

**Program Efficacy Report  
Spring 2013**

**Name of Department: Electricity/Electronics Program**

**Efficacy Team: Romana Pires and Geoffrey Schroder**

**Overall Recommendation (include rationale): Continuation**

The Electricity/Electronics program offers five associate degrees and six certificates. Its demographic characteristics generally reflect those of the college with the exception of females being significantly underrepresented. This is normal but nevertheless the program has made efforts to increase female enrollment rates. The program is continually working to improve opportunities for its students. These include required education plans, rigor of courses, articulation, technology, and numerous partnerships. Recent state legislation pertaining to the solar initiative and electrician certification requirements are predicted to increase enrollment in the program. The program is facing challenges related to limitations in space and full time faculty which may affect its ability to meet enrollment needs. The program is encouraged to continue working with its internal and external partners and advisory committee to develop goals and action plans to continue to meet enrollment and employment trends.

Strategic Initiative	Institutional Expectations	
	Does Not Meet	Meets
<b>Part I: Access</b>		
<b>Demographics</b>	<i>The program does not provide an appropriate analysis regarding identified differences in the program's population compared to that of the general population</i>	<i>The program provides an analysis of the demographic data and provides an interpretation in response to any identified variance.  If warranted, discuss the plans or activities that are in place to recruit and retain underserved populations.</i>
<p><b>Efficacy Team Analysis and Feedback: Meets</b></p> <p>The program has provided a detailed analysis of its demographic data. The program generally reflects the racial and ethnic demographic of the college. Females are significantly underrepresented in the program and this is normal within the electrical and electronics occupations. The report details a bill introduced in Congress that has as its major goal an attempt to attract women into occupations in which females are underrepresented. Program members have partnered with local organizations to promote electrical/electric careers to females among other activities.</p>		
<b>Pattern of Service</b>	<i>The program's pattern of service is not related to the needs of students.</i>	<i>The program provides evidence that the pattern of service or instruction meets student needs.  If warranted, plans or activities are in place to meet a broader range of needs.</i>

**Efficacy Team Analysis and Feedback: Meets**

The program offers five associate degrees and six certificates. The program is structured to ensure that students complete course work within four semesters and courses are offered to meet the needs of working students or electrical trainees that work during the day. Courses are offered mainly in the evenings and weekends with a couple courses scheduled to be offered in an online format beginning in the 2013-2014 academic year. The program has developed flow-chart information sheets/brochures with required course work, time offerings and instructions directing students to the college website for registration information. It is evident that the program incorporates into its planning of program offerings strong consideration for the needs of its specific student population and this includes the ease of navigating the required coursework.

**Part II: Student Success**

**Data demonstrating achievement of instructional or service success**

*Program does not provide an adequate analysis of the data provided with respect to relevant program data.*

*Program provides an analysis of the data which indicates progress on departmental goals.*

*If applicable, supplemental data is analyzed.*

**Efficacy Team Analysis and Feedback: Meets**

It appears that the program is satisfied with its student success data. The analysis of the data explains success trends resulting from efforts related to departmental policies requiring students to have an education plan and high rigor of coursework among other factors. Additionally, changes in statewide policies requiring students to hold a general electrician's certificate are predicted to increase the number of certificates awarded by the program. The program ranks number six on the top ten list of certificates awarded by the college. The report also details supplemental trends related to labor trends and industry standards. The program is only one of six community colleges in southern California to offer a General Electrician Certification program in its entirety.

**Student Learning Outcomes and/or Student Achievement Outcomes**

*Program has not demonstrated that they have made progress on Student Learning Outcomes (SLOs) and/or Service Area Outcomes (SAOs) based on the plans of the college since their last program efficacy.*

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**Efficacy Team Analysis and Feedback: Meets**

The program details processes in place to analyze course and program level student learning outcomes. These include meetings with program faculty and members of its advisory committee. Student learning outcomes are linked to departmental goals. The program is currently considering changing to a national exam as an assessment tool to measure student learning. The report includes supplemental advisory committee minutes to document discussions related to its curriculum.

**Part III: Institutional Effectiveness**

**Mission and Purpose**

*The program does not have a mission, or it does not clearly link with the institutional mission.*

*The program has a mission, and it links clearly with the institutional mission.*

**Efficacy Team Analysis and Feedback: Meets**

The mission and goals of the program primarily focus on preparing students for employment in electricity and electronics related occupations. The curriculum is recognized by several associations and designed to meet the standards or recommendations of various organizations. The program has articulation agreements and partnerships with local universities and high schools. All of these efforts are aligned with the college mission.

<b>Productivity</b>	<i>The data does not show an acceptable level of productivity for the program, or the issue of productivity is not adequately addressed.</i>	<i>The data shows the program is productive at an acceptable level.</i>
<p><b>Efficacy Team Analysis and Feedback: Meets</b></p> <p>Taking into account recent budgetary cutbacks, the data related to productivity demonstrates that the program is operating at an acceptable level as noted by the analysis and is in need of two additional full time faculty. Although the data related to WSCH is below the college average this is due to laboratory and safety standards. Although the analysis notes acceptable productivity in areas of retention, completions, and transfers, there is no data or analysis of the data regarding transfer rates or other information. The program is encouraged to provide this information in the future to support its conclusions.</p>		
<b>Relevance, Currency, Articulation</b>	<p><i>The program does not provide evidence that it is relevant, current, and that courses articulate with CSU/UC, if appropriate.</i></p> <p><i>Out of date course(s) that are not launched into Curricunet by Oct. 1 may result in an overall recommendation no higher than Conditional.</i></p>	<p><i>The program provides evidence that the curriculum review process is up to date. Courses are relevant and current to the mission of the program. Appropriate courses have been articulated or transfer with UC/CSU, or plans are in place to articulate appropriate courses.</i></p>
<p><b>Efficacy Team Analysis and Feedback: Meets</b></p> <p>All courses, certificates and programs are current. Courses articulated with UC/CSU systems are listed. The program undergoes efforts to meet with key constituents to assure that the curriculum of its courses, certificates, and programs is up to date with the latest trends and standards.</p>		
<b>Part IV: Planning</b>		
<b>Trends</b>	<i>The program does not identify major trends, or the plans are not supported by the data and information provided.</i>	<i>The program identifies and describes major trends in the field. Program addresses how trends will affect enrollment and planning. Provide data or research from the field for support.</i>
<p><b>Efficacy Team Analysis and Feedback: Meets</b></p> <p>Current trends within the field are identified and described in this section and in a previous section. Employment trends related to electricity and electrical fields are experiencing growth and demand in areas of solar/photovoltaic, fiber optics, and Radio Frequency Identification industries. Recent state legislation regarding the solar initiative and new electrician certification requirements are predicted to increase enrollment in the program. The program has ordered solar equipment however needs more laboratory space to support the anticipated growth in the program and space to hold equipment. It is unclear what efforts are in place to acquire this needed space. With the anticipated growth in the program and current enrollment trends, the program is in need of additional full time faculty. Program has partnerships with local employers to assist students with internship and employment opportunities.</p>		
<b>Accomplishments</b>	<i>The program does not incorporate accomplishments and strengths into planning.</i>	<i>The program incorporates substantial accomplishments and strengths into planning.</i>
<p><b>Efficacy Team Analysis and Feedback: Does Not Meet</b></p> <p>While the program lists numerous certification, partnership, and articulation agreements these are not linked to overall departmental planning efforts. Although other areas of this report provide trends within the electrical and electricity industries and occupations, it is not clear in this area of the report how the various listed memberships, certification, and partnerships, among others affect or are related to the planning efforts of the department.</p>		

<b>Weaknesses/challenges</b>	<i>The program does not incorporate weaknesses and challenges into planning.</i>	<i>The program incorporates weaknesses and challenges into planning.</i>
<p><b>Efficacy Team Analysis and Feedback: Meets</b></p> <p>Challenges related to space, budget, faculty, and demographics are explained. The program has described efforts to attract female students into the program. While these challenges are external to the program's abilities to incorporate into its planning efforts and goals, the program is encouraged to involve departmental strengths in particular its numerous partnerships, certification associations, and advisory committees to develop strategies to possibly minimize some of the described challenges. Some of these strategies are included in other areas of the report including in the next section and appear to be very exciting in terms of providing students with opportunities that may also be beneficial to the college in general.</p>		
<b>Part V: Technology, Partnerships &amp; Campus Climate</b>		
	<p><i>Program does not demonstrate that it incorporates the strategic initiatives of Technology, Partnerships, or Campus Climate.</i></p> <p><i>Program does not have plans to implement the strategic initiatives of Technology, Partnerships, or Campus Climate.</i></p>	<p><i>Program demonstrates that it incorporates the strategic initiatives of Technology, Partnerships and/or Campus Climate.</i></p> <p><i>Program has plans to further implement the strategic initiatives of Technology, Partnerships and/or Campus Climate.</i></p>
<p><b>Efficacy Team Analysis and Feedback: Meets</b></p> <p>The program details recent technology related purchases to maintain and improve student success and increase student opportunities after graduation. The program describes possible goals to improve campus climate in the area of sustainability including the installation of solar panels that could also create opportunities for students within the program. In this section and other areas of this report, the author(s) has described and detailed numerous partnerships with the program. This includes its advisory committee and also Southern California Edison (SCE). Currently the program is creating a Memorandum of Understanding with SCE to develop training and employment opportunities for students.</p>		
<b>Part VI: Previous Does Not Meets Categories</b>		
	<i>Program does not show that previous deficiencies have been adequately remedied.</i>	<i>Program describes how previous deficiencies have been adequately remedied.</i>
<p><b>Efficacy Team Analysis and Feedback (N/A if there were no "Does not Meets" in the previous efficacy review): Meets</b></p> <p>The program has made efforts to address in this report its previous deficiencies in areas of <i>Productivity</i> and <i>Weaknesses/Challenges</i>. The author(s) is encouraged to take into account the reviewers' suggestions when writing future efficacy reports.</p>		