Engineering

ENG 491  **Interdisciplinary Design Proj**  credit: 1 TO 4 hours.
Disciplined, multi-department, team-structured project design experience with an overall (or major phase) end-of-term completion date. Projects involve design specification through a proposal, analyses of cost and other tradeoffs among alternative designs, design review, fabrication and assembly, functional and environmental testing, and demonstrations (as applicable). Reports and presentations at the end of each term. Individual engineering activities as well as team responsibilities. No graduate credit. Senior standing required. May be repeated. Credit toward the degree is determined by the student's major department. Prerequisite: Consent of instructor.

<table>
<thead>
<tr>
<th>CRN</th>
<th>Type</th>
<th>Section</th>
<th>Time</th>
<th>Days</th>
<th>Location</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>41009</td>
<td>Lecture</td>
<td>CU1</td>
<td>12:00 PM - 12:50 PM</td>
<td>MW</td>
<td>106B6 - Engineering Hall</td>
<td>Carney, S, Carroll, D, Coverstone, V, Dragic, P</td>
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<tr>
<td>55790</td>
<td>Lecture</td>
<td>CU2</td>
<td>12:00 PM - 12:50 PM</td>
<td>MW</td>
<td>1304 - Siebel Center for Comp Sci</td>
<td>Carroll, D, Dragic, P</td>
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<tr>
<td>51964</td>
<td>Laboratory-Discussion</td>
<td>SAE</td>
<td>04:00 PM - 05:50 PM</td>
<td>M</td>
<td>1320 - Digital Computer Laboratory</td>
<td>Philpott, M</td>
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<tr>
<td>41920</td>
<td>Lecture</td>
<td>SD</td>
<td>05:00 PM - 06:20 PM</td>
<td>MR</td>
<td>1103 - Siebel Center for Comp Sci</td>
<td>Wang, X</td>
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<td>41010</td>
<td>Lecture</td>
<td>SSD</td>
<td>03:30 PM - 04:50 PM</td>
<td>TR</td>
<td>106B6 - Engineering Hall</td>
<td>Lilly, B, Singer, A</td>
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</tbody>
</table>

Cubesat 1
Please contact the instructor for an evaluation of your prerequisites before registering for the course.

Credit Hours: 3 hours
SAE Formula Car
Instructor Approval Required
Advance work on SAE Formula Car. This course is the first in the design series. The second semester ENG 491 470 is in the spring and counts for ME students as senior design credit.

Credit Hours: 3 hours
Engr Design Solar Decathlon
Instructor Approval Required
Engineering Design for Solar Decathlon. Students will design and build energy efficient mechanical systems, power system, and control system for a solar-powered house for the Solar Decathlon China 2013. The solar home will be constructed in China during 2012 and 2013. Dates and times listed are subject to change before the Fall 2012 semester. Meets in 204 AESB.

Credit Hours: 3 hours
Start Up Senior Design
Instructor Approval Required
START UP SENIOR DESIGN Two-course sequence in which students gain design experience as well as hands-on experience in launching a startup. The overall completion date is at the end of the second (spring) term. Students participate in engineering and venture creation activities with individual as well as team responsibilities. First-term projects will be provided and supervised by
Chicagoland Entrepreneurial Center (CEC) member companies, which are often venture-backed and have up to $10M in annual revenue. The student teams will also have a College of Engineering faculty advisor that will help them navigate the technical landscape of their projects. Students must complete an application and be approved in order to enroll. For application materials, please see www.tec.illinois.edu.