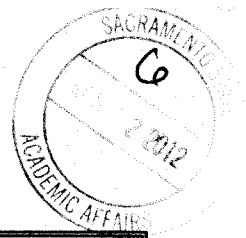




SACRAMENTO STATE

Attachment Q Faculty Senate Meeting - April 12, 2012 Program Proposal Form B



Academic Group (College): Engineering and Computer Science	Date of Submission to College Dean: 1-20-2012
Academic Organization (Department): Electrical & Electronic Engineering	Requested Effective: Fall <u>X</u> , Spring <u> </u> , 20 <u>12</u> .
Department Chair: Suresh Vadhva	Contact if not Department Chair:

Title of the Program (Please be specific; indicate minor, undergraduate or graduate degree, etc.):
Bachelor of Science in Electrical and Electronic Engineering (undergraduate degree)

Type of Program Proposal:

Modification in Existing Program:
 Substantive Change
 Non-Substantive Change
 Deletion of Existing Program

New Programs
 Initiation (Projection) of New Program on to Master Plan
 New Degree Programs
 Regular Process
 Fast Track Process
 Pilot Process
 New Minor, Concentration, Option, Specialization, Emphasis
 New Certificate Program

PLEASE NOTE: Form B is to be used only as a Cover Form. Additional information is requested for each of the above as noted in the corresponding procedure in the Policies and Procedures for Initiation, Modification, Review and Approval of Courses and Academic Programs found at <http://www.csus.edu/umannual/acad.htm>

Briefly describe the program proposal (new or change) and provide a justification.

In order to introduce incoming freshman students to both the university experience and the different areas in engineering, two new required courses are being introduced – ENGR 1 Introduction to Engineering, and ENGR 50 Computational Methods and Applications. These courses are also intended to improve retention by establishing and maintaining contact between freshman students and faculty, as well as by providing students with “hands-on” experience with basic engineering projects and concepts to get them excited about engineering. Both courses have been developed to be compatible with the current descriptions of such courses that are being drafted by Discipline Interest Groups for the Transfer Model Curricula in engineering in response to SB 1440. To make room in the program without increasing the number of required units, 2 existing courses are being dropped as requirements. Some content in these existing courses is included in the new courses, but at a different level, or is no longer deemed necessary for a modern curriculum in Electrical and Electronic Engineering. No additional fiscal or space resources are required.

Approvals:

Department Chair: Suresh Vadhva Date: 2/2/2012

College Dean: [Signature] Date: 2/24/12

University Committee: [Signature] Date: 2/27/12

Associate Vice President and Dean for Academic Affairs: [Signature] Date: 4/2/12

- Itemized List of Changes:
1. Add ENGR 1 (1 unit) as a required lower division course.

2. Replace CSc 25 (3 units) with new course, ENGR 50 (3units).
3. Delete ENGR 70 (3 units) as a required lower division course.

New Program	Old Program
<p>A. Required Lower Division Courses (42 units)</p> <p>ENGR 1 (1 unit) Introduction to Engineering</p> <p>CHEM 1A (5 units) General Chemistry I</p> <p>EEE/CPE 64 (4 units) Introduction to Logic Design</p> <p>+++++</p> <p>+++++</p> <p>ENGR 50 (3 units) Computational Methods and Applications</p> <p>ENGL 20 (3 units) College Composition II</p> <p>ENGR 17 (3 units) Introductory Circuit Analysis</p> <p>+++++</p> <p>+++++</p> <p>Math 30 (4 units) Calculus I</p> <p>Math 31 (4 units) Calculus II</p> <p>Math 32 (4 units) Calculus III</p> <p>Math 45 (3 units) Differential Equations for Science and Engineering</p> <p>PHYS 11A (4 units) General Physics: Mechanics</p> <p>PHYS 11C (4 units) General Physics: Electricity and Magnetism, Modern Physics</p> <p>No changes to Sections B, C, and D</p>	<p>A. Required Lower Division Courses (44 units)</p> <p>+++++</p> <p>+++++</p> <p>CHEM 1A (5 units) General Chemistry I</p> <p>EEE/CPE 64 (4 units) Introduction to Logic Design</p> <p>CSC 25 (3 units) Introduction to C Programming</p> <p>+++++</p> <p>+++++</p> <p>ENGL 20 (3 units) College Composition II</p> <p>ENGR 17 (3 units) Introductory Circuit Analysis</p> <p>ENGR 70 (3 units) Engineering Mechanics</p> <p>Math 30 (4 units) Calculus I</p> <p>Math 31 (4 units) Calculus II</p> <p>Math 32 (4 units) Calculus III</p> <p>Math 45 (3 units) Differential Equations for Science and Engineering</p> <p>PHYS 11A (4 units) General Physics: Mechanics</p> <p>PHYS 11C (4 units) General Physics: Electricity and Magnetism, Modern Physics</p> <p>No changes to Sections B, C, and D</p>