

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

Date proposal created or last revised: 11/22/2019 (AL)

Proposed Certificate/Major Title: Solar Photovoltaics: System Installation

Projected Program Start Date (semester and year): Fall 2020

Contact Person and Title: Robert Grandmaison

Contact Phone #: (707) 527-4634

Contact email: rgrandmaison@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:** _____

SVPAAs Signature: _____ **Date:** _____

SVPAAs verification (initial): _____ EPCC Review Completed _____ AAC Review Completed

Application Date:



California Community Colleges

NEW CREDIT PROGRAM APPLICATION FORM

Solar Photovoltaics: System Installation

PROPOSED PROGRAM TITLE

Santa Rosa Junior College

COLLEGE

Sonoma County Junior College

DISTRICT

F2020

PROJECTED PROGRAM START DATE

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: **Josh Adams**

CONTACT PERSON

Dean, Bus. & Prof. Studies

TITLE

(707) 524-1731

PHONE NUMBER

jadams2@santarosa.edu

E-MAIL ADDRESS

* 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	094610	Estimated FTE Faculty Workload	1
Units for Degree Major or Area of Emphasis	N/A	Number of New Faculty Positions	0
Total Units for Degree	N/A	Est. Cost, New Equipment	Prop 39 & Strong Workforce
Required Units-Certificate	12	Cost of New/Remodeled Facility	\$0
Projected Annual Completers	10	Est. Cost, Library Acquisitions	\$0
Projected Net Annual Labor Demand (CTE)	22	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
 - Outlines of Record for all Required Courses
 - Transfer Documentation (if applicable)

New Credit Program Application Narrative

Criteria A. Appropriateness to Mission

1. Statement of Program Goals and Objectives:

Upon successful completion of this program, the student will be able to:

1. Describe the basic technology, tools, materials, and equipment commonly used in residential solar photovoltaics systems;
2. apply necessary safety precautions to minimize workplace hazards and protect customer's property;
3. identify proper site location and installation of residential photovoltaic panels, electrical distribution, inverters, electrical connection, conversion, and distribution components;
4. assemble a simple racking and module system;
5. determine the suitability for advanced topics application to project-specific uses

2. Catalog Description:

The Solar Photovoltaics: System Installation certificate of achievement is comprised of Industry-driven courses focused on the development of skills and knowledge used in the installation of solar photovoltaic systems.

3. Program Requirements:

Key	Course and Title	Units
R	RENRG 101 Renewable Energy Industry Careers	2.00
R	RENRG 102 Electrical Trade Tools, Parts, Components & OSHA 10	2.00
R	RENRG 103 Basics of Grid Tie Residential Systems	3.00
R	RENRG 104 Grid Tie Residential Solar PV Installation	3.00
R	RENRG 106 Advanced Topics in Renewable Energy	2.00
Total	Minimum number of units to meet certificate requirements	12.00

4. Background and Rationale:

This certificate is needed in order to address the demand for employees in the growing solar PV industry. Local and state mandates require new residential buildings to include solar photovoltaic systems and this will provide the local industry with needed workers.

Criteria B: Need

5. Enrollment and Completer Projections:

- number of sections of core courses to be offered annually: 2 sections
- headcount of student annual enrollment in core courses: 48 students
- estimated completers at the end of the second year: 20 students
- estimated completers at the end of the fifth year: 50 students

6. Place of Program in Curriculum / Similar Programs:

This certificate of achievement is one of four proposed certificates in solar photovoltaics.

7. Similar Programs at Other Colleges in the Service Area:

Napa Valley College, over 40 miles away, does not offer a solar photovoltaics program.
College of Marin, over 40 miles away, does not offer a solar photovoltaics program.

8. Labor Market Information & Analysis:

A SOC code analysis for 47-2231 from Centers of Excellence projects 22 annual job openings in the SF North Bay.

9. Employer Survey:

Not required

10. Explanation of Employer Relationship:

No employer relationship exists

11. List of Members of Advisory Committee Relationship:

Tor Allen, Rarus Institute; Laura Goldman, Solar Works; Rody Jonas, Pure Power Solution; Jeff Mathias, Solar Works; Daisy Meyer, Grid Alternatives; Nick Soleil, Enphase; Daniel Soto, Sonoma State University

12. Recommendations of the Advisory Committee:

The Solar Advisory Committee last met on December 13th, 2018; the committee recommended that we build a foundation certificate, with further specialization in two additional certificates in design/sales and installation.

13. Sequence of Courses:

Please Specify: X Recommended Sequence, OR Required Sequence

Semester	Course and Title	Units
1	RENRG 101 Renewable Energy Industry Careers RENRG 106 Advanced Topics in Renewable Energy	2.00 2.00
2	RENRG 102 Electrical Trade Tools, Parts, Components & OSHA 10	2.00
3	RENRG 103 Basics of Grid Tie Residential Systems	3.00
4	RENRG 104 Grid Tie Residential Solar PV Installation	3.00

14. Transfer Applicability:

Not transferable

Criteria D. Adequate Resources

15. Library and/or Learning Resources Plan:

Existing resources are sufficient.

16. Facilities and Equipment Plan:

Any new equipment needed will be funded by Prop 39 & Strong Workforce funds.

17. Financial Support Plan:

Financial support will come from Prop 39 & Strong Workforce funds.

18. Faculty Support Plan:

Existing faculty resources adequate.

Criteria E. Compliance

19. Model Curriculum:

Not based on Model Curriculum.

20. Licensing or Accreditation Standards:

No licensing or accreditation standards exist.

21. Student Selection and Fees:

No additional student selection or fees required.

Appendix C: Evaluation Matrix

CTE Certificates and CTE Majors Only

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 1 st or 2 nd in cluster priorities	Included in PRPP and 3 rd in cluster priorities	Included in PRPP but lower than 3 rd 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.)*