

NOTICE OF INTENT

Form No. BAAC-01

Section 1007.33(5)(d), Florida Statutes (F.S.), and Rule 6A-14.095, Florida Administrative Code (F.A.C.), outline the requirements for Florida College System baccalaureate program proposals. The completed Notice of Intent form, incorporated in Rule 6A-14.095, F.A.C., Site Determined Baccalaureate Access, shall be submitted by the college president to the chancellor of the Florida College System at ChancellorFCS@fldoe.org.

CHECKLIST

The notice of intent requires completion of the following components:

- Program summary
- Program description
- Workforce demand, supply, and unmet need
- Planning process

FLORIDA COLLEGE SYSTEM INSTITUTION INFORMATION

| | |
|------------------------|------------------------------|
| Institution Name: | St Johns River State College |
| Institution President: | Joe Pickens, J.D. |

PROGRAM SUMMARY

| | | |
|-----|---|---|
| 1.1 | Program name. | Information Systems |
| 1.2 | Degree type. | <input checked="" type="checkbox"/> Bachelor of Science <input type="checkbox"/> Bachelor of Applied Science |
| 1.3 | How will the proposed degree program be delivered? (check all that apply). | <input type="checkbox"/> Face-to-face (F2F) (Entire degree program delivered via F2F courses only) <input type="checkbox"/> Completely online (Entire degree program delivered via online courses only) <input checked="" type="checkbox"/> Combination of face-to-face/online (Entire degree program delivered via a combination of F2F and online courses) |
| 1.4 | Degree Classification of Instructional Program (CIP) code (6-Digit). | 11.1003 |
| 1.5 | Anticipated program implementation date. | August 2024 |
| 1.6 | What are the primary pathways for admission to the program? Check all that apply. | <input checked="" type="checkbox"/> Associate in Arts (AA) <input checked="" type="checkbox"/> Associate in Science (AS) <input type="checkbox"/> Associate in Applied Science (AAS) If you selected AS/AAS, please specify the program: Network Systems Technology Computer Programming & Analysis |
| 1.7 | Is the degree program a STEM focus area? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 1.8 | List program concentration(s) or track(s) (if applicable). | Cybersecurity Software Application Development |

PROGRAM DESCRIPTION

*2.1 This section is the **executive summary** of this notice of intent. We recommend providing an abbreviated program description including but not limited to: the program demand, current supply, and unmet need in the college's service district; primary pathways to program admission; overview of program curriculum; career path and potential employment opportunities; and average starting salary. We encourage approximately 300 words for a sufficient description.*

St. Johns River State College's proposed Bachelor of Science degree in Information Systems Technology will provide students with the skills required to successfully design, plan, and manage Information Systems. The program will have two concentration tracks, Cybersecurity and Software Application Development, and multiple articulation pathways including from both the AA and AS degrees.

The degree's curriculum is built on the frameworks of the National Initiative for Cybersecurity Education (NICE) and Center of Academic Excellence (CAE). The program will provide instruction in computer architecture, programming, and systems analysis; networking; telecommunications; cryptography; security system auditing and design; applicable law and regulations; risk assessment and policy analysis; contingency planning; user access issues; investigation techniques; and troubleshooting. Students will gain knowledge and skills needed to manage cybersecurity infrastructure.

The curriculum consists of 120 semester hours and provides a pathway for both AA and AS students. All students will be required to complete a total of 36 hours of general education courses. A total of 27 hours of required lower-level coursework in programming and networking will be foundational, and 39 upper division credits in Information Systems will be required as will an additional 18 hours of lower-level AS or AA transfer credits.

The workforce demand for IT professionals, particularly in the cybersecurity and information systems area, is projected to continue to grow both within our local region and nationwide. In the College's three-county service district of Clay, Putnam, and St. Johns Counties, the job projection growth until 2029 will be between 20% and 29% with an average hourly salary of \$43. In other occupations with similar SOC codes such as Network specialist, Information Systems Manager, and Computer Systems Administrator, the demand is even greater with growth projected up to 42% for the next 5 years at an average yearly salary of \$103,000.

While the demand for IT professionals continues to grow, the supply of graduates at the baccalaureate level is not increasing. St. Johns River State College's baccalaureate in Information Systems is proposed to address this gap and the anticipated unmet need within our region.

WORKFORCE DEMAND, SUPPLY, AND UNMET NEED

3.1 Describe the workforce demand, supply, and unmet need for graduates of the program that incorporates, at a minimum, the shaded information from Sections 3.1.1 to 3.1.4. For proposed programs without a listed Standard Occupational Classification (SOC) linkage, provide a rationale for the identified SOC code(s). If using a SOC that is not on the CIP to SOC crosswalk, please justify why the SOC aligns with the baccalaureate program.

Graduates of St. Johns River State College's Bachelor of Science in Information Systems will be prepared for a wide range of in-demand careers in IT that currently have significant unmet need. According to the US Bureau of labor statistics, occupations associated with cybersecurity have a projected growth of 32% until 2028. Software developers are one of the occupations with the largest increase in job shares through 2026, with more than 43,1000 openings nationwide. The Florida Department of Economic Opportunity (DEO) reports a healthy workforce outlook in Florida for careers in the IT industry with a projection of 14.1% growth by 2026. Occupations that align with the proposed program's CIP code 11.1003 include Computers and Information Systems Managers, Information Security Analyst, Computer Network Support Specialist, Database Administrators, Computer Network Architect, Cybersecurity Incident Response Specialist, Security System Administrators. Both the Florida Department of Economic Opportunity (DEO) Employment Projections and EMSI Region 8 Employment Projections anticipate growth in these careers; however, within Region 8, the number of degrees being awarded in these areas is not anticipated to meet demand. As tables 3.1.1, 3.1.2, 3.1.3, and 3.1.4 illustrate, there is an anticipated five-year unmet need of 354 graduates.

DEMAND: FLORIDA DEPARTMENT OF ECONOMIC OPPORTUNITY (DEO) EMPLOYMENT PROJECTIONS

3.1.1

| Occupation | | | Number of Jobs | | | | Salary | | Education Level | |
|---|----------|----------------------------|----------------|-------|-------------------|--------------------------|------------------------|----------------------|-----------------|-----|
| Name/Title | SOC Code | County/ Region | *2021 | *2029 | **Level Change | ***Total Job Openings | Average Hourly Wage | Annualized Salary | FL | BLS |
| Computer and Information Systems Managers | 11-3021 | Clay, Putnam, St. Johns | 214 | 263 | 22.90 | 175 | 59.93 | \$ 124,654 | B | B |
| Information Security Analyst | 15-1212 | Clay, Putnam, St. Johns | 98 | 125 | 27.55 | 85 | 44.50 | \$ 92,560 | PS | B |
| Computer Network Support Specialists | 15-1231 | Clay, Putnam, St. Johns | 107 | 106 | -0.93 | 56 | 31.02 | \$ 64,522 | PS | A |
| Network and Computer Systems Administrators | 15-1244 | Clay, Putnam, St. Johns | 328 | 406 | 23.78 | 249 | 36.39 | \$ 75,691 | A | B |
| Database Administrators and Architects | 15-1245 | Clay, Putnam, St. Johns | 101 | 128 | 26.73 | 84 | 42.13 | \$ 87,630 | A | B |
| | | | | | | | | \$ - | | |
| | | | | | | | | \$ - | | |
| | | | | | | | | \$ - | | |
| | | | | | | | | \$ - | | |
| | | | | | | | | \$ - | | |
| | | | | | | | | \$ - | | |
| | | | | | | Total | 81 | \$ 42.79 | \$ 89,012 | |

DEMAND: OTHER ENTITY INDEPENDENT OF THE COLLEGE – EMSI (Region 8)

3.1.2

| Occupation | | | Number of Jobs | | | | Salary | | Education Level | |
|---|----------|---------------|----------------|-------|--------------|--------------------|---------------------|-------------------|-----------------|-----|
| Name/Title | SOC Code | County/Region | *2021 | *2029 | Level Change | Total Job Openings | Average Hourly Wage | Annualized Salary | FL | BLS |
| Computer and Information Systems Managers | 11-3021 | Region 8 | 1931 | 2213 | 14.60 | 1499 | 66.63 | \$ 138,590 | B | B |
| Information Security Analysts | 15-1212 | Region 8 | 1114 | 1393 | 25.04 | 990 | 51.16 | \$ 106,413 | B | B |
| Computer Network Support Specialists | 15-1231 | Region 8 | 973 | 1041 | 6.99 | 650 | 32.41 | \$ 67,413 | A | A |
| Computer Network Architects | 15-1241 | Region 8 | 435 | 492 | 13.10 | 278 | 51.86 | \$ 107,869 | B | B |
| Database Administrators | 15-1242 | Region 8 | 392 | 446 | 13.78 | 296 | 45.73 | \$ 95,118 | B | B |
| Database Architects | 15-1243 | Region 8 | 130 | 164 | 26.15 | 120 | 56.32 | \$ 117,146 | B | B |
| Network and Computer Systems Administrators | 15-1244 | Region 8 | 1589 | 1718 | 8.12 | 980 | 38.49 | \$ 80,059 | B | B |
| | | | | | | | | \$ - | | |
| | | | | | | | | \$ - | | |
| | | | | | | | | \$ - | | |
| | | | | | | Total | 602 | \$ 48.94 | \$ 101,801 | |

*Please replace the “Base Year” and “Projected Year” headers with the corresponding years reported.

SUPPLY: NATIONAL CENTER FOR EDUCATION STATISTICS, IPEDS

3.1.3

CLICK [HERE](#) FOR INSTRUCTIONS FOR COMPLETING THE SUPPLY SECTION: If institutions do not have data available for completers in the service district, please report statewide data. You may note these are statewide figures.

| Program | | Number of Degrees Awarded | | | | | |
|------------------|--------------------------|---------------------------|-------|-------|-------|-------|---|
| Institution Name | CIP Code | *2021 | *2020 | *2019 | *2018 | *2017 | 5-year average or average of years available if less than 5-years |
| Flagler College | 52.12 in lieu of 11.1003 | 2 | 0 | 0 | 0 | 0 | 0 |
| Region 8 | 11.XXXX | 273 | 222 | 249 | 247 | 249 | 248 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | Total | 275 | 222 | 249 | 247 | 249 | 248 |

*Please replace the “Most Recent Year” through “Prior Year 4” headers with the corresponding years reported.

ESTIMATES OF UNMET NEED

3.1.4

| | Demand | Supply | | Range of Estimated Unmet Need | | | | | | | |
|--------------|--------------------|------------------|---|--------------------------------------|------------|--|--|--|--|--|--|
| | (A) | (B) | (C) | (A-B) | (A-C) | | | | | | |
| | Total Job Openings | Most Recent Year | 5-year average or average of years available if less than 5 years | Difference | Difference | | | | | | |
| DEO Total | 81 | 2 | 0 | 79 | 81 | | | | | | |
| Other Totals | 602 | 275 | 248 | 327 | 354 | | | | | | |

3.2 Describe any other evidence of workforce demand and unmet need for graduates as selected by the institution, which may include qualitative or quantitative data and information not reflected in the data presented in Sections 3.1.1 to 3.1.4, such as local economic development initiatives, emerging industries in the area, or evidence of rapid growth.

The Cybersecurity Workforce study by (ISC)2 in 2021 reports a gap of 377,000 in United States and 2.72 million globally. Through the study conducted during the rise of ransomware attacks in 2021, it was noted that all areas of cybersecurity are affected by staff shortage. All reports from Nice in 2022 indicate a growing concern of finding certified professionals for the number of job openings in Cybersecurity at all levels, and these trends indicate a robust number of job openings in Florida.

3.3 If the education level for the occupation identified by the Florida Department of Economic Opportunity (DEO) or the Bureau of Labor Statistics (BLS) presented in Sections 3.1.1 to 3.1.2 is below or above the level of a baccalaureate degree, provide justification for the inclusion of that occupation in the analysis.

The Florida Department of Economic Opportunity (DEO) defines the minimum academic qualifications for the positions of Computer Systems Analyst and Network to be an Associates degree; however, the Bureau of Labor Statistics (BLS) indicates a Bachelor degree to be the entry level requirement. Furthermore, discussion with local business and industry partners to include SJR State's Computer Education Advisory Board members indicates local employers are seeking employees with baccalaureate degrees in Information Systems.

3.4 Describe the career path and potential employment opportunities for graduates of the program.

The career paths and potential employment opportunities for graduates of SJR State's Information Systems baccalaureate degree are numerous. Students will begin their academic journey by pursuing an Associates degree, and with an AS in one of the areas within computer education, they will be qualified to pursue entry level positions in the field while simultaneously pursuing their baccalaureate degree through hybrid courses offered in the evening. Baccalaureate graduates will be prepared for high wage, high demand careers as Information Security Analysts , Computer and Information Systems Managers, Network and Computer Systems Administrators, and Computer Network Support Specialists. Additional high demand occupations which are common to graduates of Information Systems with Cybersecurity credentials include Information Security Analysts, Vulnerability Analyst, Penetration Tester, Cybersecuti Incident Response Specialist, and Systems Administrators.

PLANNING PROCESS

4.1 Summarize the internal planning process. In timeline format, please describe the steps your institution took in completing the internal review and approval of the baccalaureate program. For example, summarize actions taken by the academic department proposing the degree, any non-academic departments, the college-wide curriculum committee, the college president, the Board of Trustees and any other areas.

| Date | Activity |
|-------------|---|
| 11/8/2018 | SJR State Computer Advisory Board discussed critical local need for baccalaureate graduates with expertise in both networking and programming/application; Department vowed to work to provide better AS to BS pathways at UNF |
| Fall 2021 | In response to the Needs Assessment findings, SJR State Computer Education faculty began program and curriculum exploration of computer education programs and their alignment to our local workforce need |
| Spring 2022 | Computer education faculty narrowed scope of program/course review to cybersecurity. |
| 3/22/2022 | Computer Education full time faculty voted to begin the process of developing a baccalaureate in Information Systems with tentative tracks in Networking and Programming and pathways from the AA and SJR State's AS in Computers |
| 6/6/2022 | SJR State Director of Computer Education attended the National Initiative for Cybersecurity Education (NICE) Conference and Expo, learning about best practices, curricula, and products being implemented by other institutions. |
| 8/16/2022 | Computer Education full time faculty voted during their department meeting to approve the draft curriculum and pathways to the degree. |
| Fall 2022 | Faculty conducted program reviews of AS in Networking and AS in Programming in preparation |
| Fall 2022 | Faculty developed course outline for proposed Baccalaureate courses |
| Fall 2022 | SJR State Director of Computer Education participated in multiple statewide Florida College System Cyber Collaborative initiative meetings during the fall of 2022: July 6, 2022 August 10, 2022 September 21, 2022 |
| 10/11/2022 | SJR State's President and Vice Presidents voted to approve the continued development of the BS in Information Systems with a targeted implementation of Fall 2024 |
| 11/8/2022 | SJR State IPC voted to approve NOI and continued development of the BS in Information Systems with a targeted implementation of Fall 2024 |
| 11/18/2022 | Computer Education faculty voted to approve the submission of the NOI |
| 11/28/2022 | SJR State Workforce Committee voted to approve the NOI |

| | |
|------------|--|
| 11/28/2022 | Board of Trustees approved continued development of and submission of the NOI for the BS in Information Systems with a targeted implementation of Fall 2024 |
| 12/5/2022 | The completed Notice of Intent form submitted by SJR State President Joe Pickens to the chancellor of the Florida College System at ChancellorFCS@fldoe.org . |

4.2 Summarize the external planning process with the business and industry community. In timeline format, please describe your institution's interactions and engagements with external stakeholders, including but not limited to industry advisory boards meetings, discussions with advisory committees, briefings from local businesses, consultations with employers, and conducting paper and online surveys.

| Date | Activity |
|------------|---|
| 3/8/2019 | SJR State Computer Advisory Board includes UNF Dean of Computers; Advisory Board members discuss curriculum and pathways to UNF |
| 3/6/2020 | During the Spring 2020 SJR State Computer Advisory Board Meeting, faculty and advisory board members discussed the curriculum of SJR State's computer programs. Advisory Board members shared their need for baccalaureate trained graduates. |
| Fall 2021 | SJR State Workforce Department conducted needs assessment regarding the development of computer education programs, surveying local employers, business, and industry |
| 5/25/2022 | Computer Education Advisory Board endorsed by vote the development of a BS in Information Systems with tracks in Cybersecurity and Software Application Development |
| 10/21/2022 | SJR State Computer Faculty discussed with Computer Education Advisory Board members the proposed curriculum, tracks, and concentrations for the BS in Information Systems. |
| Fall 2022 | SJR State received letters of support for the proposed baccalaureate degree from local community partners |

4.3 List external engagement activities with public and nonpublic postsecondary institutions. This list shall include meetings and other forms of communication among external postsecondary institutions regarding evidence of need, demand, and economic impact.

| Date | Activity |
|-------------|--|
| 3/8/2019 | SJR State Computer Advisory Board included UNF Dean of Computers; Advisory Board members discussed curriculum and pathways to UNF |
| 6/2/2022 | SJR State President and Senior VP Dr. Brown shared in a meeting with the Presidents and other leadership of UNF, Flagler College, FSCJ, JU, Edward Waters College, Keiser University, and JaxUSA that SJR State is in the process of developing a baccalaureate in Information Systems. All indicated support of the proposed degree. |
| 11/2/2022 | President Pickens talked via phone with the President of FSCJ, the Florida College System institution with campuses geographically closest to SJR State, to discuss the proposed Baccalaureate degree in Information Systems. President Avendano agreed with the need for additional graduates in the field and indicated his support of the proposal. Dr. Brown followed up the phone call with an email to both President Avendano and FSCJ's Provost. |
| 11/14/2022 | President Pickens and Dr. Brown met with Flagler College's President John Delaney to discuss the proposed Baccalaureate degree in Information Systems. President Delaney agreed with the need for additional graduates in the field and indicated his support of the proposal. Note: Flagler College is the only regionally accredited college or university within SJR State's service district. |
| 11/17/2022 | SJR State submitted a posting in Florida's Academic Program Pre-Proposal Recognition System (APPRiSe) to notify all post-secondary institutions statewide that the College is considering developing a baccalaureate degree in Criminal Justice Applied Intelligence Studies and provide advance opportunity for discussion and collaboration. |
| 12/2/2022 | President Pickens and Senior VP Dr. Brown met with the President of the University of North Florida, the public university that is geographically closest to SJR State's service district, to discuss the proposed Baccalaureate degree in Information Systems. President Limayem graciously took time to share potential challenges and offered to encourage further collaboration between UNF and SJR State. Furthermore, President Limayem indicated he would support SJR State in making its proposal. |