

Dear UUC members,

As with Software Engineering, we appreciate your careful reading of the P-form for Electrical Engineering and suggestions for improvement. The result is an improved P-form submission. For your convenience, TABLES are included below to summarize all of the changes to the P-form for Electrical Engineering as well as the C forms and syllabi. We look forward to meeting you at your next UCC meeting to answer any lingering questions.

--Michael Burin and Rick Fierro

| Requested changes for the P-form  | Changes made in the P-form   |
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| 1. Please obtain sign-off approval from Philosophy Department for the P form  | Signature requested and forthcoming, see Exhibit A.  |
| 2. Page 5 under “Programs Offered” second paragraph, first sentence needs editing, as it reads awkward. Suggest deleting the first two words, “The Coursework”. Then start the paragraph with “Electrical Engineering begins...”        | Replaced<br>“The coursework electrical engineering begins ...”<br>with<br>“The curriculum for electrical engineering begins ...”   |
| 3. Learning Outcomes: Review for consistency in language with PSLOs and SLOs, and suggest double checking them with Melissa.  | Melissa Simnitt helped develop the version that UCC read, see Exhibit B. No change required.   |
| 4. PSLO #3a: how is “function” measured? – suggest replacing with the word “collaborate” / What is meant by multidisciplinary?  | Replaced “Function on multi-disciplinary teams”<br>with<br>“Develop skills necessary to function effectively on teams.”<br><i>Justification for change: “To be effective, engineers and technologists must work in teams to reduce the knowledge load, to share the work so that it may be completed in a timely fashion and to provide a means for error checking.”</i><br><i>Karl Perusich, Beverley Davis, Kevin Taylor; 2009</i> |
| 5. PSLO #4a: typo, add “be able”  | Change made as requested.  |
| 6. PSLO #4b: revise and condense sentence structure: suggest one or other verb structure selection, either the “recognize” clause or “understand the impact.”   | The PSLO 4b is closely modeled after an ABET SLO.<br><br>The sentence has been changed to:<br>“Acquire a broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.”  |
| 7. PSLO #5b: Consider changing the wording of “currency”, eg. “Remain current”  | Change made as requested:<br><br>Replace<br>“Maintain currency in pertinent contemporary issues”<br>with<br>“Remain current in pertinent contemporary issues”  |
| 8. Page 7: GE units need to be 48 units, not 51 // include two asterisks “**” after Major Requirements for additional referral on following page at PHIL 348 and MATH 346 // include one asterisk “*” at “Six lower division” reference | All asterisks * and ** inserted as requested ***<br><br>*** Thank you for catching this subtlety.  |
| 9. Page 12, table 2: MATH 346 – title differs from course title   | Changed made as requested, as the correct title is MATH 346 Mathematical Methods for Physics   |
| 10. Advisory: double-check that all course descriptions in P form match those in C forms. For example: EE 430 C form lists 3 hours of lab / course description in program states 2 hours activity                                       | Change made to the C form for EE 430 as requested. It should have stated: “Three hours of lecture and three hours of laboratory.” After further review, no corrections of this type were needed for the other C forms.   |

*No other changes to the P-form were made, unless specifically mentioned elsewhere.*

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| <p>11. Curriculum Matrix: Curriculum Matrix of PSLOs missing all required Math courses, the 2 CS courses, and PHIL course – suggest meeting with Melissa/Assessment</p>   | <p>The Curriculum Matrix has been updated as requested, in consultation with Melissa Simnitt.</p>   |
| <p>12. Roadmap: Semester 2 should be GEO 102, not GES 102</p>   | <p>Change made as requested.</p>  |
| <p>13. Roadmap will need to be revised according to EO changes in Area D. Identify which semester they want the B2. With change of Area D, one of the LDGE lines on the roadmap needs to be removed, and the A3 requirement can be added in its place (as it currently stands the GE A3 requirement has been excluded. Reconcile with table on page 7 of program proposal as the units do not add up.</p> | <p>The A3 requirement is now mentioned in Semester 4.</p> <p>The Roadmap suggests students may satisfy the B2 requirement in Semesters 4, 7, or 8.</p> <p>The math adds up now.</p>   |
| <p>14. For all C forms: Advisory item only, double check and update DSS language</p>  | <p>Changes will be made as requested in the future when the new courses are launched, using the following language, developed in consultation with John Segoria:</p> <p>Students with disabilities who require academic accommodations must be approved for services by providing appropriate and recent documentation to the Office of Disability Support Services (DSS). This office is located in Craven Hall 4300, and can be contacted by phone at (760) 750-4905, TDD (760) 750-4909 or by email at: <a href="mailto:dss@csusm.edu">dss@csusm.edu</a>. Students can be assured that their requests to DSS for accommodations will be discussed a private and respectful setting in order to ensure their confidentiality.</p> |

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| <b>1. Requested changes CS 445</b>  | <b>Changes made</b>   |
| A. Due to content and Mode of Instruction changes, please provide updated syllabus.   | The proposer updated the syllabus as requested. See the Word document "CS445-EE406-Syllabus"  |
| <b>2. Requested changes for PHYS 301 C2 form</b>  | <b>Changes made</b>   |
| A. Please request review and approval from MATH Department regarding dropping prerequisite  | Sent an email to the Chair of the Department of Mathematics, response is forthcoming.   |
| <b>3. Requested changes for PHYS 402 C2 form</b>  | <b>Changes made</b>   |
| A. Box #8: PHYS 302: does "May not be taken for credit by students who have received credit for PHYS 302" requirement still apply?  | The current C2 form is correct, there is no need to include the statement "May not be taken for credit by students who have received credit for PHYS 302" because we no longer offer PHYS 302.  |
| <b>4. Requested changes for PHYS 403 C2 form</b>  | <b>Changes made</b>   |
| A. Roadmap indicates co-requisite of MATH 346. Syllabus notes MATH 346 is recommended. On C-2 this is not listed. Please reconcile with C2.   | The C2 form for PHYS 403 has been updated.<br>(i) The co-requisite PHYS 203 was deleted.<br>(ii) The co-requisite MATH 342 was added.<br>(iii) The prerequisite PHYS 203 was added.   |
| <b>5. Requested changes for PHYS 421 C2 form</b>  | <b>Changes made</b>   |
| A. Due to content change, please provide course outline that includes SLOs.   | The catalog description has changed somewhat, but the content still overlaps significantly.   |
| <b>6. Requested changes for EE 330 C form</b>   | <b>Changes made</b>   |
| A. Roadmap indicates co-requisite of MATH 346. Syllabus notes MATH 346 is recommended. On C-2 this is not listed. Please reconcile with C2.   | The C form and syllabus for EE 330 has been updated to include MATH 346 as a prerequisite, as well as in the course description in 4g in the P-form.  |
| <b>7. Requested changes for EE 435 C form</b>   | <b>Changes made</b>   |
| A. Prerequisite of PHYS 303 is missing from P form course description<br>B. Syllabus – Last sentence of Pedagogic Methodology re: final project – is this part of activities grade? Please include in course grade breakdown.   | A. Correction made as requested.<br>B. The activities 40% has been changed:<br>Activities: 15%<br>Project system: 25%   |
| <b>8. Requested changes for EE 491A C form</b>  | <b>Changes made</b>   |
| A. Course description: delete all but first sentence and last sentence<br>B. #22: form indicates that MATH is impacted (typo)?<br>C. Syllabus SLOs: #2 replace "function" with "articulate their role as"<br>D. #6: suggest "Demonstrate" communication.<br>E. Consider combining #4 & 6. | A. Change made as requested to the C form and syllabus for EE 491, as well as in the course description in 4g in the P-form.<br>B. This is a typo, please delete this reference.<br>C. Replaced "Function as a member of the engineering design team" with "Articulate role as member of the engineering design team"<br>D. Replaced "Communicate in written and oral form" with "Demonstrate the ability to communicate projects results in a presentation"<br>E. It is preferable to keep #4 and #6 separate. |

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| <b>9. Requested changes for EE 491B C form</b>   | <b>Changes made</b>   |
| <p>A. Course description: delete all but first sentence and last (prerequisite) statement.</p> <p>B. Box #10: Is this activity or lab? Clarify, is the intention for this to be activity or lab?</p> <p>C. Syllabus SLOs: Clarify and combine #1 and #5 as currently written they are both vague</p> <p>D. clarify #3 – it is difficult to measure</p> | <p>A. Replaced “Implementation, construction, and documentation of a senior electrical engineering design and laboratory project. Continuation of EE 491A in which student picked project topic and did planning and initial design work. Student must consult with and work under the guidance of an electrical engineering faculty member. Final written report, presentation, and demonstration of project is required.”</p> <p>with</p> <p>“Continuation of EE 491A in which student picked project topic and did planning and initial design work. Implementation, construction, and documentation of a senior electrical engineering design and laboratory project. Final written report, presentation, and demonstration of project is required.<br/><i>Prerequisite: EE 491A.</i></p> <p><i>Note: The revised course description also appears as stated above in the course description in 4g in the P-form.</i></p> <p>B. This is an Activity as indicated. No change.</p> <p>C. Deleted SLO #1 but retained SLO #5 without any changes.</p> <p>D. Regarding SLO #3, replaced “Utilize external resources to gather technical information necessary to complete the design” with “Use and document external resources to gather technical information necessary to complete the design” This SLO can be measured by the use of references to a bibliography.</p> |
| <b>10. Requested changes for PHIL 348 C form</b>   | <b>Changes made</b>   |
| Course description: delete last sentence   | Change made as requested to the C form and syllabus for PHIL 348, as well the course description in 4g in the P-form.   |

## Exhibit A.

**From:** Laurie Schmelzer

**Sent:** Wednesday, April 18, 2018 3:40 PM

**To:** Michael McDuffie <mcduffie@csusm.edu>

**Cc:** Ricardo Fierro <fierro@csusm.edu>; Paul Stuhr  
<pstuhr@csusm.edu>

**Subject:** P form for Electrical Engineering

Hi Michael,

With the inclusion of the PHIL\_348 course for Electrical Engineering, we overlooked getting your signature on the P form Signature document. Can you please reply all so that the Associate Dean of CSM and the Chair of UCC has verification from the Philosophy Department that you are aware this proposal impacts your discipline? Please note whether you support or oppose the implementation of the program.

Thank you,

Laurie

# Exhibit B.

RE: Electrical Engineering - Message (HTML)

File Message ADOBE PDF Tell me what you want to do...

Delete Reply Reply All Forward To Manager Move Tags Editing Zoom

Melissa Simnitt Ricardo Fierro 3 1/12/2017

**RE: Electrical Engineering**

You replied to this message on 1/12/2017 1:18 PM.

BSEE\_Goals\_PSLOs\_20161005\_ms.docx 23 KB

BSEE CompAssessPlan\_20161005\_ms.docx 27 KB

BSEE CurrMap\_20161005\_ms (002).docx 25 KB

Action Items + Get more apps

Hi Rick.

All is well, thank you. I hope you had an enjoyable holiday.

Of course, I am happy to help. I remember drafting up PSLOs for BSEE back in October and demonstrating how they align with ABET's standards. So sorry to be obtuse, but do we need to do something different?

The documents drafted are attached and our email conversation from October is tacked on to the bottom of this email. We may just need to tweak the curriculum map, based on the courses identified in the spreadsheet.

*Melissa Simnitt*  
Assessment Specialist  
CSU San Marcos – Academic Programs  
(760) 750-8880