by Plan

Student Grade Distribution Graph

Student Term Career - Program - Plan - Subplan: **UGRD**, Academic Plan: **TECMGT-AS**, Grade Success Rate Grading Basis: **Y**, Grade Success Rate Grade Input: **Y**, Class Academic Calendar...

Student Grade Distribution

Student Term Career - Program - Plan - Subplan: **UGRD**, Academic Plan: **TECMGT-AS**, Grade Success Rate Grading Basis: **Y**, Grade Success Rate Grade Input: **Y**, Class Academic Calendar...

	Enrollment Count									
	All									
Term Academic Year - Term Desc		A	B	C	D	F	I	N	W	WF
► 2011	545	226	133	60	16	33		3	35	39
► 2012	598	283	123	72	18	41		2	38	21
► 2013	708	320	166	77	25	44		9	41	26
► 2014	689	301	143	75	22	45	1	3	58	41

Student System Cube Refresh

Last Refresh:	5/6/2016 7:01:27 AM
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Academic Year - Term Desc - Multi 2011, 2012, 2013, 2014 ▼Campus Description AllAcademic Plan - Multi TECMGT-AS ▼Course Instructional Method All ▼Student Type (FTIC) AllClass Academic Group All ▼Age Group AllEthnic Group AllGender AllStudent Group All ▼Course Group All ▼

SharePoint

Newsfeed OneDrive Sites Robert Mohr III ?



One College Support

Academic Departments

College Administration

Committees & Groups

Executive Leadership

SPC Locations

SPC-Business Intelligence

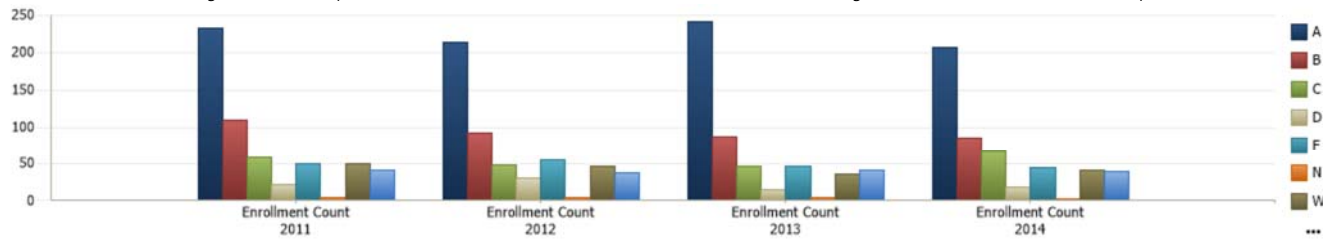
Strategic Initiatives

CAPR > Grade Distribution

Enrollment | Performance | Percent Full | Graduates | [Grade Distribution](#) | Course Groups | Program Plans Taken by Plan

Student Grade Distribution Graph

Student Term Career - Program - Plan - Subplan: **UGRD**, Academic Plan: **WEBSDM-AS**, Grade Success Rate Grading Basis: **Y**, Grade Success Rate Grade Input: **Y**, Class Academic Cal...



Student Grade Distribution

Student Term Career - Program - Plan - Subplan: **UGRD**, Academic Plan: **WEBSDM-AS**, Grade Success Rate Grading Basis: **Y**, Grade Success Rate Grade Input: **Y**, Class Academic Cal...

	Enrollment Count								
	All								
Term Academic Year - Term Desc		A	B	C	D	F	N	W	WF
▶ 2011	567	233	110	58	22	50	4	49	41
▶ 2012	526	214	93	48	30	55	4	45	37
▶ 2013	512	241	87	45	15	45	4	35	40
▶ 2014	502	207	85	67	18	44	2	40	39

Student System Cube Refresh

Last Refresh:	5/6/2016 7:01:27 AM
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Academic Year - Term Desc - Multi 2011, 2012, 2013, 2014

Campus Description All

Academic Plan - Multi WEBSDM-AS

Course Instructional Method All

Student Type (FTIC) All

Class Academic Group All

Age Group All

Ethnic Group All

Gender All

Student Group All

Course Group All

Industry Certification Attainment

Discipline/Certification	New in 2015-16?	Program	Earned 2013 - 2014	Earned 2014 - 2015	Annual Goal 14-15	Annual Goal 2015 - 2016
Computer & Information Technology			27	83	307	106
Cisco Certified Network Associate (CCNA)		Computer Networking AS	5	20	17	20
Cisco Certified Network Associate Security (CCNA Security)		Computer Networking AS		1	9	2
Cisco Certified Network Professional (CCNP) Routing & Switching		Computer Networking AS		0	6	2
CompTIA A+ Certifications		Computer Networking AS	15	14	37	19
CompTIA Linux+		Computer Networking AS		2	27	2
CompTIA Network+		Computer Networking AS	7	35	42	35
CompTIA Security+		IT Security AS		6	94	6
Java Programming Associate		Computer Programming and Analysis AS		5	69	5
Microsoft Certified Solutions Associate (MCSA) -Windows Server 2012		Computer Networking AS		0	6	2
Microsoft Excel	X	Technology Management AS, Computer Information Technology AS)				8
Microsoft Access	X	Technology Management AS, Computer Information Technology AS)				5

	A	B	C	D	E	F	G	H	I	J	K
1	View:	Course Groups									
2	Date:	10/6/2015									
3	Dashboard:	Course Groups									
	Parameter:	Fall Term 2014-2015 (0490),Spring Term 2014-2015 (0495),Summer Term 2014-2015 (0500),Fall Term 2015-2016 (0505),All,Undergraduate,CIT-LD,All,All,All,All,All,All									
4											
5											
6		Fall Term 2014-2015 (0490)		Spring Term 2014-2015 (0495)		Summer Term 2014-2015 (0500)		Fall Term 2015-2016 (0505)			
7	Class Course Group - Subject Catalog Nbr	Unduplicated Student Count	Number of Classes	Unduplicated Student Count	Number of Classes	Unduplicated Student Count	Number of Classes	Unduplicated Student Count	Number of Classes		
8	CGS2940	2	1	3	1	6	1	2	1		
9	CIS2940	4	1	4	1	2	1	3	1		
10	CNT2940	4	2	8	2	8	2	9	2		
11	COP2940	6	1	11	2	8	1	10	1		
12	CTS2940	8	1	7	1	8	1	6	1		
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											

View: **Program Plans Taken by Plan**

Date: **5/6/2016**

Dashboard: [Program Plans Taken by Plan](#)

Parameter: **Fall Term 2013-2014 (0475),Fall Term 2013-2014 (0475),COMPNET-AS,All,All,All,All,All,All,All,All,All,Fall Term 2013-2014 (0475),Spring Term 2013-2014 (0480),Summer Term 2013-2014 (0485),Fall Term 2014-2015 (0490),Spring Term 2014-2015 (0495),Summer Term 2014-2015 (0500),Fall Term 2015-2016 (0505),All**

Academic Plan	Fall Term 2013-2014 (0475) Unduplicated Student Count	Spring Term 2013-2014 (0480) Unduplicated Student Count	Summer Term 2013-2014 (0485) Unduplicated Student Count	Fall Term 2014-2015 (0490) Unduplicated Student Count	Spring Term 2014-2015 (0495) Unduplicated Student Count	Summer Term 2014-2015 (0500) Unduplicated Student Count	Fall Term 2015-2016 (0505) Unduplicated Student Count
All	255	188	84	143	122	43	93
COMPNET-AS	255	165	67	110	85	23	49
APLS-CT		1	1	1			
ARCH-AS				1			
BACCAPP-NO						1	1
BUS-AS		1		1			1
BUS-TR		2	1	1			
CRIM-TR		1	1	1			
CWPA-AS		1	2	3	4	2	3
DIG-AS				1	1		
DIGFORN-AS				1	1	1	1
ENG-AS						2	1
ENGINE-TR		1	1	1	2		1
ENRCH-NO						1	1
GEN-AA		7	5	8	7	2	8
HSA-AS							1
INMG-AS		1					
ITSC-AS		1	1	3	2		2
JOB-NO						1	
LEGAL-AS		1		1	1		
MIRAS-AS							1
PSA-BAS						1	1
TECMGT-AS							1
TMGT-BAS		6	4	10	18	8	20
TRANS-NO			1				
WEBSDM-AS					1	1	1

View: **Program Plans Taken by Plan**

Date: **5/6/2016**

Dashboard: **[Program Plans Taken by Plan](#)**

Parameter: **Fall Term 2013-2014 (0475),Fall Term 2013-2014 (0475),CWPA-AS,All,All,All,All,All,All,All,All,All,Fall Term 2013-2014 (0475),Spring Term 2013-2014 (0480),Summer Term 2013-2014 (0485),Fall Term 2014-2015 (0490),Spring Term 2014-2015 (0495),Summer Term 2014-2015 (0500),Fall Term 2015-2016 (0505),All**

Academic Plan	Fall Term 2013-2014 (0475) Unduplicated Student Count	Spring Term 2013-2014 (0480) Unduplicated Student Count	Summer Term 2013-2014 (0485) Unduplicated Student Count	Fall Term 2014-2015 (0490) Unduplicated Student Count	Spring Term 2014-2015 (0495) Unduplicated Student Count	Summer Term 2014-2015 (0500) Unduplicated Student Count	Fall Term 2015-2016 (0505) Unduplicated Student Count
All	256	194	79	151	133	51	114
CWPA-AS	256	172	59	110	86	25	61
-							1
APLS-CT							1
BUS-AS				1	1		
BUS-TR		2	3	4	4	2	3
COMM-TR			1	1	1		
COMPNET-AS		2	1	3	4	2	4
CPS-CT				1	1		
DIG-AS		1			1		3
ENG-AS						1	
ENGINE-TR		1	1	1	2		
ENRCH-NO		1	1				
GEN-AA		7	7	11	11	4	6
HSA-AS						1	1
ITSC-AS		1	1	5	4	2	4
TECMGT-AS		1		1	1		3
TMGT-BAS		4	3	10	14	12	21
TRANS-NO				1			
WEBSDM-AS		2	2	2	3	2	6

View: **Program Plans Taken by Plan**

Date: **5/6/2016**

Dashboard: [Program Plans Taken by Plan](#)

Parameter: **Fall Term 2013-2014 (0475),Fall Term 2013-2014 (0475),ITSC-AS,All,All,All,All,All,All,All,All,All,Fall Term 2013-2014 (0475),Spring Term 2013-2014 (0480),Summer Term 2013-2014 (0485),Fall Term 2014-2015 (0490),Spring Term 2014-2015 (0495),Summer Term 2014-2015 (0500),Fall Term 2015-2016 (0505),All**

Academic Plan	Fall Term 2013-2014 (0475) Unduplicated Student Count	Spring Term 2013-2014 (0480) Unduplicated Student Count	Summer Term 2013-2014 (0485) Unduplicated Student Count	Fall Term 2014-2015 (0490) Unduplicated Student Count	Spring Term 2014-2015 (0495) Unduplicated Student Count	Summer Term 2014-2015 (0500) Unduplicated Student Count	Fall Term 2015-2016 (0505) Unduplicated Student Count
All	157	118	50	94	89	34	68
ITSC-AS	157	111	42	71	61	21	35
APLS-CT					1		
BACCAPP-NO					1		
BUS-AS		1					
BUS-TR		1	1	2	2		1
COMPNET-AS		3	2	5	4	3	5
CRIM-TR				1	1		
DIG-AS							1
ENG-AS			1	1	1		
ENRCH-NO							1
GEN-AA			2	2	4	3	4
HSA-AS		1	1	2	3	2	
ITSEC-AS		1		1			
ORTHO-AS							2
TECMGT-AS				1			1
TMGT-BAS			1	6	9	4	17
TRANS-NO				1	1		
WEBSDM-AS				1	1	1	1

View: **Program Plans Taken by Plan**

Date: **5/6/2016**

Dashboard: [Program Plans Taken by Plan](#)

Parameter: **Fall Term 2013-2014 (0475),Fall Term 2013-2014 (0475),TECMGT-AS,All,All,All,All,All,All,All,All,All,Fall Term 2013-2014 (0475),Spring Term 2013-2014 (0480),Summer Term 2013-2014 (0485),Fall Term 2014-2015 (0490),Spring Term 2014-2015 (0495),Summer Term 2014-2015 (0500),Fall Term 2015-2016 (0505),All**

Academic Plan	Fall Term 2013-2014 (0475) Unduplicated Student Count	Spring Term 2013-2014 (0480) Unduplicated Student Count	Summer Term 2013-2014 (0485) Unduplicated Student Count	Fall Term 2014-2015 (0490) Unduplicated Student Count	Spring Term 2014-2015 (0495) Unduplicated Student Count	Summer Term 2014-2015 (0500) Unduplicated Student Count	Fall Term 2015-2016 (0505) Unduplicated Student Count
All	105	89	38	71	61	31	49
TECMGT-AS	105	82	30	52	35	14	21
BIO-TR				1			
BUS-AS					1	1	
BUS-BS		2	2	1	1		1
COMPNET-AS		1		1	1	1	3
ENGINE-TR				1	1		1
ENRCH-NO					1		
GEN-AA		3	3	3	3	2	4
ITSC-AS					1		
LEGAL-AS			1	1	1	1	
LEGAL-BAS							1
MGTORG-BAS				1	1	1	1
MIRAS-AS						1	
SUSMGT-BAS					1		1
TMGT-BAS		1	2	10	14	10	16

View: **Program Plans Taken by Plan**

Date: **5/6/2016**

Dashboard: [Program Plans Taken by Plan](#)

Parameter: **Fall Term 2013-2014 (0475),Fall Term 2013-2014 (0475),WEBSDM-AS,All,All,All,All,All,All,All,All,All,Fall Term 2013-2014 (0475),Spring Term 2013-2014 (0480),Summer Term 2013-2014 (0485),Fall Term 2014-2015 (0490),Spring Term 2014-2015 (0495),Summer Term 2014-2015 (0500),Fall Term 2015-2016 (0505),All**

Academic Plan	Fall Term 2013-2014 (0475) Unduplicated Student Count	Spring Term 2013-2014 (0480) Unduplicated Student Count	Summer Term 2013-2014 (0485) Unduplicated Student Count	Fall Term 2014-2015 (0490) Unduplicated Student Count	Spring Term 2014-2015 (0495) Unduplicated Student Count	Summer Term 2014-2015 (0500) Unduplicated Student Count	Fall Term 2015-2016 (0505) Unduplicated Student Count
All	83	57	28	53	44	17	36
WEBSDM-AS	83	53	22	31	22	8	15
ACTAP-CT				1			
BIO-TR		1		1			
COMPNET-AS				2	1		
CWPA-AS				1			
DIG-AS		1	1	1	2	1	1
DIGFORN-AS			1	2	2	1	2
EDU-TR				1	1		1
ENG-AS		1	1				
ENGINE-TR				1	1	1	1
ENRCH-NO			1				1
GEN-AA		1	1	1	4	1	2
ITSC-AS				1			
LEGAL-CT				1	1		
TECMGT-AS				1	1	1	2
TMGT-BAS			1	8	9	4	10
WEBDS-CT							1

SharePoint

Newsfeed OneDrive Sites Robert Mohr III ?



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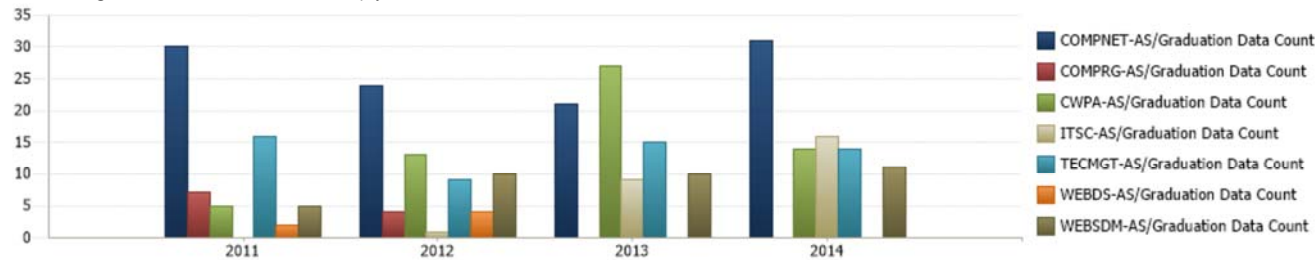
Strate

Academic Program Viability Report > Graduates

Enrollment | Performance | Percent Full | [Graduates](#) | Course Groups

Overall Graduates Trend

No background selections exist, Filter empty series and bottom axis items



Overall Graduates Count

No background selections exist, Filter empty rows and columns

Graduation Degree - Plan - Sub Plan	Measures	2011	2012	2013	2014
COMPNET-AS	Graduation Data Count	30	24	21	31
COMPRG-AS	Graduation Data Count	7	4		
CWPA-AS	Graduation Data Count	5	13	27	14
ITSC-AS	Graduation Data Count		1	9	16
TECMGT-AS	Graduation Data Count	16	9	15	14
WEBDS-AS	Graduation Data Count	2	4		
WEBSDM-AS	Graduation Data Count	5	10	10	11

Student System Cube Refresh

Last Refresh:	9/28/2015 5:10:09 AM
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Academic Year - Term Desc - Multi 2011, 2012, 2013, 2014 ▼

Graduation Degree Plan Subplan - Multi COMPNET-AS, COMPRG-

Age Group All

Gender All

Ethnic Group All

Custom Cohort All ▼

Student Group All ▼

SharePoint

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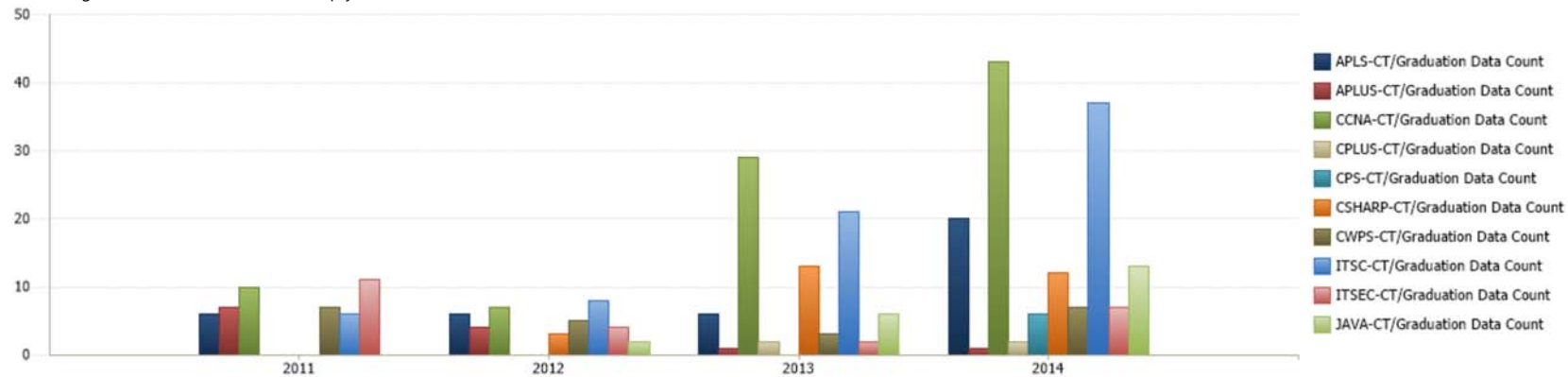
Strate

Academic Program Viability Report > Graduates

Enrollment | Performance | Percent Full | [Graduates](#) | Course Groups

Overall Graduates Trend

i No background selections exist, Filter empty series and bottom axis items



Student System C

Last Refresh:	9/28/2015
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Academic Year - Term D

Graduation Degree Plan

Age Group Gender Ethnic Group Custom Cohort Student Group

Overall Graduates Count

i No background selections exist, Filter empty rows and columns

Graduation Degree - Plan - Sub Plan	Measures	2011	2012	2013	2014
APLS-CT	Graduation Data Count	6	6	6	20
APLUS-CT	Graduation Data Count	7	4	1	1
CCNA-CT	Graduation Data Count	10	7	29	43
CPLUS-CT	Graduation Data Count			2	2
CPS-CT	Graduation Data Count				6
CSHARP-CT	Graduation Data Count		3	13	12
CWPS-CT	Graduation Data Count	7	5	3	7
ITSC-CT	Graduation Data Count	6	8	21	37
ITSEC-CT	Graduation Data Count	11	4	2	7
JAVA-CT	Graduation Data Count		2	6	13

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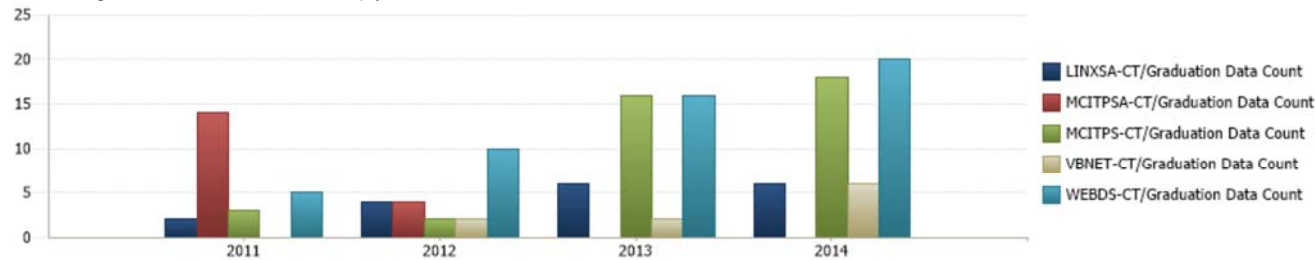
Strate

Academic Program Viability Report > Graduates

Enrollment | Performance | Percent Full | [Graduates](#) | Course Groups

Overall Graduates Trend

No background selections exist, Filter empty series and bottom axis items



Overall Graduates Count

No background selections exist, Filter empty rows and columns

Graduation Degree - Plan - Sub Plan	Measures	2011	2012	2013	2014
LINXSA-CT	Graduation Data Count	2	4	6	6
MCITPSA-CT	Graduation Data Count	14	4		
MCITPS-CT	Graduation Data Count	3	2	16	18
VBNET-CT	Graduation Data Count		2	2	6
WEBDS-CT	Graduation Data Count	5	10	16	20

Student System Cube Refresh

Last Refresh:	9/28/2015 5:10:09 AM
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Academic Year - Term Desc - Multi 2011, 2012, 2013, 2014

Graduation Degree Plan Subplan - Multi LINXSA-CT, MCITPSA-CT,

Age Group All

Gender All

Ethnic Group All

Custom Cohort All

Student Group All



Faculty/Adjunct Ratio

Equated Credit Hours by Faculty Classification

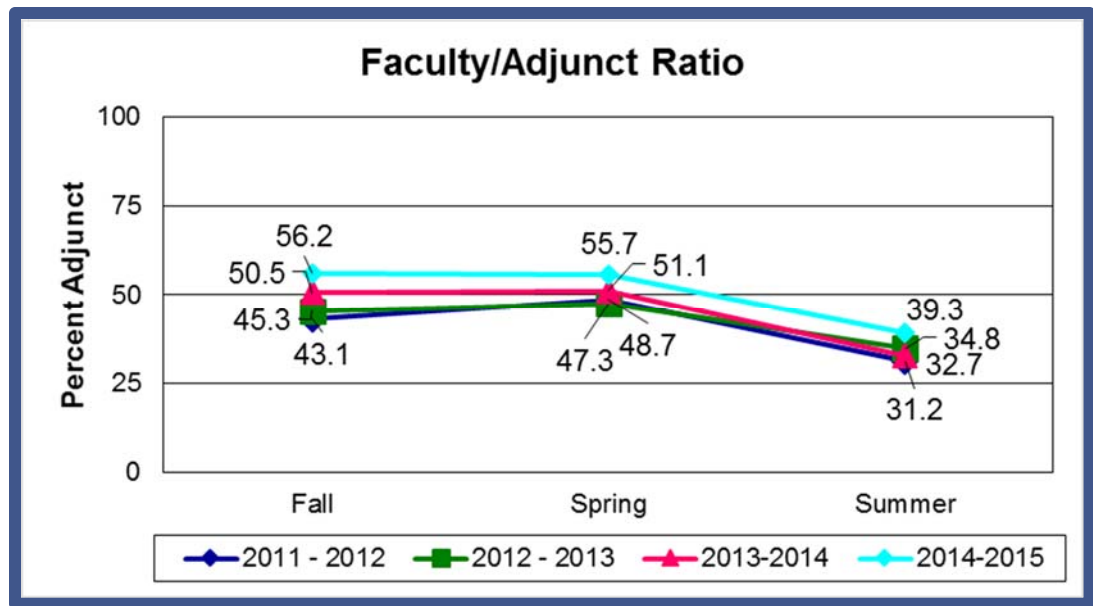
	Fulltime Faculty		Percent of Load Faculty		Adjunct Faculty	
	Number of ECHs	% of Classes Taught	Number of ECHs	% of Classes Taught	Number of ECHs	% of Classes Taught
Fall 2011-2012	338.1	56.9%	0.0	0.0%	256.5	43.1%
Spring 2011-2012	259.2	51.3%	0.0	0.0%	245.7	48.7%
Summer 2011-2012	163.4	68.8%	0.0	0.0%	74.0	31.2%
2011-2012 Total	760.6	56.9%	0.0	0.0%	576.2	43.1%
Fall 2012-2013	292.0	52.0%	15.0	2.7%	254.0	45.3%
Spring 2012-2013	291.2	49.5%	18.5	3.1%	278.0	47.3%
Summer 2012-2013	161.6	61.8%	9.0	3.4%	91.0	34.8%
2012-2013 Total	744.7	52.8%	42.5	3.0%	623.0	44.2%
Fall 2013-2014	298.2	49.5%	0.0	0.0%	304.5	50.5%
Spring 2013-2014	280.8	48.9%	0.0	0.0%	293.5	51.1%
Summer 2013-2014	166.6	67.3%	0.0	0.0%	81.0	32.7%
2013-2014 Total	745.6	52.3%	0.0	0.0%	679.0	47.7%
Fall 2014-2015	282.8	43.8%	0.0	0.0%	363.0	56.2%
Spring 2014-2015	271.4	44.3%	0.0	0.0%	341.0	55.7%
Summer 2014-2015	156.2	60.7%	0.0	0.0%	101.1	39.3%
2014-2015 Total	710.4	46.9%	0.0	0.0%	805.1	53.1%

Source: PeopleSoft Student Administration System: Faculty/Adjunct Ratio Report (S_FACRAT).



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Source: PeopleSoft Student Administration System: Faculty/Adjunct Ratio Report (S_FACRAT).



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Occupation Profile



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Occupation Descriptions

The occupation description for Information Security Analysts (151122) used by DEO is shown below:

Plan, implement, upgrade, or monitor security measures for the protection of computer networks and information. May ensure appropriate security controls are in place that will safeguard digital files and vital electronic infrastructure. May respond to computer security breaches and viruses. Excludes "Computer Network Architects" (15-1143).

The occupation description for Network and Computer Systems Architects and Administrators (151142) used by DEO is shown below:

Install, configure, and support an organization's local area network (LAN), wide area network (WAN), and Internet systems or a segment of a network system.

The occupation description for Computer Network Support Specialists (151152) used by DEO is shown below:

Analyze, test, troubleshoot, and evaluate existing network systems, such as local area network (LAN), wide area network (WAN), and Internet systems or a segment of a network system. Perform network maintenance to ensure networks operate correctly with minimal interruption. Excludes "Network and Computer Systems Administrators" (151142) and "Computer Network Architects" (151143).

The occupation description for Computer Systems Analysts (151121) used by DEO is shown below:

Analyze science, engineering, business, and other data processing problems to implement and improve computer systems.

The occupation description for Computer User Support Specialists (151151) used by DEO is shown below:



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Provide technical assistance to computer users. Answer questions or resolve computer problems for clients in person, or via telephone or electronically. May provide assistance concerning the use of computer hardware and software, including printing, installation, word processing, electronic mail, and operating systems. Excludes "Network and Computer Administrators" (151142).

The occupation description for Database Administrators (151141) used by DEO is shown below:

Administer, test, and implement computer databases, applying knowledge of database management systems.

The occupation description for Web Developers (151134) used by DEO is shown below:

Design, create, and modify Web sites. Analyze user needs to implement Web site content, graphics, performance, and capacity. May integrate Web sites with other computer applications. May convert written, graphic, audio, and video components to compatible Web formats by using software designed to facilitate the creation of Web and multimedia content. Excludes "Multimedia Artists and Animators" (271014).

The occupation description for Computer Programmers (151131) used by DEO is shown below:

Create, modify, and test the code, forms, and script that allow computer applications to run.

The occupation description for Graphic Designers (271024) used by DEO is shown below:

Design or create graphics to meet a client's specific commercial or promotional needs, such as packaging, displays, or logos. May use a variety of mediums to achieve artistic or decorative effects.

The occupation description for Multi-media artists and animators (271014) used by DEO is shown below:

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Create special effects, animation, or other visual images using film, video, computers, or other electronic tools and media for use in products or creations, such as computer games, movies, music videos, and commercials.

National, State, and County Trends and Wage Information

The distribution of 2014 wage information for Information Security Analysts, Network and Computer Systems Architects and Administrators, Computer Network Support Specialists, Computer Systems Analysts, Computer User Support Specialists, Database Administrators, Web Developers, Computer Programmers, Graphic Designers, Multimedia Artists and Animators are located in the tables below.

The mean hourly earnings for Information Security Analysts was \$39.87 in Florida and \$44.50 in Pinellas County. The mean hourly earnings for Network and Computer Systems Architects and Administrators was \$38.62 in Florida and \$39.50 in Pinellas County. The mean hourly earnings for Computer Network Support Specialists was \$26.58 in Florida and \$28.64 in Pinellas County. The mean hourly earnings for Computer Systems Analysts was \$41.92 in Florida and \$41.25 in Pinellas County. The mean hourly earnings for Computer User Support Specialists was \$21.55 in Florida and \$22.43 in Pinellas County. The mean hourly earnings for Database Administrators was \$37.90 in Florida and \$40.73 in Pinellas County. The mean hourly earnings for Web Developers was \$29.37 in Florida and \$29.59 in Pinellas County. The mean hourly earnings for Computer Programmers was \$37.00 in Florida and \$36.57 in Pinellas County. The mean hourly earnings for Graphic Designers was \$21.57 in Florida and \$19.60 in Pinellas County. The mean hourly earnings for Multimedia Artists and Animators was \$25.21 in Florida and \$25.61 in Pinellas County.

Employment trend information for occupations related to Computer and Information Technology - AS are also provided in the tables. An average annual increase in employment for Information Security Analysts (17.3% - 23.3%) is shown for the period between 2014 and 2022, across the state and county. An average annual increase in employment for Network and Computer Systems Architects and Administrators (19.9% - 20.2%) is shown for the period between 2014 and 2022, across the state and county. An average annual increase in employment for Computer Network Support Specialists (10.1% - 13.1%) is shown for the period between 2014 and 2022,

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across the state and county. An average annual increase in employment for Computer Systems Analysts (14.9% - 16.8%) is shown for the period between 2014 and 2022, across the state and county. An average annual increase in employment for Computer User Support Specialists (13.2% - 13.4%) is shown for the period between 2014 and 2022, across the state and county. An average annual increase in employment for Database Administrators (22.5% - 23.4%) is shown for the period between 2014 and 2022, across the state and county. An average annual increase in employment for Web Developers (14.3% - 16.8%) is shown for the period between 2014 and 2022, across the state and county. An average annual increase in employment for Computer Programmers (7.6% - 9.7%) is shown for the period between 2014 and 2022, across the state and county. An average annual increase in employment for Graphic Designers (8.5% - 10.2%) is shown for the period between 2014 and 2022, across the state and county. An average annual increase in employment for Multimedia Artists and Animators (6.6% - 6.8%) is shown for the period between 2014 and 2022, across the state and county.





Employment Data

Growth for Information Security Analysts

	Jobs (2014)	% Change (2014-2022)	Mean Earnings
Florida	4,155	17.3%	\$39.87/hr
Pinellas County	434	23.3%	\$44.50/hr

Source: Florida Department of Economic Opportunity (DEO)
<http://www.floridajobs.org/labor-market-information/data-center/statistical-programs/employment-projections>

Growth for Network and Computer Systems Architects and Administrators

	Jobs (2014)	% Change (2014-2022)	Mean Earnings
Florida	15,087	19.9%	\$38.62/hr
Pinellas County	974	20.2%	\$39.50/hr

Source: Florida Department of Economic Opportunity (DEO)
<http://www.floridajobs.org/labor-market-information/data-center/statistical-programs/employment-projections>

Growth for Computer Network Support Specialists

	Jobs (2014)	% Change (2014-2022)	Mean Earnings
Florida	8,204	13.1%	\$26.58/hr
Pinellas County	563	10.1%	\$28.64/hr

Source: Florida Department of Economic Opportunity (DEO)
<http://www.floridajobs.org/labor-market-information/data-center/statistical-programs/employment-projections>

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Growth for Computer Systems Analysts

	Jobs (2014)	% Change (2014-2022)	Mean Earnings
Florida	22,380	14.9%	\$41.92/hr
Pinellas County	1,626	16.8%	\$41.25/hr

Source: Florida Department of Economic Opportunity (DEO)
<http://www.floridajobs.org/labor-market-information/data-center/statistical-programs/employment-projections>

Growth for Computer User Support Specialists

	Jobs (2014)	% Change (2014-2022)	Mean Earnings
Florida	28,775	13.2%	\$21.55/hr
Pinellas County	2,132	13.4%	\$22.43/hr

Source: Florida Department of Economic Opportunity (DEO)
<http://www.floridajobs.org/labor-market-information/data-center/statistical-programs/employment-projections>

Growth for Database Administrators

	Jobs (2014)	% Change (2014-2022)	Mean Earnings
Florida	6,542	22.5%	\$37.90/hr
Pinellas County	501	23.4%	\$40.73/hr

Source: Florida Department of Economic Opportunity (DEO)
<http://www.floridajobs.org/labor-market-information/data-center/statistical-programs/employment-projections>

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Growth for Web Developers

	Jobs (2014)	% Change (2014-2022)	Mean Earnings
Florida	8,789	14.3%	\$29.37/hr
Pinellas County	543	16.8%	\$29.59/hr

Source: Florida Department of Economic Opportunity (DEO)
<http://www.floridajobs.org/labor-market-information/data-center/statistical-programs/employment-projections>

Growth for Computer Programmers

	Jobs (2014)	% Change (2014-2022)	Mean Earnings
Florida	17,509	7.6%	\$37.00/hr
Pinellas County	1,425	9.7%	\$36.57/hr

Source: Florida Department of Economic Opportunity (DEO)
<http://www.floridajobs.org/labor-market-information/data-center/statistical-programs/employment-projections>

Growth for Graphic Designers

	Jobs (2014)	% Change (2014-2022)	Mean Earnings
Florida	16,804	10.2%	\$21.57/hr
Pinellas County	1,141	8.5%	\$19.60/hr

Source: Florida Department of Economic Opportunity (DEO)
<http://www.floridajobs.org/labor-market-information/data-center/statistical-programs/employment-projections>

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Growth for Multi-media artists and animators

	Jobs (2014)	% Change (2014-2022)	Mean Earnings
Florida	1,921	6.8%	\$25.21/hr
Pinellas County	106	6.6%	\$25.61/hr

Source: Florida Department of Economic Opportunity (DEO)
<http://www.floridajobs.org/labor-market-information/data-center/statistical-programs/employment-projections>



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Major Employers

Graduates of SPC's Computer and Information Technology - AS program are employed in various areas related to their field. The primary local employers of these graduates are listed in the table below.

Major Employers

Employers of Computer and Information Technology - AS Graduates
Cambridge International Systems, Inc.
CW Bill Young Veterans Hospital
Midway Services
PSCU
eIntelligent Solutions
Netwolves
City of St Petersburg
Tampa Bay Lightning
PlateSmart
Toonari
Transworld Networks
Global ITU
Revel
SMS Software
Little Frog
Digigone
Empath
St Petersburg College
Brighthouse Network
Telnetwork
Digital Lighthouse
Geographical Solutions
BayCare
Raymond James

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Blooming Brands
Focus
Network People

Source: Recent Alumni Survey reports and program administrator records

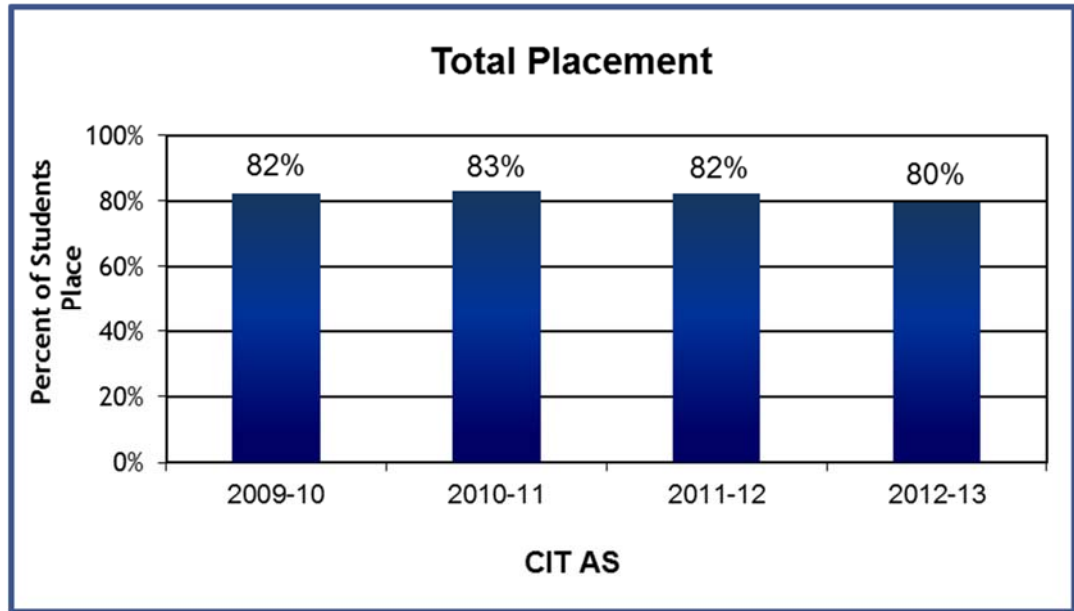


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2014-15 Placement Data



CIT AS		
	Pool Count	Percent Placed
2009-10	34	82%
2010-11	47	83%
2011-12	74	82%
2012-13	69	80%

Source: FETPIP Follow-up Outcomes <http://www.fldoe.org/fetpip/ccs.asp>



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State Graduates Outcomes

Computer Programming and Analysis Program Graduates 2012-13 Outcomes by Florida Community College

Florida Community College	Total Completers	# Found Employed	# Employed for a Full Qtr	% Employed For a Full Qtr	FETPIP Pool	# Training Related (Employed, Education, or Military)	Placement Rate
Daytona State College	17	12	7	41%	15	12	80%
Pasco-Hernando Community College	****	3	1	25%	3	2	67%
Eastern Florida State College	****	5	4	44%	7	6	86%
Florida Southwestern State College	****	4	3	50%	4	4	100%
Florida State College at Jacksonville	****	1	1	100%	1	0	0%
Broward College	14	11	10	71%	11	9	82%
Florida Gateway College	****	1	1	100%	1	1	100%
Miami Dade College	****	3	3	33%	8	8	100%
Pensacola State College	14	7	6	43%	9	5	56%
Polk State College	****	5	3	43%	7	5	71%
Seminole State College of Florida	11	10	9	82%	10	9	90%

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Florida Community College	Total Completers	# Found Employed	# Employed for a Full Qtr	% Employed For a Full Qtr	FETPIP Pool	# Training Related (Employed, Education, or Military)	Placement Rate
South Florida State College	****	1	0	0%	1	1	100%
St. Johns River State College	****	1	1	50%	1	0	0%
Tallahassee Community College	****	1	1	100%	1	1	100%
Hillsborough Community College	****	7	6	67%	8	6	75%
Valencia College	48	31	25	52%	42	37	88%
St. Petersburg College	15	7	5	33%	10	9	90%
Total	119	110	86	78%	139	115	83%

****Total Completers was not available at the time of this report.

Source: FETPIP Florida College System Vocational Reports <http://www.fldoe.org/accountability/fl-edu-training-placement-info-program/fl-college-system-vocational-reports.stml>



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Information Technology Security Program Graduates 2012-13 Outcomes by Florida Community College

Florida Community College	Total Completers	# Found Employed	# Employed for a Full Qtr	% Employed For a Full Qtr	FETPIP Pool	# Training Related (Employed, Education, or Military)	Placement Rate
Pasco-Hernando Community College	****	5	5	83%	5	2	40%
Pensacola State College	****	2	1	25%	2	2	100%
Hillsborough Community College	****	1	1	33%	2	2	100%
Florida State College at Jacksonville	****	2	2	100%	2	2	100%
St. Petersburg College	27	22	22	81%	23	18	78%
Total	27	32	31	97%	34	26	76%

****Total Completers was not available at the time of this report.

Source: FETPIP Florida College System Vocational Reports <http://www.fldoe.org/accountability/fl-edu-training-placement-info-program/fl-college-system-vocational-reports.shtml>



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Networking Services Technology Program Graduates 2012-13 Outcomes by Florida Community College

Florida Community College	Total Completers	# Found Employed	# Employed for a Full Qtr	% Employed For a Full Qtr	FETPIP Pool	# Training Related (Employed, Education, or Military)	Placement Rate
Pasco-Hernando Community College	****	6	5	56%	6	6	100%
Eastern Florida State College	17	11	5	29%	13	12	92%
Chipola College	****	3	2	67%	3	3	100%
Daytona State College	29	15	9	31%	24	23	96%
Florida Southwestern State College	22	16	13	59%	18	16	89%
Florida State College at Jacksonville	57	40	31	54%	49	49	100%
Gulf Coast State College	****	1	1	100%	1	1	100%
Broward College	23	16	15	65%	21	21	100%
State College of Florida, Manatee-Sarasota	****	2	1	50%	2	1	50%
Miami Dade College	21	16	14	67%	18	17	94%
Palm Beach State College	18	12	8	44%	15	15	100%
Santa Fe College	32	24	18	56%	29	28	97%

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Florida Community College	Total Completers	# Found Employed	# Employed for a Full Qtr	% Employed For a Full Qtr	FETPIP Pool	# Training Related (Employed, Education, or Military)	Placement Rate
Seminole State College of Florida	27	21	16	59%	26	26	100%
St. Johns River State College	****	6	3	43%	6	5	83%
Tallahassee Community College	****	5	4	67%	6	6	100%
Hillsborough Community College	16	12	12	75%	13	12	92%
St. Petersburg College	19	13	13	68%	15	14	93%
Total	281	219	170	78%	265	255	96%

****Total Completers was not available at the time of this report.

Source: FETPIP Florida College System Vocational Reports <http://www.fl DOE.org/accountability/fl-edu-training-placement-info-program/fl-college-system-vocational-reports.stml>



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Technology Project Management Program Graduates 2012-13 Outcomes by Florida Community College

Florida Community College	Total Completers	# Found Employed	# Employed for a Full Qtr	% Employed For a Full Qtr	FETPIP Pool	# Training Related (Employed, Education, or Military)	Placement Rate
St. Petersburg College	10	7	5	50%	10	8	80%
Total	10	7	5	71%	10	8	80%

Source: FETPIP Florida College System Vocational Reports <http://www.fldoe.org/accountability/fl-edu-training-placement-info-program/fl-college-system-vocational-reports.stml>

Internet Services Technology Program Graduates 2012-13 Outcomes by Florida Community College

Florida Community College	Total Completers	# Found Employed	# Employed for a Full Qtr	% Employed For a Full Qtr	FETPIP Pool	# Training Related (Employed, Education, or Military)	Placement Rate
Pasco-Hernando Community College	****	1	1	100%	1	1	100%
Daytona State College	****	3	3	38%	4	3	75%
Florida Southwestern State College	****	0	0	0%	0	0	0%
Florida State College at Jacksonville	****	0	0	0%	0	0	0%
Broward College	****	1	0	0%	1	1	100%

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Florida Community College	Total Completers	# Found Employed	# Employed for a Full Qtr	% Employed For a Full Qtr	FETPIP Pool	# Training Related (Employed, Education, or Military)	Placement Rate
Miami Dade College	****	4	2	29%	5	2	40%
Palm Beach State College	****	4	3	60%	5	2	40%
Santa Fe College	16	11	10	63%	15	8	53%
St. Johns River State College	****	1	1	50%	1	0	0%
Tallahassee Community College	****	1	1	50%	1	1	100%
Hillsborough Community College	****	2	1	20%	3	2	67%
St. Petersburg College	12	7	7	58%	11	6	55%
Total	28	35	29	83%	47	26	55%

****Total Completers was not available at the time of this report.

Source: FETPIP Florida College System Vocational Reports <http://www.fldoe.org/accountability/fl-edu-training-placement-info-program/fl-college-system-vocational-reports.stml>



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Academics



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Educational Outcomes

As part of SPC quality improvement efforts, academic assessments are conducted on each AAS/AS/BS/BAS program every three years to evaluate the quality of the program's educational outcomes. The Technology Management - AS program was evaluated through an Academic Program Assessment Report (APAR).

Each of the Program Learning Outcomes (PLOs) was evaluated during the 2014-15 assessment. Each of the three PLOs is listed below:

1. Apply contemporary technology resources that promote effective company management.
2. Using technology industry standard frameworks, evaluate technical problems and plans to identify solutions that enhance the success of a business enterprise.
3. Summarize and explain a "real-world" experience with a major related, supervised, and evaluated work experience internship.

Means of Assessment

The purpose of the End of Program assessment is to make summative interpretations for program improvement.

The Technology Management (AS) program used the results of three different assessments (development of learning objectives, the completion of an End-of-Program project, and weekly journal entries) in the internship course (CIS 2940) to evaluate the students. The criteria for success stated the students should earn a score of 70% or higher for each PLO.

Data were collected during Summer 2015. The students whom were assessed achieved a mean score greater than 70% on all three PLOs and met the criteria for success.

The 2014-15 follow-up report has not yet been published.

For the complete 2014-15 Technology Management - AS Program Assessment Report, please see Appendix B.

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Educational Outcomes

As part of SPC quality improvement efforts, academic assessments are conducted on each AAS/AS/BS/BAS program every three years to evaluate the quality of the program's educational outcomes. The Computer Networking - AS program was evaluated through an Academic Program Assessment Report (APAR).

Each of the Program Learning Outcomes (PLOs) was evaluated during the 2014-15 assessment. Each of the three PLOs is listed below:

1. Utilize analytical and critical thinking skills to provide technical support and troubleshooting services to end-users who need computer hardware or software assistance.
2. Identify network security threats and implement strategies to mitigate those threats within a diverse network environment.
3. Summarize and explain a "real-world" experience with a major related, supervised, and evaluated work experience internship.

Means of Assessment

The purpose of the End of Program assessment is to make summative interpretations for program improvement.

The Computer Networking (AS) program used the results of three different assessments (10 essay questions, 30 multiple choice questions, and weekly journal entries) in the internship course (CNT 2940) to evaluate the students. The criteria for success stated the students should earn a score of 70% or higher for each PLO.

Data were collected during Summer 2015. The students whom were assessed achieved a mean score greater than 70% on all three PLOs and met the criteria for success.

The 2014-15 follow-up report has not yet been published.

For the complete 2014-15 Computer Networking - AS Program Assessment Report, please see Appendix B.

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Educational Outcomes

As part of SPC quality improvement efforts, academic assessments are conducted on each AAS/AS/BS/BAS program every three years to evaluate the quality of the program's educational outcomes. The Computer Programming and Analysis - AS program was evaluated through an Academic Program Assessment Report (APAR).

Each of the Program Learning Outcomes (PLOs) was evaluated during the 2014-15 assessment. Each of the three PLOs is listed below:

1. Develop dynamic web content and transaction-based web systems that work with multiple programming language platforms.
2. Develop strategies for managing data while in accordance with industry standards.
3. Summarize and explain a "real-world" experience with a major related, supervised, and evaluated work experience internship.

Means of Assessment

The purpose of the End of Program assessment is to make summative interpretations for program improvement.

The Computer Programming and Analysis (AS) program used the results of three different assessments (development of web content and strategies for data managing, and weekly journal entries) in the internship course (COP 2940) to evaluate the students. The criteria for success stated the students should earn a score of 70% or higher for each PLO.

Data were collected during Summer 2015. The students whom were assessed achieved a mean score greater than 70% on all three PLOs and met the criteria for success.

The 2014-15 follow-up report has not yet been published.

For the complete 2014-15 Computer Programming and Analysis - AS Program Assessment Report, please see Appendix B.



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Educational Outcomes

As part of SPC quality improvement efforts, academic assessments are conducted on each AAS/AS/BS/BAS program every three years to evaluate the quality of the program's educational outcomes. The Information Technology (IT) Security - AS program was evaluated through an Academic Program Assessment Report (APAR).

Each of the Program Learning Outcomes (PLOs) was evaluated during the 2014-15 assessment. Each of the three PLOs is listed below:

1. Develop an Information Technology Security infrastructure that offers a mix of technology and management processes.
2. Exhibit the characteristics needed of an Information Technology Security Specialist, including problem solving, analytical and technical skills.
3. Summarize and explain a "real-world" experience with a major related, supervised, and evaluated work experience internship.

Means of Assessment

The purpose of the End of Program assessment is to make summative interpretations for program improvement.

The Information Technology (IT) Security (AS) program used the results of three different assessments (development of learning objectives, the completion of an End-of-Program project, and weekly journal entries) in the internship course (CTS 2940) to evaluate the students. The criteria for success stated the students should earn a score of 70% or higher for each PLO.

Data were collected during Summer 2015. The students whom were assessed achieved a mean score greater than 70% on all three PLOs and met the criteria for success.

The 2014-15 follow-up report has not yet been published.

For the complete 2014-15 Information Technology (IT) Security - AS Program Assessment Report, please see Appendix B.

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Educational Outcomes

As part of SPC quality improvement efforts, academic assessments are conducted on each AAS/AS/BS/BAS program every three years to evaluate the quality of the program's educational outcomes. The Web Development - AS program was evaluated through an Academic Program Assessment Report (APAR).

Each of the Program Learning Outcomes (PLOs) was evaluated during the 2014-15 assessment. Each of the three PLOs is listed below:

1. Create a web site structure that incorporates wireframe designs, functionality specifications, and organizational requirements.
2. Create an interactive flexible web site using current development technologies and languages.
3. Summarize and explain a "real-world" experience with a major related, supervised, and evaluated work experience internship.

Means of Assessment

The purpose of the End of Program assessment is to make summative interpretations for program improvement.

The Web Development (AS) program used the results of three different assessments (creation of a web site structure, an interactive web site, and weekly journal entries) in the internship courses (CGS 2823 and 2940) to evaluate the students. The criteria for success stated the students should earn a score of 70% or higher for each PLO.

Data were collected during Summer 2015. The students whom were assessed achieved a mean score greater than 70% on all three PLOs and met the criteria for success.

The 2014-15 follow-up report has not yet been published.

For the complete 2014-15 Web Development - AS Program Assessment Report, please see Appendix B.

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Stakeholder Perceptions

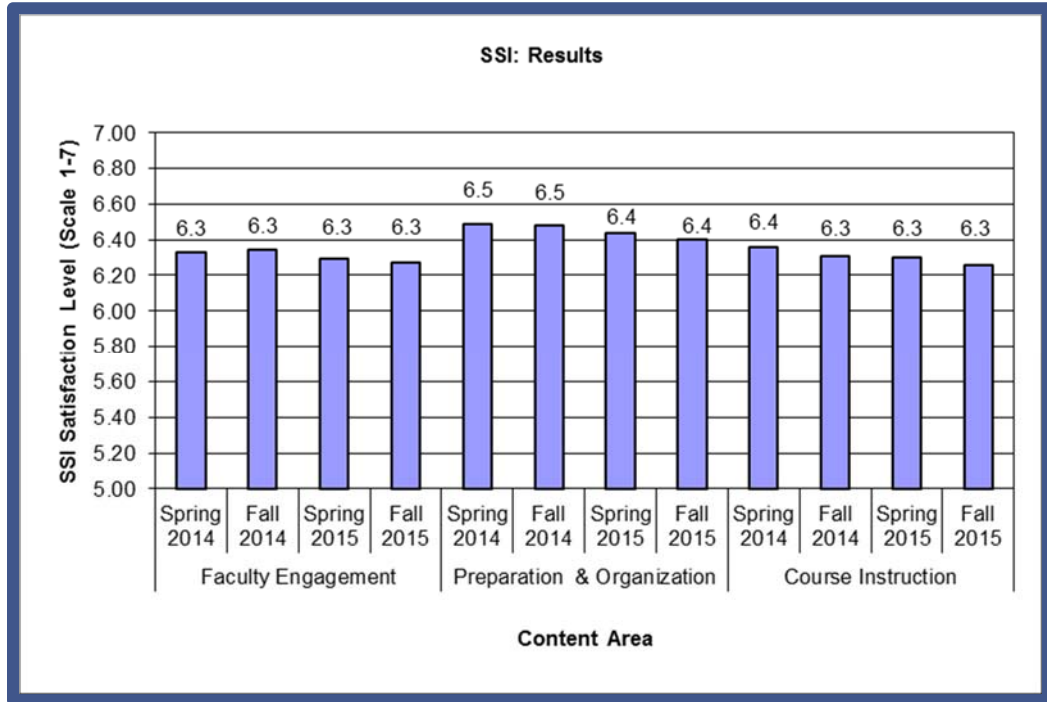


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Student Survey of Instruction (SSI)



Source: St. Petersburg College Student Survey of Instruction database



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College of Computer and Information Technology

2014-15 Alumni Survey Report

Survey of 2013-14 Graduates

- A.S. Degrees: Computer Networking, Computer Programming and Analysis, Computer/Web Programming and Analysis, Information Technology Security, Technology Management, Web Designer, Web Site Design and Management
- Certificates: Computer Support Certificate, Cisco Certified Network Associate, Computer Programming, C#, Computer/Web Programming Specialist, Information Technology Security, Java, Linux System Administrator, Microsoft Certified Information Technology Professional: Server Administrator, Microsoft Certified Server Administrator, Microsoft Certified System Engineer, Visual Basic.NET, Web Designer

Alumni Survey Information

Graduates are sent one survey to complete, even in cases where they may have earned multiple degrees within the same year. In these cases, the reported number of surveys sent and responses received are counted once per degree or certificate awarded to the student.

One-hundred and seventy-six Alumni Surveys were provided to the 2013-14 graduates of the College of Computer and Information Technology program. Responses were received from 13 A.S. graduates and 12 Certificate completers.

Fourteen percent (25/176) of the graduates surveyed responded to the survey. After receiving permission from the respondents to contact their employers, four employer surveys were sent out. Not all respondents answer every survey question; therefore, the percentages listed below represent the responses to each survey question in relation to the total number of responses received for each question.

Notable results include:

- 81.3% (13/16) of recent graduate survey respondents, who were employed, were employed full-time.
- 83.3%* (15/18) of recent graduate survey respondents had a current position related to their studies.
- 32.0% (8/25) of recent graduate survey respondents indicated their main goal in completing a degree or certificate at SPC was to "Continue my education"; 20.0% (5/25) "Obtain employment"; 16.0% (4/25) "Other"; 12.0% (3/25) "Earn more money"; 8.0% (2/25) "Change career fields"; 8.0% (2/25) "Meet certification/training needs"; and 4.0% (1/25) "Get a promotion".
- 54.5% (12/22) of recent graduate survey respondents indicated that their SPC degree allowed them to "Continue my education"; 18.2% (4/22) "Obtain employment"; 13.6% (3/22) "Earn more money"; 13.6% (3/22) "Meet certification/training needs"; 13.6% (3/22) "Other"; 9.1% (2/22) "Get a promotion"; and 4.5% (1/22) "Change career fields". [Note: The total may exceed 100% as this question allows multiple responses]

- 8.0% (2/25) of recent graduate survey respondents indicated that SPC did “Exceptionally well” in helping them meet their goal; 52.0% (13/25) “Very well”; 24.0% (6/25) “Adequately”; and 8.0% (2/25) “Poorly”; while 8.0% (2/25) thought that SPC did not help at all.
- 68.8% (11/16) of recent graduate survey respondents indicated that they earned \$25.00 or more per hour (\$52,000 or more annually); 12.5% (2/16) earned \$15.00-\$19.99 per hour (\$31,000-\$41,999 annually); 12.5% (2/16) earned \$10.00-\$14.99 per hour (\$21,000-\$30,999 annually); and 6.3% (1/16) earned less than \$10.00 an hour (less than \$21,000 annually).
- 48.0% (12/25) of recent graduate survey respondents indicated they are continuing their education.
- 72.0% (18/25) of recent graduate survey respondents would recommend SPC’s College of Computer and Information Technology program to another.
- 39.1% (9/23) indicated that they had taken an internship or co-op opportunity. Of those who indicated they took this opportunity, 33.3% (3/9) indicated it helped them obtain a job in their field.
- 31.8% (7/22) said there were additional skills they would like to have acquired in the College of Computer and Information Technology program.
- 26.1% (6/23) indicated that their salary increased after completing the College of Computer and Information Technology program, 60.9% (14/23) indicated that it remained the same, and 13.0% (3/23) indicated that it decreased.
- An evaluation of College of Computer and Information Technology graduates’ general education outcomes is displayed in Table 1. Graduates indicated satisfaction with their college preparation in the area of general education outcomes. Four outcomes received mean scores between 4.5 and 4.6, twenty received mean scores between 4.0 and 4.4, and one received a mean score of 3.8.

* Note: Although only 16 survey respondents indicated that they were employed, 18 answered the question regarding whether their current position related to their studies.

Table 1

College Preparation Ratings for Recent College of Computer and Information Technology Program Graduates

General Education Outcomes (Five point rating scale with five being the highest)	Item Ratings		
	N	Mean	SD
Communicating clearly and effectively with others through:			
Speaking	25	3.8	0.7
Listening	25	4.2	0.7
Reading	25	4.3	0.8
Writing	25	4.1	0.8

General Education Outcomes (Five point rating scale with five being the highest)	Item Ratings		
	N	Mean	SD
<i>Your use of mathematical and computational skills:</i>			
Comfortable with mathematical calculations	25	4.1	0.8
Using computational skills appropriately	25	4.0	0.7
Accurately interpreting mathematical data	25	4.0	0.8
<i>Using the following forms of technology:</i>			
Email	25	4.6	0.6
Word Processing	25	4.6	0.7
Spreadsheets	25	4.2	1.1
Databases	25	4.1	1.1
Internet Research	25	4.5	0.7
<i>Thinking logically and critically to solve problems:</i>			
Gathering and assessing relevant information	25	4.4	0.7
Inquiring about and interpreting information	25	4.4	0.8
Organizing and evaluating information	25	4.5	0.7
Analyzing and explaining information to others	25	4.3	0.8
Using information to solve problems	25	4.4	0.8
<i>Working effectively with others in a variety of settings:</i>			
Participating as a team player (e.g., group projects)	25	4.0	0.9
Working well with individuals from diverse backgrounds	25	4.3	0.8
Using ethical courses of action	24	4.3	0.8
Demonstrating leadership skills	25	4.0	1.1
<i>Appreciating the importance of lifelong learning:</i>			
Showing an interest in career development	25	4.3	0.8
Being open to new ideas and challenges	25	4.3	0.8
Willingness to take on new responsibilities	25	4.2	0.9
Pursuing additional educational opportunities	25	4.3	0.9

St. Petersburg College **College of Computer and Information Technology**
SPC 2014-15 Employer Survey Report
Employer Survey of 2013-14 Graduates

Employer Survey Information

Although employers are surveyed one time per graduate, some graduates may have earned multiple awards. Therefore, the number of surveys administered and responses received are reported for each degree or certificate the student was awarded.

Four employer surveys were sent out to employers based on the permission provided by recent graduates in the 2013-14 recent graduate survey. Seventy-five percent of the employers surveyed responded to the survey (3/4). Not all respondents answer every survey question; therefore, the percentages listed below represent the responses to each survey question in relation to the total number of responses received for each question.

Notable results include:

- 100.0% (3/3) of employers responding to the survey indicated they would hire another graduate from SPC.
- 100.0% (3/3) of employers responding to the survey had graduate employees who earned \$25.00 or more per hour (\$52,000 or more annually).
- An employer evaluation of College of Computer and Information Technology graduates' general education outcomes is displayed in Table 1. Employers indicated high levels of satisfaction with graduates' general education outcomes. Nine outcomes received a mean score of 5.0, three received a mean score of 4.7, twelve received a mean score between 4.0 and 4.3, and one received a mean score of 3.7.

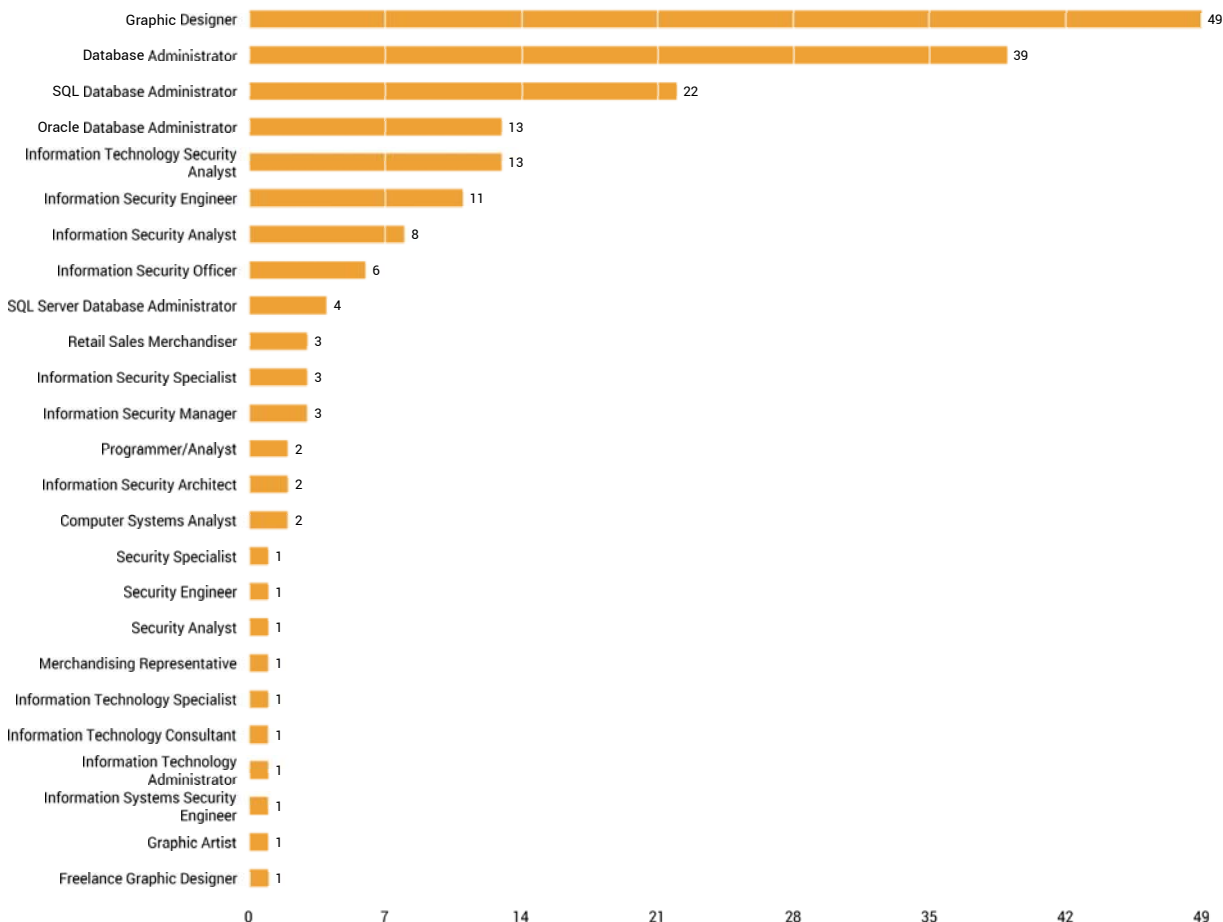
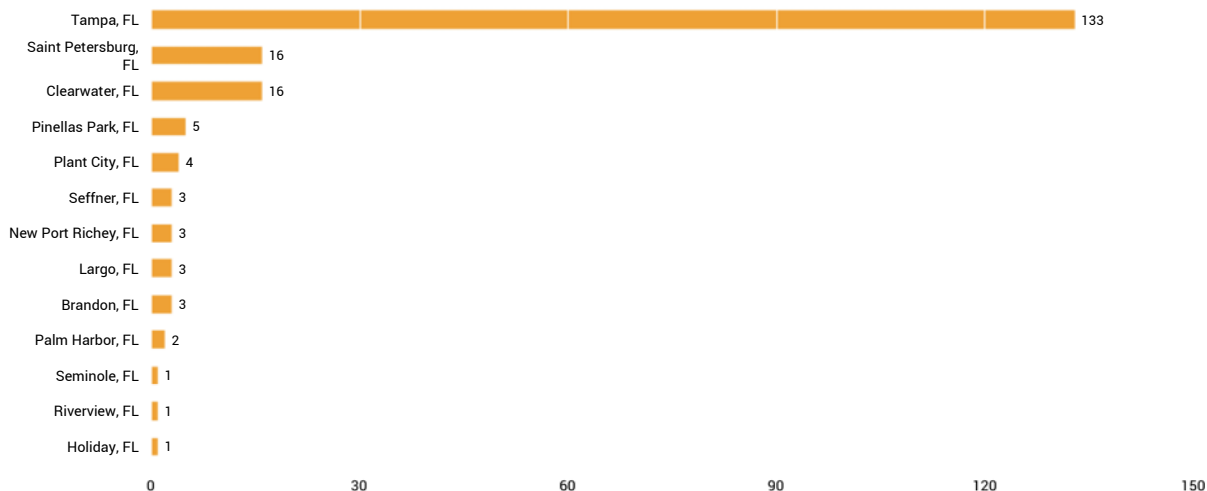
Table 1

Employer Competency Ratings for Recent College of Computer and Information Technology Graduates

General Education Outcomes (Five point rating scale with five being the highest)	Item Ratings			
	N	Mean	SD	N/A*
Communicate clearly and effectively with others through:				
Speaking	3	4.3	1.2	0
Listening	3	3.7	0.6	0
Reading	3	4.7	0.6	0
Writing	3	4.3	1.2	0
Use mathematical and computational skills:				
Comfortable with mathematical calculations	3	4.3	0.6	0
Uses computational skills appropriately	3	4.3	0.6	0

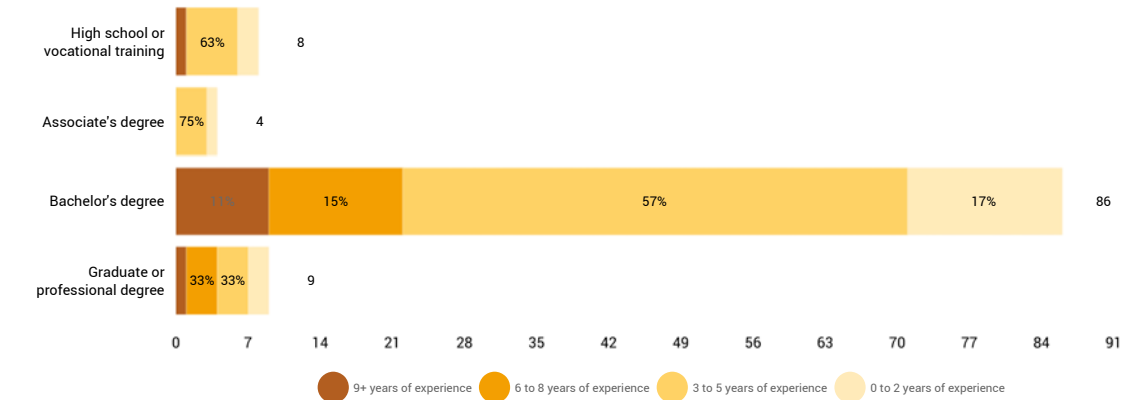
General Education Outcomes (Five point rating scale with five being the highest)	Item Ratings			
	N	Mean	SD	N/A*
Accurately interprets mathematical data	3	4.0	0.0	0
Use the following forms of technology:				
E-mail	3	4.3	0.6	0
Word Processing	3	4.3	0.6	0
Spreadsheets	3	4.3	0.6	0
Databases	3	4.3	0.6	0
Internet Research	3	4.3	0.6	0
Think logically and critically to solve problems				
Gathers and assesses relevant information	3	4.7	0.6	0
Inquires and interprets information	3	4.0	0.0	0
Organizes and evaluates information	3	5.0	0.0	0
Analyzes and explains information to others	3	4.3	1.2	0
Uses information to solve problems	3	5.0	0.0	0
Work effectively with others in a variety of settings:				
Participates as team player (e.g., groups projects)	3	5.0	0.0	0
Works well with individuals from diverse backgrounds	3	5.0	0.0	0
Uses ethical courses of action	3	5.0	0.0	0
Demonstrates leadership skills	3	4.7	0.6	0
Appreciate the importance of lifelong learning:				
Shows interest in career development	3	5.0	0.0	0
Open to new ideas and challenges	3	5.0	0.0	0
Willing to take on new responsibilities	3	5.0	0.0	0
Pursues additional educational opportunities	3	5.0	0.0	0

*The survey allowed employers to select N/A if a competency was not applicable for an employee.



Education and Experience

Note: 52% of records have been excluded because they do not include both a degree level and experience requirements. As a result, the chart below may not be representative of the full sample.
Mar. 12, 2016- May 10, 2016 (Data not available after May 08, 2016)
There are 191 postings available with the current filters applied.
There are 99 unspecified or unclassified postings.



9+ years of experience 6 to 8 years of experience 3 to 5 years of experience 0 to 2 years of experience

Top Skills

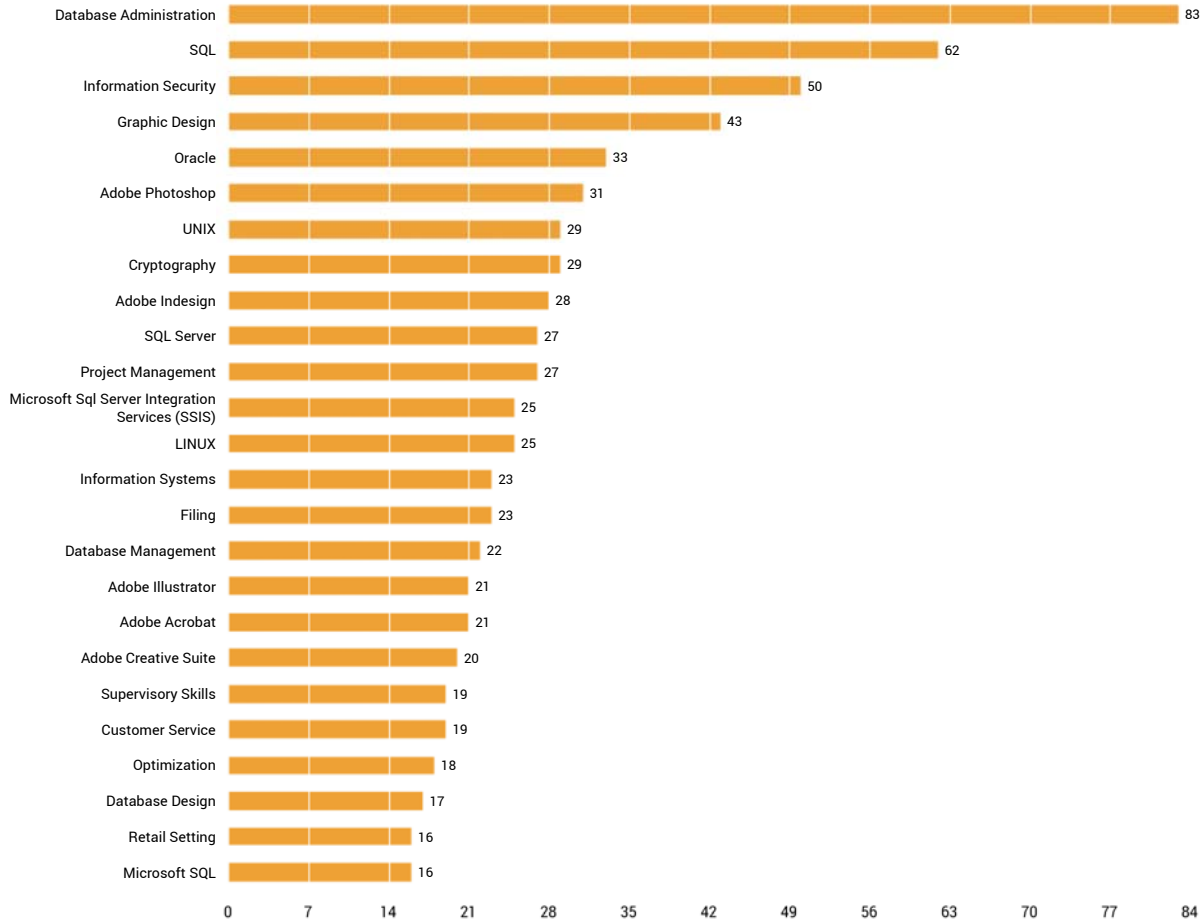
Mar. 12, 2016- May 10, 2016 (Data not available after May 08, 2016)

There are 191 postings available with the current filters applied.

There are 11 unspecified or unclassified postings.

Specialized Skills ▼

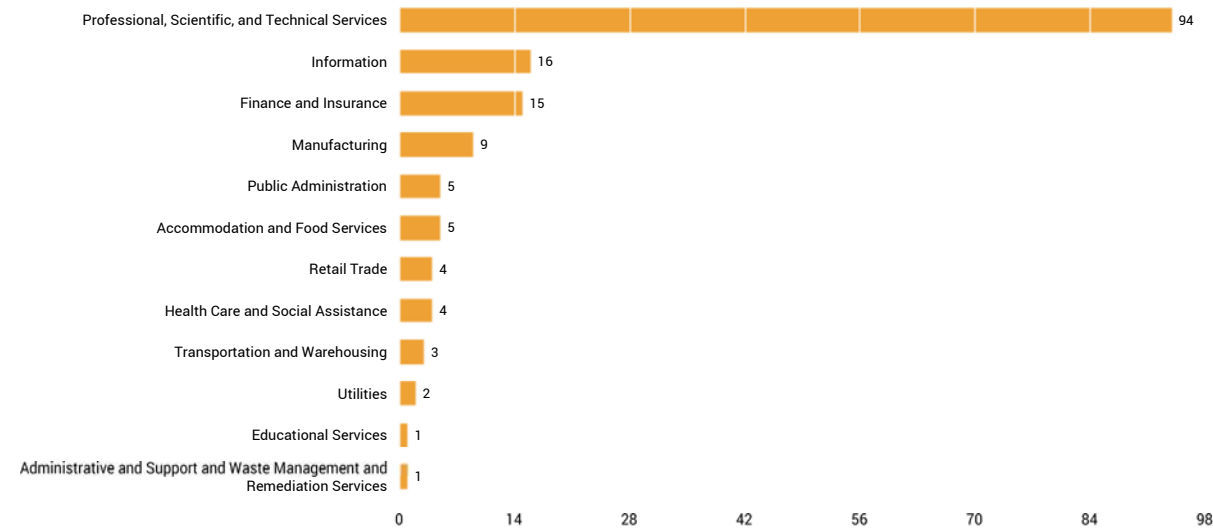
Numbers ▼



Top Industry Sectors

Mar. 12, 2016- May 10, 2016 (Data not available after May 08, 2016)
There are 191 postings available with the current filters applied.
There are 32 unspecified or unclassified postings.

Numbers ▼



Top Employers

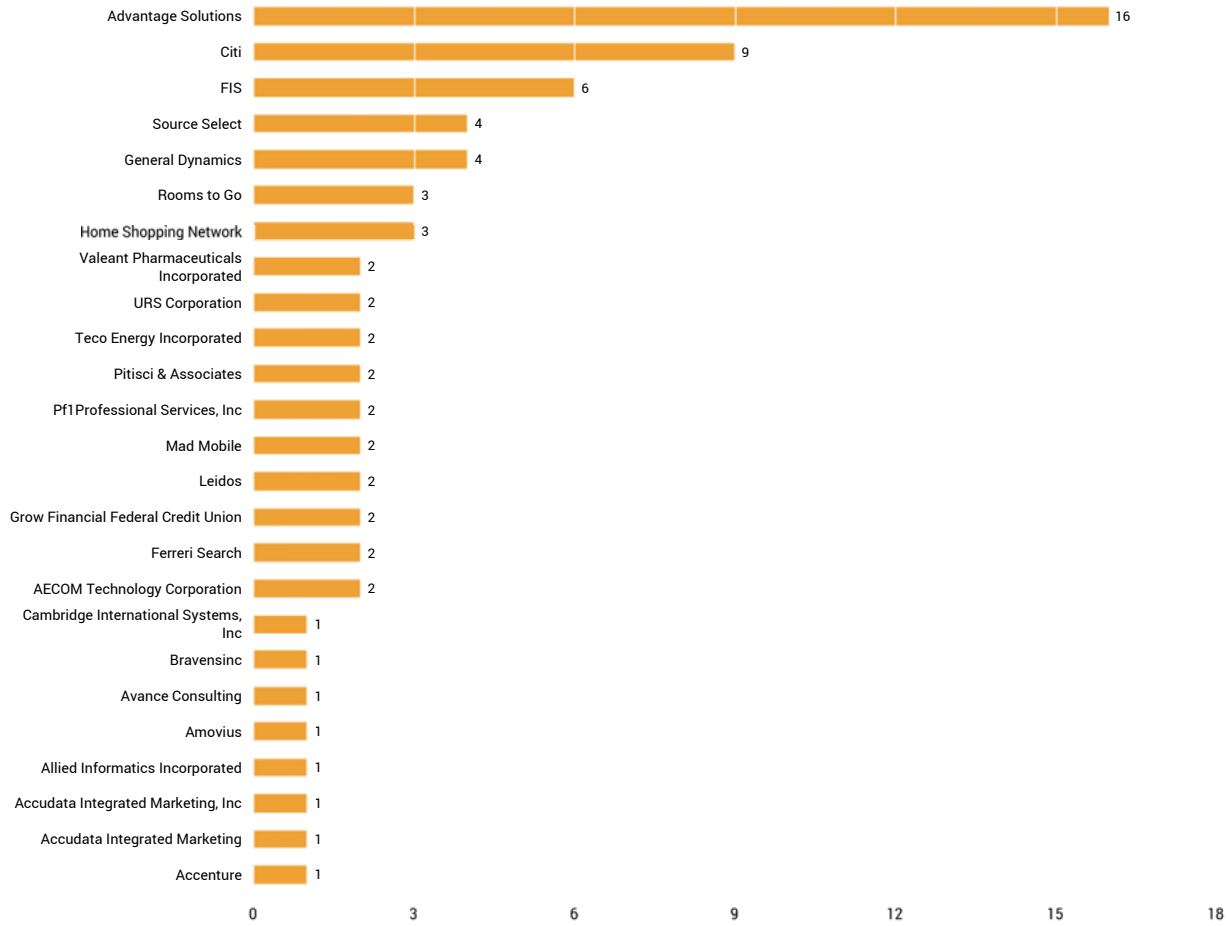
Note: 46% of records have been excluded because they do not include an employer. As a result, the chart below may not be representative of the full sample.

Mar. 12, 2016- May 10, 2016 (Data not available after May 08, 2016)

There are 191 postings available with the current filters applied.

There are 88 unspecified or unclassified postings.

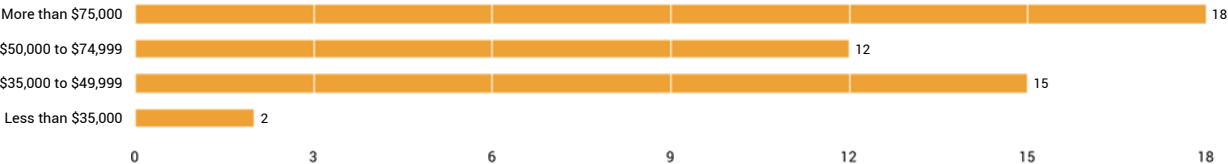
Numbers ▼



Salary Distribution

Note: 75% of records have been excluded because they do not include salary information. As a result, the chart below may not be representative of the full sample.
Mean realTime salary = \$67,858
Mar. 12, 2016- May 10, 2016 (Data not available after May 08, 2016)
There are 191 postings available with the current filters applied.
There are 144 unspecified or unclassified postings.

Numbers ▼



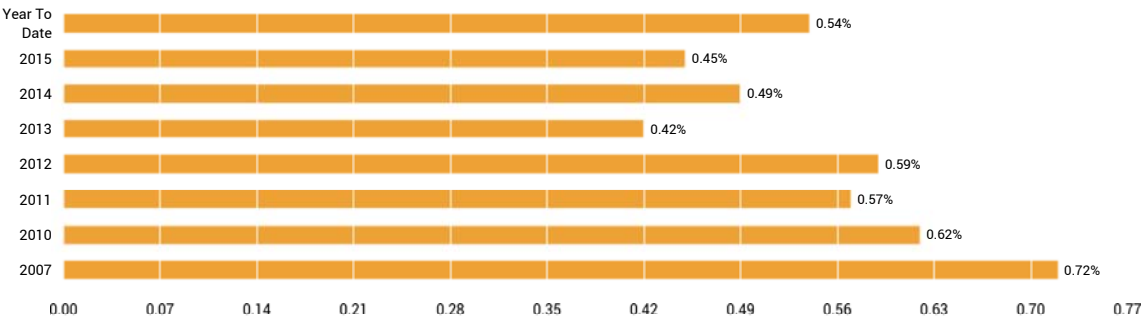
*This report uses data from real-time job postings. Salary figures are prorated to reflect full-time, annual wage status. For additional salary data by occupation from the Bureau of Labor Statistics, please refer to the summary tables options under the occupation category on the "Create reports" tab.

Job Counts By Year

This report shows data for the following time periods: 2007, 2010, 2011, 2012, 2013, 2014and 2015. Any active time period filters have not been applied. Percentages shown are out of the total number of postings for your selected location. Please also note thatthese results reflect point-in-time data and are subject to change asimprovements are made to our aggregation and reporting methodologies. Burning Glass does not recommend use of this data for time series reporting.

Mar. 12, 2016- May 10, 2016 (Data not available after May 08, 2016)
There are 191postingsavailable with the current filters applied.
There are Ounspecifiedor unclassified postings.

Percentages ▼





Program Action Plan

College: College of Computer and Information Technology

Date Completed: April 2016

Prepared By: Sharon Setterlind

I. Action Plan Items:

	Action Item	Measure Addressed	Completion Date	Responsible Party
1	Review new industry certification opportunities and align all industry certifications with current curriculum through coursework and identified Major Learning Outcomes.	Industry Certifications	June 2017	Sharon Setterlind
2	Implement a series of online career workshops in CCIT and activate the electronic portfolio for students.	Placement	June 2017	Sharon Setterlind
3	Begin development of an Internship to Apprenticeship program with DOL 5 year grant.	Internships	June 2017	Sharon Setterlind

Computer and Information Technology - AS
2015-16 Enhanced Comprehensive Academic Program Review
Institutional Research and Effectiveness

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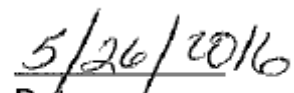
II. Special Resources Needed:

Resources will be necessary to cover the cost associated with Industry Certifications for faculty who will teach the courses.

III. Area(s) of Concern/Improvement:

None


Sharon Setterlind, Dean


Date





References

Rule 6A-14.060(5). *Florida Administrative Code, Accountability Standards*.
Retrieved October 2002, from the Division of Community Colleges
Web site: <http://www.firn.edu/doe/rules/6A-14.htm>

Contact Information

Please address any questions or comments regarding this evaluation to:

Sabrina Crawford, M.A.
Executive Director, Institutional Research and Effectiveness
St. Petersburg College, P.O. Box 13489, St. Petersburg, FL 33733
(727) 341-3118
crawford.sabrina@spcollege.edu



Computer and Information Technology - AS
2015-16 Enhanced Comprehensive Academic Program Review
Institutional Research and Effectiveness

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Appendices



Computer and Information Technology - AS
2015-16 Enhanced Comprehensive Academic Program Review
Institutional Research and Effectiveness

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PROGRAM OF STUDY
College of Computer & Information Technology
Computer Information Technology Associate in Science
CIT-AS

Effective Beginning Catalog Term: Spring 2016 (0510)

The requirements below may not reflect degree requirements for continuing students. Continuing students should visit **My SPC** and view **My Learning Plan** to see specific degree requirements for their effective Catalog term.

Program Leadership Information

Sharon Setterlind, Dean
setterlind.sharon@spcollege.edu
7273414724

Program Summary

This program prepares the student for an entry-level position in the support of information systems and technology services in a business setting. Students will learn technical skills in networking, spreadsheet and database programming, Web tools, and information technology security. Students also learn software application support, hardware configurations, and troubleshooting. Students prepare to sit for the CompTIA A+, Network+, and MOS: Excel and Access industry certifications.

The **Academic Pathway** is a tool for students that lists the following items:

- the recommended order in which to take the program courses
- suggested course when more than one option exists
- which semester each course is typically offered
- if the course has a prerequisite
- courses that may lead to a certificate (if offered in the program)

If you are starting the program this term, click here to access the [recommended Academic Pathway](#).

If you have already started the program, click here for the [archived Academic Pathways](#).

Please verify the Academic Pathway lists your correct starting semester.

Job-Related Opportunities

- Help Desk Support Specialist
- Computer User Support Specialist
- Information Technology Specialist
- Technical Support Specialist

AS GENERAL EDUCATION REQUIREMENTS

Communications - Composition

Complete 3 credits from the approved General Education Composition I coursework below. Minimum grade of "C" required. This requirement must be completed within the first 24 credits of coursework toward the AS degree.

Credits

3

Total Credits

3

AS GENERAL EDUCATION REQUIREMENTS		Credits
Communications - Speech		
	Complete 3 credits from the approved General Education Speech coursework . Minimum grade of "C" required.	3
Total Credits		3
AS GENERAL EDUCATION REQUIREMENTS		Credits
Social and Behavioral Sciences		
	Complete 3 credits from the approved General Education Social and Behavioral Sciences coursework. Minimum grade of "C" required.	3
Total Credits		3
AS GENERAL EDUCATION REQUIREMENTS		Credits
Humanities and Fine Arts		
	Complete 3 credits from the approved General Education Humanities and Fine Arts coursework. Minimum grade of "C" required.	3
Total Credits		3
AS GENERAL EDUCATION REQUIREMENTS		Credits
Mathematics		
	Complete 3 credits from the approved General Education Mathematics coursework. Minimum grade of "C" required.	3
Total Credits		3
AS GENERAL EDUCATION REQUIREMENTS		Credits
Ethics		
	Complete 3 credits from the approved General Education Ethics coursework. Minimum grade of "C" required.	3
Total Credits		3
AS GENERAL EDUCATION REQUIREMENTS		Credits
Enhanced World View		
	Complete at least one 3-credit course intended to enhance the student's world view in light of an increasingly globalized economy. Minimum grade of "C" required. In some cases, this course may also be used to satisfy another General Education Requirement.	0
Total Credits		0
SUPPORT COURSES		
Computer and Information Literacy Requirement (Complete 1 course)		Credits

	Completion of this requirement satisfies the General Education Computer Competency requirement for this AS degree	0
CGS 1100 	Computer Applications	3
Total Credits		3
SUPPORT COURSES		Credits
CGS 1301 	Introduction to Information Systems	3
CGS 1831 	Web Foundations/Essentials	3
CNT 1000 	Local Area Network Concepts	3
COP 1000 	Introduction to Computer Programming	3
CTS 1120 	Introduction to Network Security Foundations	3
GEB 1011 	Introduction to Business	3
Total Credits		18
MAJOR CORE COURSES		Credits
CET 1171C 	Computer Repair Essentials	3
CET 1172C 	Computer Support Technician	3
CGS 1515 	Spreadsheet Techniques and Programming	3
CGS 1545 	Database Techniques	3
CGS 2651 	Intro to Social Media and Web Technologies	3
CIS 2321 	Systems Analysis and Design	3
CIS 2940 	Technology Support Internship	3
Total Credits		21
Total Credits		60

PID 477

PROGRAM OF STUDY
College of Computer & Information Technology
Computer Networking Associate in Science
COMPNET-AS

Effective Beginning Catalog Term: Fall 2015 (0505)

The requirements below may not reflect degree requirements for continuing students. Continuing students should visit **My SPC** and view **My Learning Plan** to see specific degree requirements for their effective Catalog term.

Program Leadership Information

Dr. Sharon Setterlind, Dean, SP/G
(727) 341-4724

John Long, Academic Department Chair
long.john@spcollege.edu
(727) 341-4724

Program Summary

This program is designed for students to develop a network utilizing the appropriate analytical skills, develop help desk support platforms that facilitate troubleshooting and to develop secure network strategies that maximize value in the information technology environment. This program prepares students to sit for the CompTIA A+, CompTIA Network+, CompTIA Linux+, CISCO Certified Network Associate (CCNA) and Microsoft Certified Solutions Associate (MCSA) industry certifications.

Job-Related Opportunities

Job Related Opportunities

- Network and Computer Systems Administrators
- Computer Network Support Specialists
- Computer User Support Specialists

Graduation Rules

Minimum grade of "C" required in all Major and Subplan courses.

AS GENERAL EDUCATION REQUIREMENTS

Communications - Composition I

Credits

Complete 3 credits from the approved General Education Composition I coursework. Minimum grade of "C" required. This requirement must be completed within the first 24 credits of coursework toward the AS degree.

3

Total Credits

3

AS GENERAL EDUCATION REQUIREMENTS

Communications - Speech

Credits

Complete 3 credits from the approved General Education Speech coursework. Minimum grade of "C" required.

3

Total Credits

3

AS GENERAL EDUCATION REQUIREMENTS		Credits
Social and Behavioral Sciences		
	Complete 3 credits from the approved General Education Social and Behavioral Sciences coursework. Minimum grade of "C" required.	3
Total Credits		3
AS GENERAL EDUCATION REQUIREMENTS		Credits
Humanities and Fine Arts		
	Complete 3 credits from the approved General Education Humanities and Fine Arts coursework. Minimum grade of "C" required.	3
Total Credits		3
AS GENERAL EDUCATION REQUIREMENTS		Credits
Mathematics		
	Complete 3 credits from the approved General Education Mathematics coursework. Minimum grade of "C" required.	3
Total Credits		3
AS GENERAL EDUCATION REQUIREMENTS		Credits
Ethics		
	Complete 3 credits from the approved General Education Ethics coursework. Minimum grade of "C" required.	3
Total Credits		3
AS GENERAL EDUCATION REQUIREMENTS		Credits
Enhanced World View		
	Complete at least one 3-credit course intended to enhance the student's world view in light of an increasingly globalized economy. Minimum grade of "C" required. In some cases, this course may also be used to satisfy another General Education Requirement.	0
Total Credits		0
AS GENERAL EDUCATION REQUIREMENTS		Credits
Computer/Information Literacy Competency		
	Competency may be demonstrated by completing the Computer Information and Literacy Exam (CGS 1070T) OR by successful completion of one of the approved Computer/Information Literacy Competency courses. No minimum credits required.	0
Total Credits		0

MAJOR CORE COURSES		Credits
Complete 18 credits		
CET 1171C 	Computer Repair Essentials	3
CET 1172C 	Computer Support Technician	3
CNT 2940 	Computer Networking Internship	3
COP 1000 	Introduction to Computer Programming	3
CTS 1411 	Fundamentals of Information Storage and Management	3
CTS 2370 	Configuring and Managing Virtualization	3
Total Credits		18
MAJOR CORE COURSES		Credits
REQUIRED FINAL COURSE: Last Semester for All Students		
CIS 2321 	Systems Analysis and Design	3
Total Credits		3
SUBPLANS		Credits
Select ONE subplan below (Complete 24 credits)		
Total Credits		24
SUBPLAN CORE COURSES		Credits
Subplan: Networking Administration (Complete 24 credits)		
CNT 1000 	Local Area Network Concepts	3
CTS 1303 	Configuring Advanced Windows Server Services	3
CTS 1327 	Configuring and Administering MS Windows Client	3
CTS 1328 	Installing and Configuring Windows Server	3
CTS 1334 	Administering Windows Servers	3
CTS 2106 	Fundamentals of the Linux/Unix Operating Environment	3
CTS 2321 	Linux System Administration I	3
CTS 2322 	Linux System Administration II	3
SUBPLAN CORE COURSES		Credits
SUBPLAN: Networking Engineering (Complete 24 credits)		
CET 1600 	Introduction to Networks	3
CET 1610 	Routing Protocols & Concepts	3
CET 2615 	Scaling Networks	3
CET 2620 	Connecting Networks	3
CET 2670 	Scalable Routing Protocols and IPV6	3
CET 2682 	Fundamentals of Voice Over IP (VoIP)	3
CET 2685 	Implementing Secure Converged WANS	3
CET 2856 	Implementing CISCO IP Switched Networks (SWITCH)	3
Total Credits		63

PROGRAM OF STUDY
College of Computer & Information Technology
Computer Programming and Analysis Associate in
Science
CWPA-AS

Effective Beginning Catalog Term: Fall 2015 (0505)

The requirements below may not reflect degree requirements for continuing students. Continuing students should visit **My SPC** and view **My Learning Plan** to see specific degree requirements for their effective Catalog term.

Program Leadership Information

Dr. Sharon Setterlind, Dean, SP/G
setterlind.sharon@spcollege.edu
(727) 341-4724

Shane Hamilton, Lead Instructor
hamilton.shane@spcollege.edu
727-614-7049

Program Summary

This program offers the student the opportunity to specialize in two programming languages. Students will develop dynamic Web content and transaction-based Web systems that work with multiple programming language platforms. Students will also develop strategies for managing data while in accordance with industry standards and to evaluate the effectiveness of information technology application systems. Students electing the Java courses will be prepared to sit for the Oracle Java Certified Associate industry certification.

Job-Related Opportunities

Computer Programmers
Computer Systems Analysts
Web Developers

Graduation Rules

Minimum grade of "C" required in all courses.

AS GENERAL EDUCATION REQUIREMENTS

Communications - Composition I

Complete 3 credits from the approved General Education Composition I coursework. Minimum grade of "C" required. This requirement must be completed within the first 24 credits of coursework toward the AS degree.

Credits

3

Total Credits

3

AS GENERAL EDUCATION REQUIREMENTS

Communications - Speech

Credits

Complete 3 credits from the approved General Education Speech coursework . Minimum grade of "C" required.	3
Total Credits	3
AS GENERAL EDUCATION REQUIREMENTS	Credits
Social and Behavioral Sciences	
Complete 3 credits from the approved General Education Social and Behavioral Sciences coursework. Minimum grade of "C" required.	3
Total Credits	3
AS GENERAL EDUCATION REQUIREMENTS	Credits
Humanities and Fine Arts	
Complete 3 credits from the approved General Education Humanities and Fine Arts coursework. Minimum grade of "C" required.	3
Total Credits	3
AS GENERAL EDUCATION REQUIREMENTS	Credits
Mathematics	
Complete 3 credits from the approved General Education Mathematics coursework. Minimum grade of "C" required.	3
Total Credits	3
AS GENERAL EDUCATION REQUIREMENTS	Credits
Ethics	
Complete 3 credits from the approved General Education Ethics coursework. Minimum grade of "C" required.	3
Total Credits	3
AS GENERAL EDUCATION REQUIREMENTS	Credits
Computer/Information Literacy Competency	
Competency may be demonstrated by completing the Computer Information and Literacy Exam (CGS 1070T) OR by successful completion of one of the approved Computer/Information Literacy Competency courses. No minimum credits required.	0
Total Credits	0
AS GENERAL EDUCATION REQUIREMENTS	Credits
Enhanced World View	

Complete at least one 3-credit course intended to enhance the student's world view in light of an increasingly globalized economy. Minimum grade of "C" required. In some cases, this course may also be used to satisfy another General Education Requirement.	0
Total Credits	0
MAJOR CORE COURSES	
Complete 24 credits	Credits
CGS 1560  Computer Operating Systems	3
CGS 1831  Web Foundations/Essentials	3
CGS 2823  Advanced Web Site Development	3
CNT 1000  Local Area Network Concepts	3
COP 1000  Introduction to Computer Programming	3
COP 2801  JavaScript	3
CTS 2433  SQL Database Design & Programming	3
COP 2940  Computer Programming Internship	3
Total Credits	24
MAJOR ELECTIVE COURSES	
Select TWO tracks from below (Complete 18 credits):	Credits
Total Credits	18
TRACK	Credits
C++ Track (Complete 9 credits)	
CGS 2402  Programming in C++ for Business	3
COP 2222  Advanced C++ Programming for Business	3
CAP 2733  C++ Programming with DirectX	3
or	
COP 2654  iOS App Development	3
TRACK	Credits
C# Track (Complete 9 credits)	
COP 2360  Introduction to C# Programming	3
COP 2362  Advanced Programming with C#	3
COP 2839  ASP.NET Programming with C#/VB.NET	3
or	
COP 2666  Windows Phone App Development	3
TRACK	Credits
Java Track (Complete 9 credits)	
COP 2250  Java Programming I	3
COP 2251  Java Programming II	3
COP 2806  Java Web Applications	3
or	
COP 2660  Introduction to Android Programming	3

TRACK**Open Source Track (Complete 9 credits)****Credits**

COP 1831	 Web Scripting with CGI/PERL	3
COP 1842	 Developing Web Sites Using PHP/MYSQL	3
COP 2843	 Advanced PHP/MySQL	3

TRACK**Visual Basic.NET Track (Complete 9 credits)****Credits**

COP 2837	 Visual Basic.NET Programming I	3
COP 2838	 Visual Basic.NET Programming II	3
COP 2839	 ASP.NET Programming with C#/VB.NET	3
or		
COP 2666	 Windows Phone App Development	3

Total Credits**60**

PID 446

PROGRAM OF STUDY
College of Computer & Information Technology
Cybersecurity Associate in Science
ITSC-AS

Effective Beginning Catalog Term: Spring 2016 (0510)

The requirements below may not reflect degree requirements for continuing students. Continuing students should visit **My SPC** and view **My Learning Plan** to see specific degree requirements for their effective Catalog term.

Program Leadership Information

Dr. Sharon Setterlind, Dean, SP/G
(727) 341-4724

Therezita Ortiz, Professor
Ortiz.Therezita@spcollege.edu
727-791-5905

Program Summary

This program is designed to prepare the student to develop an organizational network and security program using risk management strategies, and to develop a strategy to address the increase growth of informational technology security concerns from regional to international environments. Students learn also how to evaluate security techniques that assist in the prevention of hackers and cyber-attacks. Students are also given the opportunity to sit for the CompTIA Security+ and CISCO Certified Network Associate (CCNA) industry certifications.

The **Academic Pathway** is a tool for students that lists the following items:

- the recommended order in which to take the program courses
- suggested course when more than one option exists
- which semester each course is typically offered
- if the course has a prerequisite
- courses that may lead to a certificate (if offered in the program)

If you are starting the program this term, click here to access the [recommended Academic Pathway](#).

If you have already started the program, click here for the [archived Academic Pathways](#).

Please verify the Academic Pathway lists your correct starting semester.

Job-Related Opportunities

- Information Security Analyst
- Information Management Specialist
- Network Security Administrator

Graduation Rules

Minimum grade of "C" required in all Support and Major courses.

AS GENERAL EDUCATION REQUIREMENTS
Communications - Composition I

Credits

Complete 3 credits from the approved General Education Composition I coursework. Minimum grade of "C" required. This requirement must be completed within the first 24 credits of coursework toward the AS degree.	3
Total Credits	3
AS GENERAL EDUCATION REQUIREMENTS	Credits
Communications - Speech	
Complete 3 credits from the approved General Education Speech coursework . Minimum grade of "C" required.	3
Total Credits	3
AS GENERAL EDUCATION REQUIREMENTS	Credits
Social and Behavioral Sciences	
Complete 3 credits from the approved General Education Social and Behavioral Sciences coursework. Minimum grade of "C" required.	3
Total Credits	3
AS GENERAL EDUCATION REQUIREMENTS	Credits
Humanities and Fine Arts	
Complete 3 credits from the approved General Education Humanities and Fine Arts coursework. Minimum grade of "C" required.	3
Total Credits	3
AS GENERAL EDUCATION REQUIREMENTS	Credits
Mathematics	
Complete 3 credits from the approved General Education Mathematics coursework. Minimum grade of "C" required.	3
Total Credits	3
AS GENERAL EDUCATION REQUIREMENTS	Credits
Ethics	
Complete 3 credits from the approved General Education Ethics coursework. Minimum grade of "C" required.	3
Total Credits	3
AS GENERAL EDUCATION REQUIREMENTS	Credits
Computer/Information Literacy Competency	

Competency may be demonstrated by completing the Computer Information and Literacy Exam (CGS 1070T) OR by successful completion of one of the approved Computer/Information Literacy Competency courses. No minimum credits required.	0
Total Credits	0
AS GENERAL EDUCATION REQUIREMENTS	
Enhanced World View	Credits
Complete at least one 3-credit course intended to enhance the student's world view in light of an increasingly globalized economy. Minimum grade of "C" required. In some cases, this course may also be used to satisfy another General Education Requirement.	0
Total Credits	0
SUPPORT COURSES	
Complete 21 credits	Credits
CET 1600  Introduction to Networks	3
CET 1610  Routing Protocols & Concepts	3
CET 2615  Scaling Networks	3
CET 2620  Connecting Networks	3
CTS 2106  Fundamentals of the Linux/Unix Operating Environment	3
CTS 2433  SQL Database Design & Programming	3
COP 1000  Introduction to Computer Programming	3
Total Credits	21
MAJOR CORE COURSES	
Complete 21 credits	Credits
CAP 2134  Database Security	3
CET 2691  Laws & Legal Aspects of IT Security	3
CGS 2811  Incident Response & Disaster Recovery	3
CIS 1358  Operating System Security	3
CTS 1120  Introduction to Network Security Foundations	3
CTS 1314  Network Defense and Countermeasures	3
CIS 2352  Ethical Hacking	3
Total Credits	21
MAJOR CORE COURSES	
INTERNSHIP	Credits
CTS 2940  IT Security Internship	3
Total Credits	3
Total Credits	63

PID 476

PROGRAM OF STUDY
College of Computer & Information Technology
Web Development Associate in Science
WEBSDM-AS

Effective Beginning Catalog Term: Fall 2015 (0505)

The requirements below may not reflect degree requirements for continuing students. Continuing students should visit **My SPC** and view **My Learning Plan** to see specific degree requirements for their effective Catalog term.

Program Leadership Information

Dr. Sharon Setterlind, Dean, SP/G
setterlind.sharon@spcollege.edu
(727) 341-4724

Nancy Russell, Academic Department Coordinator, SP
russell.nancy@spcollege.edu
(727) 341-4641

Program Summary

This program provides the student the ability to structure web site platforms using the most recent versions of web application tools and to develop web pages and/or web sites combining interactive graphics, image optimization, 508 accessibility requirements and ecommerce techniques. Also the student will learn to develop complex web sites using artistic and technical abilities, while ensuring the needs of the business environment. Students will be prepared to sit for the Oracle Java Certified Associate industry certification.

Job-Related Opportunities

- Web Developer
- Graphic Designer
- Multimedia Artist
- Web Administrator

Graduation Rules

Minimum grade of "C" required in all Support and Major courses.

AS GENERAL EDUCATION REQUIREMENTS

Communications - Composition I

Credits

Complete 3 credits from the approved General Education Composition I coursework. Minimum grade of "C" required. This requirement must be completed within the first 24 credits of coursework toward the AS degree.

3

Total Credits

3

AS GENERAL EDUCATION REQUIREMENTS

Communications - Speech

Credits

Complete 3 credits from the approved General Education Speech coursework . Minimum grade of "C" required.	3
Total Credits	3
AS GENERAL EDUCATION REQUIREMENTS	Credits
Social and Behavioral Sciences	
Complete 3 credits from the approved General Education Social and Behavioral Sciences coursework. Minimum grade of "C" required.	3
Total Credits	3
AS GENERAL EDUCATION REQUIREMENTS	Credits
Humanities and Fine Arts	
Complete 3 credits from the approved General Education Humanities and Fine Arts coursework. Minimum grade of "C" required.	3
Total Credits	3
AS GENERAL EDUCATION REQUIREMENTS	Credits
Mathematics	
Complete 3 credits from the approved General Education Mathematics coursework. Minimum grade of "C" required.	3
Total Credits	3
AS GENERAL EDUCATION REQUIREMENTS	Credits
Computer/Information Literacy Competency	
Competency may be demonstrated by completing the Computer Information and Literacy Exam (CGS 1070T) OR by successful completion of one of the approved Computer/Information Literacy Competency courses. No minimum credits required.	0
Total Credits	0
AS GENERAL EDUCATION REQUIREMENTS	Credits
Ethics	
Complete 3 credits from the approved General Education Ethics coursework. Minimum grade of "C" required.	3
Total Credits	3
AS GENERAL EDUCATION REQUIREMENTS	Credits
Enhanced World View	

Complete at least one 3-credit course intended to enhance the student's world view in light of an increasingly globalized economy. Minimum grade of "C" required. In some cases, this course may also be used to satisfy another General Education Requirement.

0

Total Credits

0

SUPPORT COURSES

Complete 15 credits

Credits

COP 1000  Introduction to Computer Programming
 CNT 1000  Local Area Network Concepts
 GEB 1011  Introduction to Business
 CGS 1100 ^a  Computer Applications
 CTS 2433  SQL Database Design & Programming

3

3

3

3

3

Total Credits

15

MAJOR CORE COURSES

Complete 30 credits

Credits

CGS 1821  Web Graphics
 CGS 1831  Web Foundations/Essentials
 CGS 1874  Introduction to Multimedia
 COP 2250  Java Programming I
 CGS 2651  Collaborative Technologies
 COP 2801  JavaScript
 CGS 2823  Advanced Web Site Development
 COP 2806  Java Web Applications
 CGS 2940  Web Development Internship
 CIS 2321  Systems Analysis and Design

3

3

3

3

3

3

3

3

3

3

Total Credits

30

Total Credits

63

^aSatisfies general education computer literacy requirement.

PID 459



Program Assessment Report

Program: Technology Management

Option: Technology Management

Report Year: 2014-15

Drafted by Sharon Setterlind on Aug 5, 2015

Data Files

TMGT AS Assessment Rubric Summer 2015 

Overall Introduction

In support of the mission of St. Petersburg College, faculty committees established thirteen value statements. Three of these value statements are:

- Student Focus: We believe students are the heart of SPC! All SPC resources, decisions, and efforts are aligned to transform students' lives to empower them to finish what they start!
- Academic Excellence: We promote academic excellence through interactive, innovative, and inquiry-centered teaching and learning.
- Culture of Inquiry: We encourage a data-driven environment that allows for open, honest dialogue about who we are, what we do, and how we continue to improve student success.

It is the intent of St. Petersburg College to incorporate continuous improvement practices in all areas. Assessment reports provide comparisons of present and past results which are used to identify topics where improvement is possible. SPC has traditionally used past results as a vital tool in achieving its commitment to continuous improvement.

Program Learning Outcomes

#1: Apply contemporary technology resources that promote effective company management.

I. Use of Past Results

The 2010-11 assessment report stated that there was no evidence indicating that any end of program assessments had been completed in the Technology Management program due to the low number of Associate in Science (A.S.) graduates. As a result, the analysis of End of Program Assessments could not be included in this report.

II. Methodology

Means of Assessment: For the Technology Management AS degree program, the CIS2940 Technology Management Internship course is the designated course that students will take as the last course for degree completion and assessment. The project in the course is designed to assess the student's knowledge and comprehension of the PLOs for this AS degree. Students were asked to work with the faculty member and the employer of the Internship to develop learning objectives.

Date(s) of Administration: Summer Term 2014-15

Method: Students enrolled in CIS2940 were assessed on their preparation of Internship Learning Objectives

Assessment Instrument:

Performance Measure	Improvement Needed (1)	Fair (2)	Good (3)	Excellent (4)	Score

Internship Learning Objectives	Little or no proficiency demonstrated: Benchmark not met overall or on any components of assessment activity.	Proficiency demonstrated in some areas of the assessment activity but overall benchmark not met.	Proficiency demonstrated and benchmark met for assessment activity but not on a continuous basis.	Proficiency demonstrated and benchmark met for assessment activity for each data collection period, as well as overall, on a continuous basis.	100% or 4
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Population: Students enrolled in CIS2940 were assessed during the last week of a 10-week summer term.

III. Criteria for Success

Students should receive a score of 70% or above on each category of the evaluation.

IV. Summary of Assessment Findings

PLO 1 Assessment Results				
Term	N	Mean Score	Minimum Score	Maximum Score
2014-15 Summer	1	100%	100%	100%

V. Discussion and Analysis of Assessment Findings

The PLO #1 assessment results address the development of Learning Objectives that are created with the participation of the student, the employer, and the course faculty to identify and quantify the learning objectives for each student. This is prepared during the first two weeks of the course and may be modified by agreement of all parties which will include and reflect a mix of technology and management processes. The creation of the Learning Objectives is designed to develop a technology management infrastructure that offers a mix of technology and management processes. Scores were based on a possible 4 points earned. It was clear that the student developed Learning Objectives in the Internship to align with the coursework of the Technology Management AS degree.

VI. Action Plan and Timetable for Implementation

Based on the analysis of the results the following Action Plan Items have been selected for implementation:

- The method utilized for data collection and analysis needs improvement. The program will ensure that all students enrolled in CIS2940 Technology Management Internship are assessed, and the assessment data collected is analyzed to identify specific areas for improvement. The assessment data collected in fall 2015, spring 2016, and summer 2016, will be analyzed and reported in August 2016.
- Sharon Setterlind / Aug 2016
- Revisions are needed for the rubric used in data collection. The purpose for revising the scoring rubric used in data collection for all three PLOs in the Technology Management AS degree, is to add specific scoring categories for each performance measure. This will provide a more specific detailed account of the student competencies being measured in each category, for each PLO. The new rubric will be used to assess students in fall 2015, spring 2016, and summer 2016.
- Sharon Setterlind / Aug 2016

#2: Using technology industry standard frameworks, evaluate technical problems and plans to identify solutions that enhance the success of a business enterprise.

I. Use of Past Results

The 2010-11 assessment report stated that there was no evidence indicating that any end of program assessments had been completed in the Technology Management program due to the low number of Associate in Science (A.S.)

graduates. As a result, the analysis of End of Program Assessments could not be included in this report.

II. Methodology

Means of Assessment: For the Technology Management AS degree program, the CIS2940 Technology Management Internship course is the designated course that students will take as the last course for degree completion and assessment. The project in the course is designed to assess the student's knowledge and comprehension of the PLOs for this AS degree. Students worked on an End-of-Program project that was designed to exhibit the characteristics needed of a Technology Management specialist, including problem solving, analytical and technical skills.

Date(s) of Administration: Summer Term 2014-2015

Method: Students produced a presentation and report guided by questions about their 'real world' experience in the field of information technology.

Assessment Instrument:

Performance Measure	Improvement Needed (1)	Fair (2)	Good (3)	Excellent (4)	Score
Presentation Content	Little or no proficiency demonstrated: Benchmark not met overall or on any components of assessment activity.	Limited proficiency demonstrated with minimal reflection in the quality of the presentation. The presentation provided only the minimum content required.	Proficiency demonstrated and benchmark met for assessment activity but not on a continuous basis. The presentation content met the objectives.	Proficiency demonstrated and benchmark met for assessment activity for each data collection period. The presentation clearly stated and demonstrated the objectives and PLOs.	88% or 3.52
Report Content	Little or no proficiency demonstrated: Benchmark not met overall or on any components of assessment activity.	Limited proficiency demonstrated in some areas of the assessment activity but overall benchmark not met. The report provided only the minimum content required.	Proficiency demonstrated and benchmark met for assessment activity but not on a continuous basis. The report content met the objectives.	Proficiency demonstrated and benchmark met for assessment activity for each data collection period. The report clearly stated and demonstrated the skills to be successful. The report was well organized, no grammar and/or spelling errors.	95% or 3.8

Population: Students enrolled in CIS2940 were assessed during the last week of a 10-week summer term.

III. Criteria for Success

Students should receive a score of 70% or above on each category of the evaluation.

IV. Summary of Assessment Findings

PLO 2 Assessment Results			
Term	N	Mean Score	
		Presentation	Report
2014-15 Summer	1	88%	95%

V. Discussion and Analysis of Assessment Findings

The PLO #2 assessment results address the second part of an End of Program Assessment that will exhibit the characteristics needed of a information technology specialist including problem solving, analytical and technical skills. Students were asked to produce a presentation and a report in which they were asked specific questions regarding their internship and their field of study: technology management. Out of a possible 4 points the scores were 3.52 and 3.80 which demonstrates that the student has passed the competency requirement to exhibit the characteristics needed of an Information Technology Specialist, including problem solving, analytical and technical skills.

VI. Action Plan and Timetable for Implementation

Based on the analysis of the results the following Action Plan Items have been selected for implementation:

- The method utilized for data collection and analysis needs improvement. The program will ensure that all students enrolled in CIS2940 Technology Management Internship are assessed, and the assessment data collected is analyzed to identify specific areas for improvement. The assessment data collected in fall 2015, spring 2016, and summer 2016, will be analyzed and reported in August 2016.
- Sharon Setterlind / Aug 2016
- Revisions are needed for the rubric used in data collection. The purpose for revising the scoring rubric used in data collection for all three PLOs in the Technology Management AS degree, is to add specific scoring categories for each performance measure. This will provide a more specific detailed account of the student competencies being measured in each category, for each PLO. The new rubric will be used to assess students in fall 2015, spring 2016, and summer 2016.
- Sharon Setterlind / Aug 2016

#3: Summarize and explain a 'real-world' experience with a major-related, supervised and evaluated practical work experience internship.

I. Use of Past Results

The 2010-11 assessment report stated that there was no evidence indicating that any end of program assessments had been completed in the Technology Management program due to the low number of Associate in Science (A.S.) graduates. As a result, the analysis of End of Program Assessments could not be included in this report.

II. Methodology

Means of Assessment: For the Technology Management AS degree program, the CIS2940 Technology Management Internship course is the designated course that students will take as the last course for degree completion and assessment. The project in the course is designed to assess the student's knowledge and comprehension of the PLOs for this AS degree. Each student was asked to document their internship experience in a journal on a weekly basis. Students were asked to summarize and explain their experience with a local company over a 10 or 16 week "real-world" job experience.

Date(s) of Administration: Summer Term 2014-15

Method: Students enrolled in CIS2940 were assessed on their Journal.

Assessment Instrument:

Performance Measure	Improvement Needed (1)	Fair (2)	Good (3)	Excellent (4)	Score

Journals	Little or no proficiency demonstrated: Benchmark not met overall or on any components of assessment activity.	Proficiency demonstrated in some areas of the assessment activity but overall benchmark not met.	Proficiency demonstrated and benchmark met for assessment activity but not on a continuous basis.	Proficiency demonstrated and benchmark met for assessment activity for each data collection period, as well as overall, on a continuous basis.	96% or 3.82
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Population: Students enrolled in CIS2940 were assessed during the last week of a 10-week summer term.

III. Criteria for Success

Students should receive a score of 70% or above on each category of the evaluation.

IV. Summary of Assessment Findings

PLO 3 Assessment Results				
Term	N	Mean Score	Minimum Score	Maximum Score
2014-15 Summer	1	96%	96%	96%

V. Discussion and Analysis of Assessment Findings

The PLO #3 assessment results address the journaling process by each student and the process is evaluated on a weekly basis. Students are asked to summarize and explain their experience with a local company over a 10 or 16 week "real-world" job experience. Based on the scores it was clear that student demonstrated a knowledge and understanding of a 'real-world' experience with a major-related, supervised and evaluated practical work experience internship that in many cases prepared he or she for job placement.

VI. Action Plan and Timetable for Implementation

Based on the analysis of the results the following Action Plan Items have been selected for implementation:

- The method utilized for data collection and analysis needs improvement. The program will ensure that all students enrolled in CIS2940 Technology Management Internship are assessed, and the assessment data collected is analyzed to identify specific areas for improvement. The assessment data collected in fall 2015, spring 2016, and summer 2016, will be analyzed and reported in August 2016.
- Sharon Setterlind / Aug 2016
- Revisions are needed for the rubric used in data collection. The purpose for revising the scoring rubric used in data collection for all three PLOs in the Technology Management AS degree, is to add specific scoring categories for each performance measure. This will provide a more specific detailed account of the student competencies being measured in each category, for each PLO. The new rubric will be used to assess students in fall 2015, spring 2016, and summer 2016.
- Sharon Setterlind / Aug 2016

Action Plan

Category	Action Plan Detail / Implications	For PLO	Responsible Party / Due Date
D. Improve Assessment Methodology			
D4. Improve method of data collection & analysis			
	The method utilized for data collection and analysis needs improvement. The program will ensure that all students enrolled in CIS2940 Technology Management Internship are assessed, and the assessment data collected is analyzed to identify specific areas for improvement. The assessment data collected in fall 2015, spring 2016, and summer 2016, will be analyzed and reported in August 2016.	#1, #2, #3	Sharon Setterlind Aug 2016
D5. Revise assessment instruments			
	Revisions are needed for the rubric used in data collection. The purpose for revising the scoring rubric used in data collection for all three PLOs in the Technology Management AS degree, is to add specific scoring categories for each performance measure. This will provide a more specific detailed account of the student competencies being measured in each category, for each PLO. The new rubric will be used to assess students in fall 2015, spring 2016, and summer 2016.	#1, #2, #3	Sharon Setterlind Aug 2016

Approvals

Program Administrator:

Sharon Setterlind - Dean

Approved by Sharon Setterlind - Dean on Aug 5, 2015

Educational Outcomes Coordinators:

Joe Boyd - Assessment Coordinator

Magaly Tymms - Assessment Director

Approved by Magaly Tymms - Assessment Director on Aug 17, 2015

Dean:

Sharon Setterlind - Dean

Approved by Sharon Setterlind - Dean on Aug 19, 2015

Senior Vice President:

Anne Cooper - Senior VP Instruction and Academic Programs

Approved by Anne Cooper - Senior VP Instruction and Academic Programs on Aug 19, 2015



Program Assessment Report

Program: Computer Networking, AS

Option: Computer Networking

Report Year: 2014-15

Drafted by Sharon Setterlind on Aug 4, 2015

Data Files

□ Assessment Data - Summer 2014-15

Overall Introduction

In support of the mission of St. Petersburg College, faculty committees established thirteen value statements. Three of these value statements are:

- **Student Focus:** We believe students are the heart of SPC! All SPC resources, decisions, and efforts are aligned to transform students' lives to empower them to finish what they start!
- **Academic Excellence:** We promote academic excellence through interactive, innovative, and inquiry-centered teaching and learning.
- **Culture of Inquiry:** We encourage a data-driven environment that allows for open, honest dialogue about who we are, what we do, and how we continue to improve student success.

It is the intent of St. Petersburg College to incorporate continuous improvement practices in all areas. Assessment reports provide comparisons of present and past results which are used to identify topics where improvement is possible. SPC has traditionally used past results as a vital tool in achieving its commitment to continuous improvement.

Program Learning Outcomes

#1: Utilize analytical and critical thinking skills to provide technical support and troubleshooting services to end-users who need computer hardware or software assistance.

I. Use of Past Results

The 2011-12 assessment report stated that there was no evidence indicating that any end of program assessments had been completed in the Computer Networking program due to the low number of graduates, thus data analysis was not conducted.

The Computer Networking Associate in Science (A.S.) degree program became effective in Spring 2007. Prior to Spring 2007, an A.S. degree in Computer Engineering Technology was offered at SPC, which included CISCO Certified Network Associate, CISCO Certified Network Professional, and Computer Networking.

II. Methodology

Means of Assessment: For the Computer Networking AS degree program, the CNT2940 Computer Networking Internship course is the designated course that students will take as the last course for degree completion and assessment. The project in the course is designed to assess students' knowledge and comprehension of the PLOs for this AS degree. Students are assessed using a variety of on-the-job scenarios for which they provided detailed responses about how they would appropriately handle the situation presented.

Date(s) of Administration: Summer Term 2014-15

Method: Students enrolled in CNT2940 were assessed on their responses to 10 essay questions.

Assessment Instrument: Faculty developed assessment consisting of 10 essay questions, based on a variety of

on-the-job scenarios

Scoring Rubric:

Performance Measure	Improvement Needed (1)	Fair (2)	Good (3)	Excellent (4)	Score
Essay Questions	Little or no proficiency demonstrated: Benchmark not met overall or on any components of assessment activity.	Proficiency demonstrated in some areas of the assessment activity but overall benchmark not met.	Proficiency demonstrated and benchmark met for assessment activity but not on a continuous basis.	Proficiency demonstrated and benchmark met for assessment activity for each data collection period, as well as overall, on a continuous basis.	100

Population: Students enrolled in CNT2940 Computer Networking, were assessed during the last week of a 10-week summer term.

III. Criteria for Success

Students should receive a score of 70% or above on each category of the evaluation.

IV. Summary of Assessment Findings

PLO 1 Assessment Results				
Term	N	Mean Score	Minimum Score	Maximum Score
2014-15 Summer	6	89%	81%	95%

V. Discussion and Analysis of Assessment Findings

The PLO #1 assessment results address the first part of an End of Program Assessment that will exhibit the characteristics needed of a computer networking specialist, including problem solving, analytical and technical skills. Students were presented with a variety of on-the-job scenarios for which they provided detailed responses about how they would appropriately handle the situation presented. They answered 10 short essay questions and out of a possible 100 points the average score was 89 which demonstrates that students have passed the competency requirement needed for a computer networking specialist in the area of problem solving, analytical and technical skills.

VI. Action Plan and Timetable for Implementation

Based on the analysis of the results the following Action Plan Items have been selected for implementation:

- Revisions are needed for the rubric used in data collection. The purpose for revising the scoring rubric used in data collection for all three PLOs in the Computer Networking AS degree, is to add specific scoring categories for each performance measure. This will provide a more specific detailed account of the student competencies being measured in each category, for each PLO. The new rubric will be used to assess students in fall 2015, spring 2016, and summer 2016.
- Sharon Setterlind / Aug 2015

#2: Identify network security threats and implement strategies to mitigate those threats within a diverse network environment.

I. Use of Past Results

The 2011-12 assessment report stated that there was no evidence indicating that any end of program assessments had been completed in the Computer Networking program due to the low number of graduates, thus data analysis was not conducted.

The Computer Networking Associate in Science (A.S.) degree program became effective in Spring 2007. Prior to Spring 2007, an A.S. degree in Computer Engineering Technology was offered at SPC, which included CISCO Certified Network Associate, CISCO Certified Network Professional, and Computer Networking.

II. Methodology

Means of Assessment: For the Computer Networking AS degree program, the CNT2940 Computer Networking Internship course is the designated course that students will take as the last course for degree completion and assessment. The project in the course is designed to assess students' knowledge and comprehension of the PLOs for this AS degree. Students were presented with a multiple choice quiz of 30 questions to assess their competency in the field of security for the computer networking specialist.

Date(s) of Administration: Summer Term 2014-15

Method: Students enrolled in CNT2940 were assessed on their responses to a 30 question Multiple Choice Quiz.

Assessment Instrument: Faculty developed assessment consisting of a 30-question Multiple Choice quiz.

Scoring Rubric:

Performance Measure	Improvement Needed (1)	Fair (2)	Good (3)	Excellent (4)	Score
Multiple Choice Quiz	</ 20 out of 30	21 out of 30	24 out of 30	>/ 27 out of 30	30

Population: Students enrolled in CNT2940 Computer Networking, were assessed during the last week of a 10-week summer term.

III. Criteria for Success

Students should receive a score of 70% or above on each category of the evaluation.

IV. Summary of Assessment Findings

PLO 2 Assessment Results				
Term	N	Mean Score	Minimum Score	Maximum Score
2014-15 Summer	6	89%	80%	97%

V. Discussion and Analysis of Assessment Findings

The PLO #2 assessment results address the second part of an End of Program Assessment that will exhibit the characteristics needed of a computer networking specialist in the field of security including problem solving, analytical and technical skills. Students were presented with a multiple choice quiz for which they provided responses to the 30 questions asked on the quiz. Out of a possible 100 points the average score was 89 which demonstrates that students have passed the competency requirement needed for a computer networking specialist in the field of security which included problem solving, analytical and technical skills.

VI. Action Plan and Timetable for Implementation

Based on the analysis of the results the following Action Plan Items have been selected for implementation:

- Revisions are needed for the rubric used in data collection. The purpose for revising the scoring rubric used in data collection for all three PLOs in the Computer Networking AS degree, is to add specific scoring categories for each performance measure. This will provide a more specific detailed account of the student competencies being measured in each category, for each PLO. The new rubric will be used to assess students in fall 2015, spring 2016, and summer 2016.
- Sharon Setterlind / Aug 2015

#3: Summarize and explain a "real-world" experience with a major related, supervised and evaluated work experience internship.

I. Use of Past Results

The 2011-12 assessment report stated that there was no evidence indicating that any end of program assessments had been completed in the Computer Networking program due to the low number of graduates, thus data analysis was not conducted.

The Computer Networking Associate in Science (A.S.) degree program became effective in Spring 2007. Prior to Spring 2007, an A.S. degree in Computer Engineering Technology was offered at SPC, which included CISCO Certified Network Associate, CISCO Certified Network Professional, and Computer Networking.

II. Methodology

Means of Assessment: For the Computer Networking AS degree program, the CNT2940 Computer Networking Internship course is the designated course that students will take as the last course for degree completion and assessment. The project in the course is designed to assess students' knowledge and comprehension of the PLOs for this AS degree. Each student was asked to document their internship experience in a journal on a weekly basis. Students were asked to summarize and explain their experience with a local company over a 10 week "real-world" job experience.

Date(s) of Administration: Summer Term 2014-15

Method: Students enrolled in CNT2940 were assessed on their journal entries on a weekly basis over a 10-week term.

Assessment Instrument: Faculty developed assessment consisting of an internship journal.

Scoring Rubric:

Performance Measure	Improvement Needed (1)	Fair (2)	Good (3)	Excellent (4)	Score
Journal	Little or no proficiency demonstrated: Benchmark not met overall or on any components of assessment activity.	Proficiency demonstrated in some areas of the assessment activity but overall benchmark not met.	Proficiency demonstrated and benchmark met for assessment activity but not on a continuous basis.	Proficiency demonstrated and benchmark met for assessment activity for each data collection period, as well as overall, on a continuous basis.	100

Population: Students enrolled in CNT2940 Computer Networking, were assessed during the last week of a 10-week summer term.

III. Criteria for Success

Students should receive a score of 70% or above on each category of the evaluation.

IV. Summary of Assessment Findings

PLO 3 Assessment Results				
Term	N	Mean Score	Minimum Score	Maximum Score
2014-15 Summer	6	93%	75%	100%

V. Discussion and Analysis of Assessment Findings

PLO #3 is documented through the journaling process by each student and the process is evaluated on a weekly basis. Students are asked to summarize and explain their experience with a local company over a 10 or 16 week "real-world" job experience. Based on the scores it was clear that students demonstrated a knowledge and understanding of a 'real-world' experience with a major-related, supervised and evaluated practical work experience internship that in many cases prepared them for job placement.

VI. Action Plan and Timetable for Implementation

Based on the analysis of the results the following Action Plan Items have been selected for implementation:

- Revisions are needed for the rubric used in data collection. The purpose for revising the scoring rubric used in data collection for all three PLOs in the Computer Networking AS degree, is to add specific scoring categories for each performance measure. This will provide a more specific detailed account of the student competencies being measured in each category, for each PLO. The new rubric will be used to assess students in fall 2015, spring 2016, and summer 2016.
- Sharon Setterlind / Aug 2015

Action Plan

Category	Action Plan Detail / Implications	For PLO	Responsible Party / Due Date
D. Improve Assessment Methodology			
D5. Revise assessment instruments			
	Revisions are needed for the rubric used in data collection. The purpose for revising the scoring rubric used in data collection for all three PLOs in the Computer Networking AS degree, is to add specific scoring categories for each performance measure. This will provide a more specific detailed account of the student competencies being measured in each category, for each PLO. The new rubric will be used to assess students in fall 2015, spring 2016, and summer 2016.	#1, #2, #3	Sharon Setterlind Aug 2015

Approvals

Program Administrators:

John Long - Academic Department Chair
Sharon Setterlind - Dean

Approved by Sharon Setterlind - Dean on Aug 4, 2015

Educational Outcomes Coordinators:

Joe Boyd - Assessment Coordinator
Magaly Tymms - Assessment Director

Approved by Magaly Tymms - Assessment Director on Aug 5, 2015

Dean:

Sharon Setterlind - Dean

Approved by Sharon Setterlind - Dean on Aug 5, 2015

Senior Vice President:

Anne Cooper - Senior VP Instruction and Academic Programs

Approved by Anne Cooper - Senior VP Instruction and Academic Programs on Aug 5, 2015



Program Assessment Report

Program: Computer Programming and Analysis

Option: Computer Programming and Analysis

Report Year: 2014-15

Drafted by Sharon Setterlind on Aug 5, 2015

Data Files

❏ [CWPA AS Assessment Rubric Summer 2015](#)

Overall Introduction

In support of the mission of St. Petersburg College, faculty committees established thirteen value statements. Three of these value statements are:

- **Student Focus:** We believe students are the heart of SPC! All SPC resources, decisions, and efforts are aligned to transform students' lives to empower them to finish what they start!
- **Academic Excellence:** We promote academic excellence through interactive, innovative, and inquiry-centered teaching and learning.
- **Culture of Inquiry:** We encourage a data-driven environment that allows for open, honest dialogue about who we are, what we do, and how we continue to improve student success.

It is the intent of St. Petersburg College to incorporate continuous improvement practices in all areas. Assessment reports provide comparisons of present and past results which are used to identify topics where improvement is possible. SPC has traditionally used past results as a vital tool in achieving its commitment to continuous improvement.

Program Learning Outcomes

#1: Develop dynamic web content and transaction-based web systems that work with multiple programming language platforms.

I. Use of Past Results

The 2011-12 assessment report stated that there was no evidence indicating that any end of program assessments had been completed in the Computer Programming and Analysis program due to the low number of graduates, thus data analysis was not conducted.

II. Methodology

Means of Assessment: For the Computer Programming AS degree program, the COP2940 Computer Programming Internship course is the designated course that students will take as the last course for degree completion and assessment. The project in the course is designed to assess students' knowledge and comprehension of the PLOs for this AS degree. Students were asked to develop dynamic web content and transaction-based web systems that work with multiple programming language platforms.

Date(s) of Administration: Summer Term 2014-15

Method: Students enrolled in COP2940 were assessed on their development of dynamic web content and transaction-based web systems using one of multiple programming language platforms.

Assessment Instrument: Faculty developed assessment used to evaluate students' ability to develop dynamic web content and transaction-based web systems using one of multiple programming language platforms.

Scoring Rubric:

Performance Measure	Improvement Needed (1)	Fair (2)	Good (3)	Excellent (4)	Score
Project Part 1	Little or no proficiency demonstrated: Benchmark not met overall or on any components of assessment activity.	Proficiency demonstrated in some areas of the assessment activity but overall benchmark not met.	Proficiency demonstrated and benchmark met for assessment activity but not on a continuous basis.	Proficiency demonstrated and benchmark met for assessment activity for each data collection period, as well as overall, on a continuous basis.	100

Population: Students enrolled in CNT2940 Computer Networking, were assessed during the last week of a 10-week summer term.

III. Criteria for Success

Students should receive a score of 70% or above on each category of the evaluation.

IV. Summary of Assessment Findings

PLO 1 Assessment Results				
Term	N	Mean Score	Minimum Score	Maximum Score
2014-15 Summer	8	94%	50%	100%

V. Discussion and Analysis of Assessment Findings

The PLO #1 assessment results address the first part of a documented End of Program Assessment Final Project that will exhibit the characteristics needed of a computer programming specialist, including problem solving, analytical and technical skills. It was clear, based on the average score of 94% that students had the necessary skills to develop dynamic web content and transaction-based web systems that work with multiple programming language platforms.

VI. Action Plan and Timetable for Implementation

Based on the analysis of the results the following Action Plan Items have been selected for implementation:

- The method utilized for data collection and analysis needs improvement. The program will ensure that all students enrolled in COP2940 Computer Programming are assessed, and the assessment data collected is analyzed to identify specific areas for improvement. The assessment data collected in fall 2015, spring 2016, and summer 2016, will be analyzed and reported in August 2016.
- Sharon Setterlind / Aug 2016
- Revisions are needed for the rubric used in data collection. The purpose for revising the scoring rubric used in data collection for all three PLOs in the Computer Programming and Analysis AS degree, is to add specific scoring categories for each performance measure. This will provide a more specific detailed account of the student competencies being measured in each category, for each PLO. The new rubric will be used to assess students in fall 2015, spring 2016, and summer 2016.
- Sharon Setterlind / Aug 2016

#2: Develop strategies for managing data while in accordance with industry standards.

I. Use of Past Results

The 2011-12 assessment report stated that there was no evidence indicating that any end of program assessments had been completed in the Computer Programming and Analysis program due to the low number of graduates, thus data analysis was not conducted.

II. Methodology

Means of Assessment: For the Computer Programming AS degree program, the COP2940 Computer Programming Internship course is the designated course that students will take as the last course for degree completion and assessment. The project in the course is designed to assess students' knowledge and comprehension of the PLOs for this AS degree. Students were asked to develop strategies for managing data while in accordance with industry standards.

Date(s) of Administration: Summer Term 2014-15

Method: Students enrolled in COP2940 were assessed on their ability to develop strategies for managing data while in accordance with industry standards.

Assessment Instrument: Faculty developed assessment used to evaluate students' strategies for managing data while in accordance with industry standards.

Scoring Rubric:

Performance Measure	Improvement Needed (1)	Fair (2)	Good (3)	Excellent (4)	Score
Project Part 2	Little or no proficiency demonstrated: Benchmark not met overall or on any components of assessment activity.	Proficiency demonstrated in some areas of the assessment activity but overall benchmark not met.	Proficiency demonstrated and benchmark met for assessment activity but not on a continuous basis.	Proficiency demonstrated and benchmark met for assessment activity for each data collection period, as well as overall, on a continuous basis.	100

Population: Students enrolled in COP2940 Computer Programming, were assessed during the last week of a 10-week summer term.

III. Criteria for Success

Students should receive a score of 70% or above on each category of the evaluation.

IV. Summary of Assessment Findings

PLO 2 Assessment Results				
Term	N	Mean Score	Minimum Score	Maximum Score
2014-15 Summer	8	100%	100%	100%

V. Discussion and Analysis of Assessment Findings

The PLO #2 assessment results address the second part of a documented End of Program Assessment Final Project that will exhibit the characteristics needed of a computer programming specialist, including problem solving, analytical and technical skills. It was clear, based on the average score of 100 that students had the necessary skills to develop strategies for managing data in accordance with industry standard that work with multiple programming

VI. Action Plan and Timetable for Implementation

Based on the analysis of the results the following Action Plan Items have been selected for implementation:

- The method utilized for data collection and analysis needs improvement. The program will ensure that all students enrolled in COP2940 Computer Programming are assessed, and the assessment data collected is analyzed to identify specific areas for improvement. The assessment data collected in fall 2015, spring 2016, and summer 2016, will be analyzed and reported in August 2016.
- Sharon Setterlind / Aug 2016
- Revisions are needed for the rubric used in data collection. The purpose for revising the scoring rubric used in data collection for all three PLOs in the Computer Programming and Analysis AS degree, is to add specific scoring categories for each performance measure. This will provide a more specific detailed account of the student competencies being measured in each category, for each PLO. The new rubric will be used to assess students in fall 2015, spring 2016, and summer 2016.
- Sharon Setterlind / Aug 2016

#3: Summarize and explain a “real-world” experience with a major-related, supervised and evaluated practical work experience internship.

I. Use of Past Results

The 2011-12 assessment report stated that there was no evidence indicating that any end of program assessments had been completed in the Computer Programming and Analysis program due to the low number of graduates, thus data analysis was not conducted.

II. Methodology

Means of Assessment: For the Computer Programming and Analysis AS degree program, the COP2940 Computer Programming Internship course is the designated course that students will take as the last course for degree completion and assessment. The project in the course is designed to assess students' knowledge and comprehension of the PLOs for this AS degree. Each student was asked to document their internship experience in a journal on a weekly basis. Students were asked to summarize and explain their experience with a local company over a 10-week “real-world” job experience.

Date(s) of Administration: Summer Term 2014-15

Method: Students enrolled in COP2940 were assessed on their journal entries on a weekly basis over a 10-week term.

Assessment Instrument: Faculty developed assessment used to evaluate an internship journal.

Scoring Rubric:

Performance Measure	Improvement Needed (1)	Fair (2)	Good (3)	Excellent (4)	Score
Journal	Little or no proficiency demonstrated: Benchmark not met overall or on any components of assessment activity.	Proficiency demonstrated in some areas of the assessment activity but overall benchmark not met.	Proficiency demonstrated and benchmark met for assessment activity but not on a continuous basis.	Proficiency demonstrated and benchmark met for assessment activity for each data collection period, as well as overall, on a continuous basis.	100

Population: Students enrolled in COP2940 Computer Programming were assessed during the last week of a 10-week summer term.

III. Criteria for Success

Students should receive a score of 70% or above on each category of the evaluation.

IV. Summary of Assessment Findings

PLO 3 Assessment Results				
Term	N	Mean Score	Minimum Score	Maximum Score
2014-15 Summer	8	95%	80%	100%

V. Discussion and Analysis of Assessment Findings

The PLO #3 assessment results address the journaling process by each student, and the process is evaluated on a weekly basis. Students are asked to summarize and explain their experience with a local company over a 10 or 16 week "real-world" job experience. Based on the scores it was clear that students demonstrated a knowledge and understanding of a 'real-world' experience with a major-related, supervised and evaluated practical work experience internship that in many cases prepared them for job placement.

VI. Action Plan and Timetable for Implementation

Based on the analysis of the results the following Action Plan Items have been selected for implementation:

- The method utilized for data collection and analysis needs improvement. The program will ensure that all students enrolled in COP2940 Computer Programming are assessed, and the assessment data collected is analyzed to identify specific areas for improvement. The assessment data collected in fall 2015, spring 2016, and summer 2016, will be analyzed and reported in August 2016.
- Sharon Setterlind / Aug 2016
- Revisions are needed for the rubric used in data collection. The purpose for revising the scoring rubric used in data collection for all three PLOs in the Computer Programming and Analysis AS degree, is to add specific scoring categories for each performance measure. This will provide a more specific detailed account of the student competencies being measured in each category, for each PLO. The new rubric will be used to assess students in fall 2015, spring 2016, and summer 2016.
- Sharon Setterlind / Aug 2016

Action Plan

Category	Action Plan Detail / Implications	For PLO	Responsible Party / Due Date
D. Improve Assessment Methodology			
D4. Improve method of data collection & analysis			
	The method utilized for data collection and analysis needs improvement. The program will ensure that all students enrolled in COP2940 Computer Programming are assessed, and the assessment data collected is analyzed to identify specific areas for improvement. The assessment data collected in fall 2015, spring 2016, and summer 2016, will be analyzed and reported in August 2016.	#1, #2, #3	Sharon Setterlind Aug 2016
D5. Revise assessment instruments			
	Revisions are needed for the rubric used in data collection. The purpose for revising the scoring rubric used in data collection for all three PLOs in the Computer Programming and Analysis AS degree, is to add specific scoring categories for each performance measure. This will provide a more specific detailed account of the student competencies being measured in each category, for each PLO. The new rubric will be used to assess students in fall 2015, spring 2016, and summer 2016.	#1, #2, #3	Sharon Setterlind Aug 2016

Approvals

Program Administrators:

Shane Hamilton - Professor
Sharon Setterlind - Dean

Approved by Sharon Setterlind - Dean on Aug 5, 2015

Educational Outcomes Coordinators:

Joe Boyd - Assessment Coordinator
Magaly Tymms - Assessment Director

Approved by Magaly Tymms - Assessment Director on Aug 11, 2015

Dean:

Sharon Setterlind - Dean

Approved by Sharon Setterlind - Dean on Aug 16, 2015

Senior Vice President:

Anne Cooper - Senior VP Instruction and Academic Programs

Approved by Anne Cooper - Senior VP Instruction and Academic Programs on Aug 17, 2015



Program Assessment Report

Program: Information Technology (IT) Security

Option: IT Security

Report Year: 2014-15

Drafted by Sharon Setterlind on Aug 5, 2015

Data Files

ITSEC AS Assessment Rubric Summer 2015 

Overall Introduction

In support of the mission of St. Petersburg College, faculty committees established thirteen value statements. Three of these value statements are:

- Student Focus: We believe students are the heart of SPC! All SPC resources, decisions, and efforts are aligned to transform students' lives to empower them to finish what they start!
- Academic Excellence: We promote academic excellence through interactive, innovative, and inquiry-centered teaching and learning.
- Culture of Inquiry: We encourage a data-driven environment that allows for open, honest dialogue about who we are, what we do, and how we continue to improve student success.

It is the intent of St. Petersburg College to incorporate continuous improvement practices in all areas. Assessment reports provide comparisons of present and past results which are used to identify topics where improvement is possible. SPC has traditionally used past results as a vital tool in achieving its commitment to continuous improvement.

Program Learning Outcomes

#1: Develop an Information Technology Security infrastructure that offers a mix of technology and management processes.

I. Use of Past Results

The 2010-11 assessment report stated that there was no evidence indicating that any end of program assessments had been completed in the IT Security program due to the low number of graduates, thus data analysis was not conducted.

A review and realignment of various technology degree programs was conducted, and in Fall 2011, the Information Technology (IT) Security A.S. degree was moved from the College of Public Safety to the College of Computer & Information Technology (CCIT). Beginning with Spring 2012, all A.S. degree programs in CCIT have included a required internship course.

II. Methodology

Means of Assessment: For the Information Technology (IT) AS degree program, the CTS2940 IT Security Internship course is the designated course that students will take as the last course for degree completion and assessment. The project in the course is designed to assess students' knowledge and comprehension of the PLOs for this AS degree. Students were asked to work with the faculty member and the employer of the Internship to develop learning objectives.

Date(s) of Administration: Summer Term 2014-15

Method: Students enrolled in CTS2940 were assessed on their preparation of the Internship Learning Objectives.

Assessment Instrument: Faculty developed assessment consisting of Internship Learning Objectives.

Scoring Rubric:

Performance Measure	Improvement Needed (1)	Fair (2)	Good (3)	Excellent (4)	Score
Internship Learning Objectives	Little or no proficiency demonstrated: Benchmark not met overall or on any components of assessment activity.	Proficiency demonstrated in some areas of the assessment activity but overall benchmark not met.	Proficiency demonstrated and benchmark met for assessment activity but not on a continuous basis.	Proficiency demonstrated and benchmark met for assessment activity for each data collection period, as well as overall, on a continuous basis.	200

Population: Students enrolled in CTS2940 IT Security Internship, were assessed during the last week of a 10-week summer term.

III. Criteria for Success

Students should receive a score of 70% or above on each category of the evaluation.

IV. Summary of Assessment Findings

PLO 1 Assessment Results				
Term	N	Mean Score	Minimum Score	Maximum Score
2014-15 Summer	8	93%	63%	100%

V. Discussion and Analysis of Assessment Findings

PLO #1 is satisfied through the development of Learning Objectives that are created with the participation of the student, the employer, and the course faculty to identify and quantify the learning objectives for each student. This is prepared during the first two weeks of the course and may be modified by agreement of all parties which will include and reflect a mix of technology and management processes. The creation of the Learning Objectives is designed to develop an Information Technology Security infrastructure that offers a mix of technology and management processes. Scores were based on points earned, and with an average of 186 out of a possible 200 it was clear that students developed Learning Objectives in the Internship to align with the coursework of the Information Technology (IT) Security AS degree.

VI. Action Plan and Timetable for Implementation

Based on the analysis of the results the following Action Plan Items have been selected for implementation:

- The method utilized for data collection and analysis needs improvement. The program will ensure that all students enrolled in CTS2940 IT Security Internship are assessed, and the assessment data collected is analyzed to identify specific areas for improvement. The assessment data collected in fall 2015, spring 2016, and summer 2016, will be analyzed and reported in August 2016.
- Sharon Setterlind / Aug 2016
- Revisions are needed for the rubric used in data collection. The purpose for revising the scoring rubric used in data collection for all three PLOs in the Information Technology (IT) Security AS degree, is to add specific scoring categories for each performance measure. This will provide a more specific detailed account of the student competencies being measured in each category, for each PLO. The new rubric will be used to assess

#2: Exhibit the characteristics needed of an Information Technology Security Specialist, including problem solving, analytical and technical skills.

I. Use of Past Results

The 2010-11 assessment report stated that there was no evidence indicating that any end of program assessments had been completed in the IT Security program due to the low number of graduates, thus data analysis was not conducted.

A review and realignment of various technology degree programs was conducted, and in Fall 2011, the Information Technology (IT) Security A.S. degree was moved from the College of Public Safety to the College of Computer & Information Technology (CCIT). Beginning with Spring 2012, all A.S. degree programs in CCIT have included a required internship course.

II. Methodology

Means of Assessment: For the Information Technology (IT) AS degree program, the CTS2940 IT Security Internship course is the designated course that students will take as the last course for degree completion and assessment. The project in the course is designed to assess students' knowledge and comprehension of the PLOs for this AS degree. Students worked on an End-of-Program project that was designed to exhibit the characteristics needed of an Information Technology Security specialist, including problem solving, analytical and technical skills.

Date(s) of Administration: Summer Term 2014-15

Method: Students enrolled in CTS2940 were assessed on producing a report in which they were asked specific questions regarding their internship and their field of study: security.

Assessment Instrument: Faculty developed assessment consisting of specific questions.

Scoring Rubric:

Performance Measure	Improvement Needed (1)	Fair (2)	Good (3)	Excellent (4)	Score
End of Program Assessment Project	Little or no proficiency demonstrated: Benchmark not met overall or on any components of assessment activity.	Proficiency demonstrated in some areas of the assessment activity but overall benchmark not met.	Proficiency demonstrated and benchmark met for assessment activity but not on a continuous basis.	Proficiency demonstrated and benchmark met for assessment activity for each data collection period, as well as overall, on a continuous basis.	440

Population: Students enrolled in CTS2940 IT Security Internship, were assessed during the last week of a 10-week summer term.

III. Criteria for Success

Students should receive a score of 70% or above on each category of the evaluation.

IV. Summary of Assessment Findings

PLO 2 Assessment Results

Term	N	Mean Score	Minimum Score	Maximum Score
2014-15 Summer	8	85%	28%	95%

V. Discussion and Analysis of Assessment Findings

The PLO #2 assessment results address the second part of an End of Program Assessment that will exhibit the characteristics needed of a information technology specialist in the field of security including problem solving, analytical and technical skills. Students were asked to produce a report in which they were asked specific questions regarding their internship and their field of study: security. Out of a possible 440 points the average score was 373 which demonstrates that students have passed the competency requirement to exhibit the characteristics needed of an Information Technology Security Specialist, including problem solving, analytical and technical skills.

VI. Action Plan and Timetable for Implementation

Based on the analysis of the results the following Action Plan Items have been selected for implementation:

- The method utilized for data collection and analysis needs improvement. The program will ensure that all students enrolled in CTS2940 IT Security Internship are assessed, and the assessment data collected is analyzed to identify specific areas for improvement. The assessment data collected in fall 2015, spring 2016, and summer 2016, will be analyzed and reported in August 2016.
- Sharon Setterlind / Aug 2016
- Revisions are needed for the rubric used in data collection. The purpose for revising the scoring rubric used in data collection for all three PLOs in the Information Technology (IT) Security AS degree, is to add specific scoring categories for each performance measure. This will provide a more specific detailed account of the student competencies being measured in each category, for each PLO. The new rubric will be used to assess students in fall 2015, spring 2016, and summer 2016.
- Sharon Setterlind / Aug 2016

#3: Summarize and explain a "real-world" experience with a major related, supervised and evaluated work experience internship.

I. Use of Past Results

The 2010-11 assessment report stated that there was no evidence indicating that any end of program assessments had been completed in the IT Security program due to the low number of graduates, thus data analysis was not conducted.

A review and realignment of various technology degree programs was conducted, and in Fall 2011, the Information Technology (IT) Security A.S. degree was moved from the College of Public Safety to the College of Computer & Information Technology (CCIT). Beginning with Spring 2012, all A.S. degree programs in CCIT have included a required internship course.

II. Methodology

Means of Assessment: For the Information Technology (IT) AS degree program, the CTS2940 IT Security Internship course is the designated course that students will take as the last course for degree completion and assessment. The project in the course is designed to assess students' knowledge and comprehension of the PLOs for this AS degree. Each student was asked to document their internship experience in a journal on a weekly basis. Students were asked to summarize and explain their experience with a local company over a 10 week "real-world" job experience.

Date(s) of Administration: Summer Term 2014-15

Method: Students enrolled in CNT2940 were assessed on their journal entries on a weekly basis over a 10-week term.

Assessment Instrument: Faculty developed assessment consisting of an internship journal.

Scoring Rubric:

Performance Measure	Improvement Needed (1)	Fair (2)	Good (3)	Excellent (4)	Score

Journals	Little or no proficiency demonstrated: Benchmark not met overall or on any components of assessment activity.	Proficiency demonstrated in some areas of the assessment activity but overall benchmark not met.	Proficiency demonstrated and benchmark met for assessment activity but not on a continuous basis.	Proficiency demonstrated and benchmark met for assessment activity for each data collection period, as well as overall, on a continuous basis.	360
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Population: Students enrolled in CTS2940 IT Security Internship, were assessed during the last week of a 10-week summer term.

III. Criteria for Success

Students should receive a score of 70% or above on each category of the evaluation.

IV. Summary of Assessment Findings

PLO 3 Assessment Results				
Term	N	Mean Score	Minimum Score	Maximum Score
2014-15 Summer	8	95%	83%	100%

V. Discussion and Analysis of Assessment Findings

PLO #3 is documented through the journaling process by each student and the process is evaluated on a weekly basis. Students are asked to summarize and explain their experience with a local company over a 10 or 16 week "real-world" job experience. Based on the scores it was clear that students demonstrated a knowledge and understanding of a 'real-world' experience with a major-related, supervised and evaluated practical work experience internship that in many cases prepared them for job placement.

VI. Action Plan and Timetable for Implementation

Based on the analysis of the results the following Action Plan Items have been selected for implementation:

- The method utilized for data collection and analysis needs improvement. The program will ensure that all students enrolled in CTS2940 IT Security Internship are assessed, and the assessment data collected is analyzed to identify specific areas for improvement. The assessment data collected in fall 2015, spring 2016, and summer 2016, will be analyzed and reported in August 2016.
- Sharon Setterlind / Aug 2016
- Revisions are needed for the rubric used in data collection. The purpose for revising the scoring rubric used in data collection for all three PLOs in the Information Technology (IT) Security AS degree, is to add specific scoring categories for each performance measure. This will provide a more specific detailed account of the student competencies being measured in each category, for each PLO. The new rubric will be used to assess students in fall 2015, spring 2016, and summer 2016.
- Sharon Setterlind / Aug 2016

Action Plan

Category	Action Plan Detail / Implications	For PLO	Responsible Party / Due Date
D. Improve Assessment Methodology			
D4. Improve method of data collection & analysis			
	The method utilized for data collection and analysis needs improvement. The program will ensure that all students enrolled in CTS2940 IT Security Internship are assessed, and the assessment data collected is analyzed to identify specific areas for improvement. The assessment data collected in fall 2015, spring 2016, and summer 2016, will be analyzed and reported in August 2016.	#1, #2, #3	Sharon Setterlind Aug 2016
D5. Revise assessment instruments			
	Revisions are needed for the rubric used in data collection. The purpose for revising the scoring rubric used in data collection for all three PLOs in the Information Technology (IT) Security AS degree, is to add specific scoring categories for each performance measure. This will provide a more specific detailed account of the student competencies being measured in each category, for each PLO. The new rubric will be used to assess students in fall 2015, spring 2016, and summer 2016.	#1, #2, #3	Sharon Setterlind Aug 2016

Approvals

Program Administrators:

John Long - Academic Department Chair
Sharon Setterlind - Dean
Therezita Ortiz - Professor

Approved by Sharon Setterlind - Dean on Aug 5, 2015

Educational Outcomes Coordinators:

Ashley Caron - Assessment & Accreditation Coordinator
Joe Boyd - Assessment Coordinator
Magaly Tymms - Assessment Director

Approved by Magaly Tymms - Assessment Director on Aug 11, 2015

Dean:

Sharon Setterlind - Dean

Approved by Sharon Setterlind - Dean on Aug 16, 2015

Senior Vice President:

Anne Cooper - Senior VP Instruction and Academic Programs

Approved by Anne Cooper - Senior VP Instruction and Academic Programs on Aug 17, 2015



Program Assessment Report

Program: Web Development

Option: Web Development

Report Year: 2014-15

Drafted by Sharon Setterlind on Aug 5, 2015

Data Files

WEBDV AS Assessment Rubric Summer 2015 

Overall Introduction

In support of the mission of St. Petersburg College, faculty committees established thirteen value statements. Three of these value statements are:

- Student Focus: We believe students are the heart of SPC! All SPC resources, decisions, and efforts are aligned to transform students' lives to empower them to finish what they start!
- Academic Excellence: We promote academic excellence through interactive, innovative, and inquiry-centered teaching and learning.
- Culture of Inquiry: We encourage a data-driven environment that allows for open, honest dialogue about who we are, what we do, and how we continue to improve student success.

It is the intent of St. Petersburg College to incorporate continuous improvement practices in all areas. Assessment reports provide comparisons of present and past results which are used to identify topics where improvement is possible. SPC has traditionally used past results as a vital tool in achieving its commitment to continuous improvement.

Program Learning Outcomes

-
- #1:** Create a web site structure that incorporates wireframe design, functionality specifications, and organizational requirements.
-

I. Use of Past Results

The 2009-10 assessment report indicated that program assessments were not conducted in the Web Site Design and Management program previously due to the low number of Associate in Science (A.S.) graduates. As a result, the analysis of End of Program Assessments could not be included in this report.

II. Methodology

Means of Assessment: For the Web Development AS degree program, the CGS2823 Advanced Web Site Development and the CGS2940 Web Development Internship courses are the designated courses that students will take as the last courses for degree completion and assessment. The project in the courses are designed to assess students' knowledge and comprehension of the PLOs for this AS degree. In the CGS2823 Advanced Web Site Development course students were asked to create an interactive flexible web site using current development technologies and languages. Students were asked to create a web site structure.

Date(s) of Administration: Summer Term 2014-15

Method: Students enrolled in CGS2823 were assessed on their ability to prepare a web site that incorporates wireframe design, functionality specifications, and organizational requirements.

Assessment Instrument: Faculty developed assessment consisting of a project to assess students' ability to create a web site using HTML, CSS and Website layout design.

Scoring Rubric:

Performance Measure	Improvement Needed (1)	Fair (2)	Good (3)	Excellent (4)	Score
Project	No submission or instructions were not followed to receive ample credit for assignment.	Website structure is is distractingly unorganized or very poorly designed.	Website structure is attractive though it lacks design detail.	Website structure is exceptionally attractive in terms of design, layout, and neatness.	100

Population: Students enrolled in CGS2823 Advanced Web Site Development, were assessed during the last week of a 10-week summer term.

III. Criteria for Success

Students should receive a score of 70% or above on each category of the evaluation.

IV. Summary of Assessment Findings

PLO 1 Assessment Results				
Term	N	Mean Score	Minimum Score	Maximum Score
2014-15 Summer	6	98%	85%	100%

V. Discussion and Analysis of Assessment Findings

The PLO #1 assessment results address the first part of an End of Program Assessment that will exhibit the characteristics needed of a web development specialist including problem solving, analytical and technical skills. Students were asked to create a web site structure that incorporates wireframe design, functionality specifications, and organizational requirements. Out of a possible 100 points the average score was 97.5 which demonstrates that the students have passed the competency requirement to exhibit the characteristics needed of an Web Development Specialist, including: HTML, CSS, Website layout design.

VI. Action Plan and Timetable for Implementation

Based on the analysis of the results the following Action Plan Items have been selected for implementation:

- The method utilized for data collection and analysis needs improvement. The program will ensure that all students enrolled in CGS2823 Advanced Web Site Development and the CGS2940 Web Development Internship are assessed, and the assessment data collected is analyzed to identify specific areas for improvement. The assessment data collected in fall 2015, spring 2016, and summer 2016, will be analyzed and reported in August 2016.
- Sharon Setterlind / Aug 2016
- Revisions are needed for the rubric used in data collection. The purpose for revising the scoring rubric used in data collection for all three PLOs in the Web Development AS degree, is to add specific scoring categories for each performance measure. This will provide a more specific detailed account of the student competencies being measured in each category, for each PLO. The new rubric will be used to assess students in fall 2015, spring 2016, and summer 2016.
- Sharon Setterlind / Aug 2016

#2: Create an interactive flexible web site using current development technologies and languages.

I. Use of Past Results

The 2009-10 assessment report indicated that program assessments were not conducted in the Web Site Design and Management program previously due to the low number of Associate in Science (A.S.) graduates. As a result, the analysis of End of Program Assessments could not be included in this report.

II. Methodology

Means of Assessment: For the Web Development AS degree program, the CGS2823 Advanced Web Site Development and the CGS2940 Web Development Internship courses are the designated courses that students will take as the last courses for degree completion and assessment. The project in the courses are designed to assess students' knowledge and comprehension of the PLOs for this AS degree. In the CGS2823 Advanced Web Site Development course students were asked to create an interactive flexible web site using current development technologies and languages.

Date(s) of Administration: Summer Term 2014-15

Method: Students enrolled in CGS2823 were assessed on their ability to prepare a web site structure using HTML, CSS and Website layout design.

Assessment Instrument: Faculty developed assessment consisting of a project to assess students' ability to create a web site using HTML, CSS, Website layout design, image optimization, and multimedia use.

Scoring Rubric:

Performance Measure	Improvement Needed (1)	Fair (2)	Good (3)	Excellent (4)	Score
Project	No submission or instructions were not followed to receive ample credit for assignment.	HTML is not semantic and CSS is not lean and well-organized. Color palette does not establishes or reflect a professional tone.	HTML is mostly semantic and CSS is somewhat lean and well-organized. Color palette establishes and reflects a somewhat professional tone.	HTML is semantic and CSS lean and well-organized. Color palette establishes and reflects a professional tone.	100

Population: Students enrolled in CGS2823 Advanced Web Site Development, were assessed during the last week of a 10-week summer term.

III. Criteria for Success

Students should receive a score of 70% or above on each category of the evaluation.

IV. Summary of Assessment Findings

PLO 2 Assessment Results				
Term	N	Mean Score	Minimum Score	Maximum Score
2014-15 Summer	6	90%	85%	100%

V. Discussion and Analysis of Assessment Findings

The PLO #2 assessment results address the second part of an End of Program Assessment that will exhibit the characteristics needed of a web development specialist including problem solving, analytical and technical skills. Students were asked to create an interactive flexible web site using current development technologies and

languages. Out of a possible 100 points the average score was 90 which demonstrates that the students have passed the competency requirement to exhibit the characteristics needed of an Web Development Specialist, including: HTML, CSS, Website layout design, image optimization, multimedia use, problem solving, analytical and technical skills.

VI. Action Plan and Timetable for Implementation

Based on the analysis of the results the following Action Plan Items have been selected for implementation:

- The method utilized for data collection and analysis needs improvement. The program will ensure that all students enrolled in CGS2823 Advanced Web Site Development and the CGS2940 Web Development Internship are assessed, and the assessment data collected is analyzed to identify specific areas for improvement. The assessment data collected in fall 2015, spring 2016, and summer 2016, will be analyzed and reported in August 2016.
- Sharon Setterlind / Aug 2016
- Revisions are needed for the rubric used in data collection. The purpose for revising the scoring rubric used in data collection for all three PLOs in the Web Development AS degree, is to add specific scoring categories for each performance measure. This will provide a more specific detailed account of the student competencies being measured in each category, for each PLO. The new rubric will be used to assess students in fall 2015, spring 2016, and summer 2016.
- Sharon Setterlind / Aug 2016

#3: Summarize and explain a 'real-world' experience with a major-related, supervised and evaluated practical work experience internship.

I. Use of Past Results

The 2009-10 assessment report indicated that program assessments were not conducted in the Web Site Design and Management program previously due to the low number of Associate in Science (A.S.) graduates. As a result, the analysis of End of Program Assessments could not be included in this report.

II. Methodology

Means of Assessment: For the Web Development AS degree program, the CGS2823 Advanced Web Site Development and the CGS2940 Web Development Internship courses are the designated courses that students will take as the last courses for degree completion and assessment. The project in the courses are designed to assess students' knowledge and comprehension of the PLOs for this AS degree. In the CGS2940 Web Development Internship course students were asked to document their internship experience in a journal on a weekly basis. Students were asked to summarize and explain their experience with a local company over a 10 week "real-world" job experience.

Date(s) of Administration: Summer Term 2014-15

Method: Students enrolled in CGS2940 were assessed on their journal entries on a weekly basis over a 10-week term.

Assessment Instrument: Faculty developed assessment consisting of an internship journal.

Scoring Rubric:

Performance Measure	Improvement Needed (1)	Fair (2)	Good (3)	Excellent (4)	Score
Journal	Little or no proficiency demonstrated: Benchmark not met overall or on any components of assessment activity.	Proficiency demonstrated in some areas of the assessment activity but overall benchmark not met.	Proficiency demonstrated and benchmark met for assessment activity but not on a continuous basis.	Proficiency demonstrated and benchmark met for assessment activity for each data collection period, as well as overall, on a continuous basis.	100

Population: Students enrolled in CGS2940 Web Development, were assessed during the last week of a 10-week summer term.

III. Criteria for Success

Students should receive a score of 70% or above on each category of the evaluation.

IV. Summary of Assessment Findings

PLO 3 Assessment Results				
Term	N	Mean Score	Minimum Score	Maximum Score
2014-15 Summer	6	98%	92%	100%

V. Discussion and Analysis of Assessment Findings

The PLO #3 assessment results address the journaling process by each student and the process is evaluated on a weekly basis. Students are asked to summarize and explain their experience with a local company over a 10 week "real-world" job experience. Based on the scores it was clear that students demonstrated a knowledge and understanding of a 'real-world' experience with a major-related, supervised and evaluated practical work experience internship that in many cases prepared the student for job placement.

VI. Action Plan and Timetable for Implementation

Based on the analysis of the results the following Action Plan Items have been selected for implementation:

- The method utilized for data collection and analysis needs improvement. The program will ensure that all students enrolled in CGS2823 Advanced Web Site Development and the CGS2940 Web Development Internship are assessed, and the assessment data collected is analyzed to identify specific areas for improvement. The assessment data collected in fall 2015, spring 2016, and summer 2016, will be analyzed and reported in August 2016.
- Sharon Setterlind / Aug 2016
- Revisions are needed for the rubric used in data collection. The purpose for revising the scoring rubric used in data collection for all three PLOs in the Web Development AS degree, is to add specific scoring categories for each performance measure. This will provide a more specific detailed account of the student competencies being measured in each category, for each PLO. The new rubric will be used to assess students in fall 2015, spring 2016, and summer 2016.
- Sharon Setterlind / Aug 2016

Action Plan

Category	Action Plan Detail / Implications	For PLO	Responsible Party / Due Date
D. Improve Assessment Methodology			
D4. Improve method of data collection & analysis			
	The method utilized for data collection and analysis needs improvement. The program will ensure that all students enrolled in CGS2823 Advanced Web Site Development and the CGS2940 Web Development Internship are assessed, and the assessment data collected is analyzed to identify specific areas for improvement. The assessment data collected in fall 2015, spring 2016, and summer 2016, will be analyzed and reported in August 2016.	#1, #2, #3	Sharon Setterlind Aug 2016
D5. Revise assessment instruments			
	Revisions are needed for the rubric used in data collection. The purpose for revising the scoring rubric used in data collection for all three PLOs in the Web Development AS degree, is to add specific scoring categories for each performance measure. This will provide a more specific detailed account of the student competencies being measured in each category, for each PLO. The new rubric will be used to assess students in fall 2015, spring 2016, and summer 2016.	#1, #2, #3	Sharon Setterlind Aug 2016

Approvals

Program Administrators:

Nancy Russell - Academic Department Coordinator
Sharon Setterlind - Dean

Approved by Sharon Setterlind - Dean on Aug 5, 2015

Educational Outcomes Coordinators:

Joe Boyd - Assessment Coordinator
Magaly Tymms - Assessment Director

Approved by Magaly Tymms - Assessment Director on Aug 17, 2015

Dean:

Sharon Setterlind - Dean

Approved by Sharon Setterlind - Dean on Aug 17, 2015

Senior Vice President:

Anne Cooper - Senior VP Instruction and Academic Programs

Approved by Anne Cooper - Senior VP Instruction and Academic Programs on Aug 17, 2015



Appendix C: 2015 Advisory Committee Minutes and Recommendations

Advisory Board Meeting Minutes for February 2015 and May 2015 are provided within this Appendix.

For additional Advisory Board Committee Minutes and Recommendations, please refer to the following link:

http://www.spcollege.edu/epicenter/advisory/advisory_committees.htm



Computer and Information Technology - AS
2015-16 Enhanced Comprehensive Academic Program Review
Institutional Research and Effectiveness

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**COLLEGE OF COMPUTER AND INFORMATION TECHNOLOGY
ADVISORY COMMITTEE MEETING
DATE: February 25th, 2015 8:00 – 9:30 am**

Members in attendance:

Susan Biszewski-Eber, Christy Boucher, Dan Brown, Bill Cross, Joseph Cuenco, Tony Francisco, Muslim Gadiwalla, Mike Gordon, Shane Hamilton, Mayra Harley, John Long, Therezita Ortiz, Chris Paul, Chrissy Risberg, Nancy Russell, Harold Schomaker, Sharon Setterlind, Alex Sharpe, Adrian Tillman, Darlene Westberg, Lisa Yacso.

Capstone:

The Capstone is based on three case studies. One is the Enterprise Experience, where a team of students is sent out to a local business and ask the business to give them a problem. The teams work on the problems and come back with recommendations for the business and they are evaluated on that process.

Student feedback on the Enterprise Experience and Capstone Project was generally positive-some students expressed that the experience gave value to the final course. Feedback from sponsors of the Enterprise Experience students was positive as well. Some comments were: "I would like to keep them all"; "May I forward their information to ___, he is looking for good people"; "I don't need anybody right now, but I talked to someone last week who needs five people-can you send me the contact information for these students". In one case, the student team did a study; the business sponsor took that case study to their board of directors, and said they thought it should be implemented. Their board agreed, and the students' suggestion is being implemented at the sponsor company.

Members of the Advisory Committee who had sponsored students for the Enterprise Experience shared their experiences. Joseph Cuenco's company hired one of the students they sponsored. Sharon asked if, in his opinion he felt the CCIT students were well prepared. He replied that, for the entry level positions they would be applying for, our students were well prepared. Tony Francisco also had a positive experience, and his company is actually implementing the student's recommendation. Some of the difficulties encountered were lack of communication between students and sponsors, and trying to find time in the schedules of both students and sponsors for a when they could meet for a presentation of the recommended solution. On average the time for an Enterprise Experience project is dependent entirely on the students.

Chris Paul suggested that Capstone sponsors should have a common basis for evaluating things, so that evaluators can give the feedback the instructors need. He also expressed that the value of the course would be greatly enhanced if it is mandatory that there is a follow up. Dr. Cross responded that he is making a follow up presentation a mandatory part of the Enterprise Experience, but that student's should still have the option of saying "we can't" due to time constraints.

Dr. Cross thanked the Advisory Committee, and attributed the success of the Capstone Program in large part to their participation, citing their input as invaluable in the development of the Capstone Program.

The Capstone Orientation for Spring Semester will be March 16th, and the Capstone Presentations will be May 4th and 5th. Dr. Cross invited all Advisory Committee members to attend.

Lisa Yacso asked if we could document our success stories from Capstone.

Enrollment Increase:

Sharon informed the group that CCIT's programs have increased by 53% since last spring. She attributed this growth to the addition of the Software Development and Data Analytics tracks. A question was asked requesting an explanation of the Data Analytics track. Dr. Cross explained that this program teaches the basics of data analytics and data mining, preparing the student for an entry level position in these fields. Data mining tools CCIT students are using in this track are SAS and Wakeup, and statistics has been added as a required course for students entering this program.

Advisory Committee Survey:

Sharon presented the results of the Advisory Committee Survey. Out of 8 respondents to the survey, 7 agreed with meeting 3 times a year, and one respondent suggested that active engagement as needed throughout the year would provide more value. All respondents agreed to the meeting times suggested in the survey. 7 of 8 respondents agreed with holding meetings at the EpiCenter campus. One respondent would like to meet in the classrooms of different campuses and get a sample of what technology is being used. 5 out of 8 respondents were interested in working with internships in their company. Of those that answered "No," one respondent was a one person consulting company and could not offer an internship, and one respondent was the student representative. 6 out of 8 respondents said they would be interested in actively working with the Enterprise Experience and Capstone Project. Of the 2 that responded "No", one had not found anything that would work for their clients, and the other was the student representative on the Committee. Respondents were allowed multiple answers to the question: What is the most beneficial aspect of being a member? 2 respondents listed professional recognition, 1 listed personal recognition, 3 listed education, 7 listed student career success. Engaging with local professionals in industry, community support, and networking opportunity were written in under the "Other" category. 7 out of 8 respondents agreed with the new sub-committee structure and responsibilities. 8 out of 8 respondents would be willing to speak in the classroom or at career events, and 8 out of 8 respondents would be willing to give industry updates at meetings.

Smart Choice Program:

There has been difficulty getting the student's interested in the program. Another attempt to generate interest will be made this summer. There will be two technology summer camps set up. A different variety of courses will be offered this summer, including a course for Introduction to C# taught by Shane Hamilton. There are two different courses. Only 12 students can be allowed into the class under dual enrollment. Then the course is opened up for any other student that wants to take it. Students will be encouraged to take both courses over the 5 weeks that they are set up. Students will meet Monday-Wednesday or Tuesday-Thursday, depending on the class, and Fridays will be an open lab. There will be two faculty members, one for North County and one for South County, who will go and sit with the students on open lab day. We received a 30,000 dollar grant from FITCA for the Smart Choice Program. They have paid for advertising for our Info Session, where we had over 50 students in attendance.

Academic Chair Positon:

New Academic Chair Position. CCIT is hiring a new Academic Chair for the Downtown/Midtown Campus to help ease the shortage of faculty. A new PC repair program is being instituted at the Downtown Campus, and this Chair will be in charge of that.

There is a Major Fair Program from 5 to 7 tomorrow on the Seminole Campus. Speakers have been lined up that will speak about what their college major was and what they are doing today. The event is for SPC students, and later some high school students will also be brought in.

BLOG:

Changes have been made to the CCIT blog. It has been taken over by the college. Whenever we add something to the blog, it will be pushed out to all the social media. They will also keep an eye out for anything we put on the blog that they may want to spotlight. Sharon would like to highlight some of the Committee members' companies in the blog to communicate what we are about to local industries.

Internships:

Susan had a record breaking Spring semester for the internship program. She placed 35 interns. She has 31 interns enrolled for Summer semester. The deadline for enrollment is April first, so more students may want to enroll.

Sharon would like the opinion of the Committee members regarding Cyber-Security. CCIT is working with Public Safety with the possibility of developing a Bachelor's Program in Cyber-Security Forensics. We will have the preventive side-building and

securing networks and data. Now we are going to have the forensics side-what happens when somebody gets through.

Industry Updates:

Sharon would like the opinion of the Committee members regarding Cyber-Security. CCIT is working with Public Safety with the possibility of developing a Bachelor's Program in Cyber-Security Forensics. We will have the preventive side-building and securing networks and data. Now we are going to have the forensics side-what happens when somebody gets through.

Sharon and Chris Paul have been discussing getting a group of Committee members together in between formal meetings to discuss new technologies and/or what Committee member's companies are doing. Myra Harley asked how Sharon would like feedback about industry updates to be submitted. Sharon said that Committee members could send her an email.

Mayra Harley suggested Committee members could record themselves talking about technology and what their companies are doing. These could be played at meetings and incorporated in classroom curriculum. Myra Harley suggested that as she also co-owns a media company in Oldsmar, and could arrange for shoots to be done there, and podcasts could also be recorded. She also suggested a template of questions could be devised to give uniformity to the recordings. Bill Cross suggested that such recordings could be even more valuable outside the classroom, for events such as Career Explorations.

Events:

On March 23rd, students will be working together in an exploratory lab that gives them a sample of what it is like to work at Tech Data and Valpak. Students from USF Tampa, USF St. Petersburg, University of Tampa, Eckerd College and St. Petersburg College will be participating. A big sponsor of this program is TBTF.

Career Exploration Event at SP/Gibbs Campus on April 14th. All Advisory Committee members are welcome to attend.

The Advisory Committee Breakfast will be September 24th at the Seminole Campus. The Advisory Committee will meet from 7

Advisory Meeting - Wednesday, the 20th of May.

Adjourned at 9:30 am

**COLLEGE OF COMPUTER AND INFORMATION TECHNOLOGY
ADVISORY COMMITTEE MEETING
DATE: MAY 20TH, 2015
HELD AT MELITTA USA**

Members in attendance

Christy Boucher, Bill Cross, Alberto Contreras, Joseph Cuenco, Muslim Gadiwalla, Mike Gordon, Shane Hamilton, Mayra Harley, John Long, Steve Marcinek, Chris Paul, Chrissy Risberg, Nancy Russell, Harold Schomaker, Sharon Setterlind, Darlene Westberg, Brad Yourth

A tour of the Melitta facility was given after the meeting.

Minutes of the last Advisory Committee Meeting were approved.

Spring Capstone

Dr. Cross reviewed the Spring Capstone. Dr. Cross thanked the Advisory Committee for their support of and commitment to the Capstone program. He felt that this year's Capstone was successful, with all students passing the class. He also stated that students taking the exit questionnaire felt that it had been a positive experience, with most student's placing especial value on the Enterprise Experience. Local business's that sponsored Capstone students also reported a positive experience. Dr. Cross also stated that this spring's Capstone an improvement over the Fall presentations. A member of the committee said they noticed improvement at each Capstone. Dr. Cross noted that there has been a problem in the past with different Capstone teams presenting the same case study, but thinks he may have found a solution to the problem. Dean Setterlind informed the group that a third Capstone class is being added to the program, so that students can have more time to interact with their instructor. She also suggested that a limit may be placed on the number of students who can enroll in Capstone in the future. The Dean has suggested that in the future, members of the Advisory Committee be briefed ahead of time on the case studies students will be presenting, as the Committee is acting as the "Board of Directors" for each presentation.

Advisory Committee Video Project

At the last meeting of the Advisory Committee, idea was discussed of highlighting members of the Advisory Committee, and all they do for the college, in a series of short videos that would be used at college events and info sessions. Committee member Mayra Harley had offered the services of her company, SMC software, to do the video spots. Mayra brought the co-owner of her company, Mike Harley, and videographer/editor/producer Manda to the meeting to give some information about their company, and offer input on the creation of these videos. It was decided that each video should be approximately 30 seconds long. Members discussed where videos should be filmed and what material they would cover. It was decided that each video

will be shot at the Committee member's company. Sharon said she wanted this series of videos to highlight the Advisory Committee members; what they do for the college, and what the college does for them. She would like to have the videos ready to show at the Advisory Committee Appreciation Breakfast in September. The Dean will get in touch with those Committee members who were not in attendance at the meeting and ask if they agree with the idea of the videos. Then she will have Christy Boucher get in touch with Advisory Committee members and set up a schedule for taping the video spots. This will be provided to Manda at SMC Software, who will be doing the recording, editing and production of the videos.

Internships

The Dean informed the Committee that we have 65 interns in our Internship Program for the Summer Semester. Nancy Russell added that about 30 of those interns have already been placed. The Dean asked Committee members to help spread word to local businesses about our Internship Program. Steve Marcinek suggested that if the HR process could be made smoother, it would be easier to get large companies to sponsor our interns. Issues of insurance and liability for student interns keeps some companies from taking advantage of internship programs. It was suggested that our department ask other departments with internship programs how they deal with this problem.

Industry Certification

The Dean spoke to the Advisory Committee about the college's push for industry certification, and the fact that we will now be embedding preparation for industry certification exams in our curriculum. Holly Hoopes spoke about some of the challenges she encountered while doing a pilot of the industry certification curriculum during the last eight weeks of the Spring Semester. Several Committee members stated that while Microsoft, the CCNA and other higher level certifications were desirable, the lower level certifications (such as A+) were not something they considered when looking at candidates for employment. Mr. Contreras suggested that we should come up with a list of relevant foundation certifications to embed in our courses (such as ITIL Foundations and Ethical Hacking).

Cyber-Security

The Dean announced that the title of the IT Security A.S. will be changed to Cyber-Security, and she is asking to have the title of the IT Security sub-plan changed as well.

The Cyber-Security discussion will be scheduled for the next Advisory Committee meeting.

New Degrees

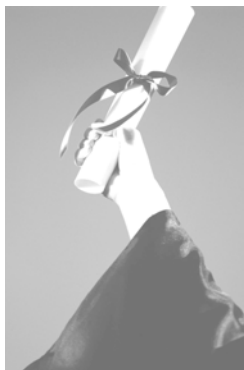
The lower division Technology Management A.S. will be replaced with the Computer Information Technology A.S beginning next Spring. This degree will be for people who will be running helpdesks, and other jobs that require this skill set. CCIT may also be developing a new four year B.S. degree. Committee members are asked to think over what degrees could be offered, and bring their ideas to the next meeting for discussion. The Dean will also bring several models for the new degree to the meeting.

Next Advisory Meeting

September 24th, 2015. The meeting is from 7:30 am to 9:00 am, Seminole Campus, room TL108.

- Meeting-7:30 am to 9:00 am
- Breakfast-9:00 am to 10:30 am

Meeting adjourned at 9:30



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