# New Credit Program Application
## Long Form (CCC-501) and Short-Form (CCC-510)
## Santa Rosa Junior College

Date proposal created or last revised: 10/7/2019 (AL)

Proposed Certificate/Major Title: Computer Studies: Web and Full-Stack Developer

Projected Program Start Date (semester and year): F2020

Contact Person and Title: Ethan Wilde

Contact Phone #: (707) 527-4855          Contact email: ewilde@santarosa.edu

**Check one or more of the following (to check box, double click on the box and click "checked" option):**

☐ 0.5 - 17.5 unit certificate, **not** seeking Chancellor's Office approval (local approval required)

☐ 12 – 17.5 unit certificate, seeking Chancellor's Office approval (recommended)

☒ 18 unit or more certificate (requires Chancellor's Office approval)

☒ 18 unit or more CTE major, non-transferable (no articulation required, but still requires Chancellor's Office approval)

☐ Transfer major (18 units or more) either CTE or Liberal Arts (articulation required, but still requires Chancellor's Office approval)

☐ AA-T or AS-T transfer major following Transfer Model Curriculum (TMC) template (requires Chancellor's Office approval)

**For instructions, see page 2.**

**Preliminary Approval Signatures:**
The signatures below indicate that **preliminary** approval has been given to submit the application and start curriculum development, as needed. The signatures below indicate that the proposed certificate or major is appropriate to mission, meets the needs of the community, meets SRJC standards for high quality, is feasible within existing resources or resource needs can be supported, and complies with all relevant Title 5 or Ed Code requirements.

**Department Chair Signature**: _____     Date: _____

**Supervising Administrator:** _____     Date: _____

**Dean III Signature (if any):** _____     Date: _____

**SVPAA Signature:** _____     Date: _____

**SVPAA verification (initial):** _____ EPCC Review Completed     _____ AAC Review  Completed

## NEW CREDIT PROGRAM APPLICATION FORM

**Computer Studies: Web and Full-Stack Developer**
PROPOSED PROGRAM TITLE

**Josh Adams**
CONTACT PERSON

**Santa Rosa Junior College**
COLLEGE

**Dean, Bus. & Prof. Stud**
TITLE

**Sonoma County Junior College**
DISTRICT

**(707) 524-1508**
PHONE NUMBER

**F2020**
PROJECTED PROGRAM START DATE

**jadams2@santarosa.edu**
E-MAIL ADDRESS

**GOAL(S) OF PROGRAM:**

☒ CAREER TECHNICAL EDUCATION (CTE)　　☐ TRANSFER　　☐ OTHER

**TYPE OF PROGRAM (SELECT ONLY ONE):**
☐ A.A. DEGREE　　☒ A.S. DEGREE　　☐ AA-T DEGREE (for transfer)*　　☐ AS-T DEGREE (for transfer)*

CERTIFICATE OF ACHIEVEMENT**:**　☒ 18+ semester (or 27+ quarter) units
　　　　　　　　　　　　　　　　☐ 12-18 semester (or 18-27 quarter) units

* The AA-T and AS-T degrees fulfill the requirements of California Education Code sections 66745-66749, also known as the Student Transfer Achievement Reform Act. See special instructions provided here.

| Type of change requested: Check all that apply. | |
|---|---|
| Replace Existing Degree | ☐ |
| Replace Existing Certificate of Achievement | ☐ |
| Add New Degree | ☒ |
| Add New Certificate of Achievement | ☒ |
| Delete Existing Degree from an approved credit program | ☐ |
| Delete Existing Certificate of Achievement from an approved credit program | ☐ |

*Note: to check a box double click on the box and select the "checked" option.*

## PLANNING SUMMARY

| | | | |
|---|---|---|---|
| Recommended T.O.P. Code | 061430 | Estimated FTE Faculty Workload | 1 |
| Units for Degree Major or Area of Emphasis | 19 | Number of New Faculty Positions | 0 |
| Total Units for Degree | 60 | Est. Cost, New Equipment | $0 |
| Required Units-Certificate | 19 | Cost of New/Remodeled Facility | $0 |
| Projected Annual Completers | 10 | Est. Cost, Library Acquisitions | $0 |
| Projected Net Annual Labor Demand (CTE) | 352 | When will this program undergo review as part of college's Program Evaluation Plan? | Month __May____  Year__2022____ |

*Attachments required for this form:*
- *State Chancellor's Office signature page (generated by the curriculum office)*
- *Development Criteria Narrative & Documentation (with all attachments):*
  - *Labor/Job Market DATA (CTE only)*
  - *Employer Survey (CTE only)*
  - *Minutes of Key Meetings*

**1. Statement of Program Goals and Objectives:**

A) There is explosive growth of web-based technologies in many fields – commerce, communication, art, games, education, and mobile applications to name a few. In order to succeed in any of these fields, students must first learn the basics of developing software using web technologies. This certificate will provide the fundamentals of working with web-based technologies on both the client and server-side. These skills will provide practical job-ready experience and the foundation for continued study in other disciplines, including interaction design, and computer software development.

B) Upon successful completion of this program, the student will be able to:
1. work as an effective member of a web or mobile development team;
2. use principles of software design to analyze programming problems and develop solutions;
3. create and test web- and mobile-based computer programs that incorporate complex data structures and algorithms, and object-oriented programming methods; and
4. produce an online, multi-screen web or mobile application with consistency throughout the design and implementation of the application.

**2. Catalog Description:**

The Computer Studies: Web and Mobile Full-Stack Developer [certificate of achievement or degree] provides a course of study that prepares students to work on client and server-side web and mobile development. This pathway leads to opportunities for a career in web and mobile development. The Computer Studies: Web and Mobile Full-Stack Developer [certificate or degree] focuses on the core front-end web and mobile technologies of HTML, CSS, and JavaScript as well as server-side development using the PHP and JavaScript languages together with SQL and NoSQL databases.

**3. Program Requirements:**

| Key | Course and Title | Units |
|-----|------------------|-------|
| R | CS 50A Web Development 1 | 3.00 |
| R | CS 50 B Web Development 2 | 3.00 |
| R | CS 50C Web Development 3: JavaScript | 3.00 |
| R | CS 55.13 Server-Side Web Development | 3.00 |
| R | CS 50.32 Web and Digital Media Projects | 4.00 |
| Complete 3.00 units from below: | | |
| RE | CS 10A Introduction to Computer Programming | 4.00 |
| RE | CS 74.11 Introduction to Digital Media | 3.00 |
| RE | CS 81.62 Relational Database Concepts and Structured Query Language | 3.00 |
| RE | GD 51 Introduction to Graphic Design | 3.00 |
| Total | Minimum number of units to meet major requirements | 19.00 |

**List any special requirements in addition to above, such as work experience, internship, or examination:**

**Unit Summary**
-Total units to complete the certificate or major requirements: 19
-For associate degree majors, total units that double count as GE courses: 0
-For associate degree majors, total units minus the units that double count: 19
-For associate degree majors, additional units of "free" electives to bring the total to 60: 18

**4. Background and Rationale:**
Industry research and advisory committee feedback has demonstrated major opportunities for full-stack web developers – individuals without a four-year degree – to gain employment in the web development fields.

At Santa Rosa Junior College, faculty members with discipline expertise develop all certificates and majors.  For AA-T and AS-T degrees, faculty members with appropriate expertise determine which courses align with the C-ID descriptors.  The Supervising Administrator(s) then review the application to assure that it aligns with Chancellor's Office criteria for approval and SRJC guidelines for financial feasibility and community need. The Majors & Certificate Review Committee reviews the application and suggests any changes to assure than all guidelines have been observed.  The item is then placed on the Curriculum Review Committee agenda for approval, and when approved, is submitted for approval by the Board of Trustees.

## Criteria B: Need

**5. Enrollment and Completer Projections**:

- number of sections of core courses to be offered annually: 1-2
- headcount of student annual enrollment in core courses: 350 (35 students x 10 sections/year)
- estimated completers at the end of the second year: 10
- estimated completers at the end of the fifth year: 15

**6. Place of Program in Curriculum / Similar Programs:**
This new program shares several courses with existing Computer Studies/Digital Media majors/certificates.

**7. Similar Programs at Other Colleges in the Service Area:**
College of Marin, over 40 miles away, offers two certificates of achievement and two degrees in multimedia studies. None of the courses in the College of Marin pathways cover server-side web technologies.

Napa Valley College, over 40 miles away, offers a locally approved certificate in Web Site Development. Only one of the courses in the Napa Valley College pathways cover server-side web technologies.

**8. Labor Market Information & Analysis:**
Economic Modeling Specialists International (EMSI) projects 352 annual job openings in the greater San Francisco Bay Area.

**9. Employer Survey:**
Employer survey not required.

**10. Explanation of Employer Relationship:**
No employer relationship exists.

**11. List of Members of Advisory Committee Relationship:**
See attached

**12. Recommendations of the Advisory Committee:**
See attached

**13. Sequence of Courses:**

Please Specify: _X____Recommended Sequence, OR  _____Required Sequence

| Semester | Course and Title | Units |
|---|---|---|
| **1** | CS 50A Web Development 1 | 3.00 |
| **2** | CS 50B Web Development 2 | 3.00 |
| | CS 55.13 Server-Side Web Development | 3.00 |
| **3** | CS 50C Web Development 3- JavaScript | 3.00 |
| **4** | CS 50.32 Web and Digital Media Projects | 4.00 |
| | Restricted Elective | 3.00 |

**14. Transfer Applicability:**
Program is not for transfer.

## Criteria D. Adequate Resources

**15. Library and/or Learning Resources Plan:**
No additional resources are required

**16. Facilities and Equipment Plan:**
No additional resources are required

**17. Financial Support Plan:**
No additional resources are required

**18. Faculty Support Plan:**
No additional resources are required

## Criteria E. Compliance

**19. Model Curriculum:**
Not based on model curriculum

**20. Licensing or Accreditation Standards:**
No licensing or accreditation standards apply

**21. Student Selection and Fees:**
No additional student selection or fees are required

# Appendix A

<span style="color:red">Not required for a TMC when a similar major already exists</span>

**A.1. Enrollment**:  Provide data and discussion about the efficiency over the past **three** years of current courses to be used in this program (efficiency is the percentage of seats filled at first census compared to the class limit). This information can be pulled from the data mine, Facilities Mod data base. Ask you supervising administrator for assistance, if needed.

**A.2. Finances**:  Estimate department expenses to create and implement the proposed program:

| Category | **New and additional\* start up costs,** such as coordinate application; write courses; research; meetings; staff work; new faculty or staff; new equipment or facilities; etc. | **New or additional\* continuing** operational expenses per semester, such as cost of instruction; department support; faculty program coordination; supplies; maintenance; fees; etc. |
|---|---|---|
| 1000 – Instructional personnel | $0 | $0 |
| 2000 – Other personnel | $0 | $0 |
| 3000 – Benefits | $0 | $0 |
| 4000 – Supplies | $0 | $0 |
| 5000 – Operations - Travel, services, telephone, etc. | $0 | $0 |
| 6000 – Equipment | $0 | $0 |
| • Additional expenses might include District resources such as facilities; equipment; supplies; library resources.  If applicable, include possible sources of new or additional revenue, not including FTES | | |

A.3 **Department/Cluster Changes**:  Outline department or cluster programs and expenses, if any, that would have to be reduced or eliminated or changed to offer the program.

SRJC New Credit Program Proposal

## Appendix C: Evaluation Matrix

<span style="color:red">**CTE Certificates and CTE Majors Only**</span>

Use the rubric below and add up the points in the far right column.

| Planning Factor | 3 Points | 2 Points | 1 Point | 0 Points | Points |
|---|---|---|---|---|---|
| **SRJC Initiatives** | Addresses 2 or more initiatives and 2 or more goals from each initiative | Addresses 2 or more initiatives and 1 goal from each initiative | Addresses 1 initiative and 1 goal from each initiative | Addresses no initiatives | |
| **CTE Regional Need** | High regional need evidenced by labor market data, advisory committee ranking (1 or 2) and additional data/information. | Moderate regional need evidenced by labor market data, advisory committee ranking (3 or lower) and other data/information | Low regional need evidenced by labor market data, no advisory committee recommendation and no other data/information | No regional need | |
| **Similar programs** | No similar regional programs | One similar regional program | Two similar regional programs | Multiple similar regional programs | |
| **SRJC PRPP** | Included in PRPP and ranked 1st or 2nd in cluster priorities | Included in PRPP and 3rd in cluster priorities | Included in PRPP but lower than 3rd in cluster priorities | Not in PRPP | |
| **Financial Analysis: Cost Increases** | Program has negligible cost increase: Uses existing resources, including equipment, staff, or facilities. Library materials may be required. | Program requires some new resources or cuts to existing programs. Funding available in department or cluster | Program requires significant new resources or cuts to other programs and/or significant financial investment. District commitment is needed to fund | Program requires resources that may be beyond ability of the District to fund | |
| **Partnership\*\*** | Includes 3 or more partners | Includes 2 partners | Includes 1 partner | Does not include partners | |
| **Total Points based on Rubric** | | | | | |

*\*\*Partner may be internal or external (e.g. other SRJC departments; business; industry; professional organization; non-profit organization; etc.)*

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