Course Change Proposal  
Form A  

<table>
<thead>
<tr>
<th>Academic Group (College):</th>
<th>Engineering and Computer Science</th>
<th>Date:</th>
<th>17 Sept 07</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Organization (Department):</td>
<td>Civil Engineering</td>
<td>Submitted by:</td>
<td>Ramzi Mahmood</td>
</tr>
<tr>
<td>Type of Course Proposal:</td>
<td>New Change <em>X</em> Deletion ___</td>
<td>Department Chair:</td>
<td>Ramzi Mahmood</td>
</tr>
<tr>
<td>Does this course fulfill a requirement for single-subject or multiple subject credential students?</td>
<td>Yes ___ No <em>x</em></td>
<td>Semester Effective:</td>
<td>Fall <em>x</em> Spring __, 20_08</td>
</tr>
<tr>
<td>For Catalog Copy:</td>
<td>Yes <em>x</em> No ___</td>
<td>CCE (Extension):</td>
<td>Yes ___ No <em>x</em></td>
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</tbody>
</table>

This course replaces experimental course Subject Area (prefix) and Catalog Nbr (course number):  

<table>
<thead>
<tr>
<th>Change from:</th>
<th>Subject Area (prefix) &amp; Catalog Nbr (course no.):</th>
<th>Title:</th>
<th>Units:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 138</td>
<td>Hydrology</td>
<td></td>
<td>3</td>
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<tr>
<th>Change to:</th>
<th>Subject Area (prefix) &amp; Catalog Nbr (course no.):</th>
<th>Title:</th>
<th>Units:</th>
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JUSTIFICATION:  
Prerequisite Change  
From: CE 137, may be taken concurrently  
To: CE 137  
CE 137 introduces the topics that are covered in greater depth in this technical elective course. To accommodate students taking CE 137 concurrently (the old prerequisite), a significant fraction of time in this class had to be given to CE 137 topics. By requiring students to finish CE 137 before taking this course, this duplication of coverage is eliminated and more time will be available for advanced topics in this course.

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)  
Introduction to hydrologic engineering design. Precipitation analysis, hydrograph and flood routing applications for civil engineering. Groundwater hydrology including quality problems in development of subsurface water resources. Statistical applications in hydrology. Prerequisite: CE 137; may be taken concurrently.

Note:  
Prerequisite: CE 137  
Enforced at Registration: Yes _x_ No ___  
Corequisite:  
Enforced at Registration: Yes ___ No ___  
CAN (California Articulation Number):  
Graded: Letter _X_ Credit/No Credit ___  
Instructor Approval Required? Yes ___ No _X_  
Course Classification (e.g., lecture, lab, seminar, discussion):  
Title for CMS (not more than 30 characters)  
Water Resources Engr  
Cross Listed?  
Yes ___ No _X_  
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?  
1  
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

**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:

**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.

<table>
<thead>
<tr>
<th>Signatures:</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department Chair:</td>
<td>9/17/07</td>
</tr>
<tr>
<td>College Dean or Associate Dean:</td>
<td>11/20/07</td>
</tr>
<tr>
<td>CPSP (for school personnel courses ONLY)</td>
<td></td>
</tr>
<tr>
<td>Associate Vice President and Dean for Academic Programs</td>
<td></td>
</tr>
</tbody>
</table>

**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.