



SACRAMENTO
STATE

Course Change Proposal Form A

Academic Group (College): ECS	Academic Organization (Department): EEE	Date: 09/18/2006
Type of Course Proposal: New ___ Change <u>X</u> Deletion ___	Department Chair: Dr. Suresh Vadhva	Submitted by: Dr. Suresh Vadhva
Does this course fulfill a requirement for single-subject or multiple subject credential students? Yes ___ No <u>X</u>	For Catalog Copy: Yes <u>X</u> No ___ CCE: Yes ___ No <u>X</u>	Semester Effective: Fall ___ Spring <u>X</u> , 20_07__

This course replaces experimental course Subject Area (prefix) and Catalog Number (course number):	EEE 296K
This Catalog Number (course number) is being replaced:	

Change from:

Subject Area (prefix) & Catalog No. (course no.): EEE 296K	Title: Advanced VLSI Design	Units: 3
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Change to:

Subject Area (prefix) & Catalog No. (course no.): EEE 239	Title: Advanced VLSI Design-For-Test II	Units: 3
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JUSTIFICATION:

<p>To build a greater knowledge depth among students of CMOS logic and VLSI fabrication, assembly and test operations. These are items that would make our students more competitive in the electronics industry.</p>
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NEW COURSE DESCRIPTION: (Not to exceed 80 words, and language should conform to catalog copy. See <http://www.csus.edu/acaf/univmanual/crspsl.htm> - Guidelines for Catalog Course Description)

<p>Advanced topics in VLSI testing and Design-For-Test applications. Memory-specific test methodology and special features of memory designs employed in high volume manufacturing for improved testability, yield, and reliability. VLSI failure modes, their detection and prevention. Application of trim, redundancy, wear-leveling and error correction.</p>
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Note:

Prerequisite: EEE 238	
Corequisite:	
CAN (California Articulation Number):	
Graded: Letter <u>X</u> Credit/No Credit ___	Instructor Approval Required? Yes ___ No <u>X</u>
Course Classification (e.g., lecture, lab, seminar, discussion): C5 Lecture	Title for SIS+/CMS (not more than 30 characters) Adv VLSI Design-For-Test II
Cross Listed? Yes ___ No <u>X</u>	If yes, do they meet together and fulfill the same requirement, and what is the other course.

How Many Times Can This Course be Taken for Credit? ___Once___

Can the course be taken for Credit more than once during the same term? Yes ___ No X

FOR NEW COURSE PROPOSALS OR SUBSTANTIVE CHANGES ONLY:

Description of the Expected Learning Outcomes: Describe outcomes using the following format: “Students will be able to: 1), 2), etc.” See the example at <http://www.csus.edu/acaf/example.htm>

Students will become familiar with the advanced issues involved with taking a finished integrated circuit design and developing it into a validated, mass production-worthy product. Students will learn the problems encountered in the development of integrated circuits and the methods used to solve them.

**Attach a list of the required/recommended course readings and activities [Note: it is understood that these are updated and modified as needed by the instructor(s).] This attachment should be forwarded only to your Dean's office, not Academic Affairs.

Assessment Strategies: A description of the assessment strategies (e.g., portfolios, examinations, performances, pre-and post-tests, conferences with students, student papers) which will be used by the instructor to determine the extent to which students have achieved the learning outcomes noted above:

**Evaluations will be based on the following:
2 midterm exams and 1 final exam
Research term paper**

For whom is this course being developed?

Majors in the Dept Majors of other Depts Minors in the Dept General Education Other

Is this course required in a degree program (major, minor, graduate degree, certificate)? Yes No

If yes, identify program(s):

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer facilities, faculty, etc.)? Yes No

If yes, attach a description of resources needed and verify that resources are available.

Indicate which department or programs will be affected by the proposed course (if any). _____

The Department Chair's signature below indicates that affected programs have been sent a copy of this proposal form.

Approvals: If proposed change, new course or deletion is approved, sign and date below. If not approved, forward without signing to the next reviewing authority, and attach an explanatory memorandum to the original copy.

Signatures:

Date

Signatures:	Date
Department Chair:	
College Dean or Associate Dean:	
CPSP (for school personnel courses ONLY)	
Associate Vice President and Dean for Academic Programs	

Distribution: Academic Affairs (original), Department Chair and College Dean. Dean's office to send original after approval to Academic Affairs, at mail zip 6016. An electronic copy must also be sent.