Each senior student is supposed to prepare a senior thesis in order to fulfill the graduation requirements. Senior thesis consists of two courses, BIM 437 Computer Engineering Design and BIM 444 Computer Engineering Applications, offered in both Fall and Spring semesters. A senior thesis is an independent research project that senior students take to fulfill a graduation requirement. During the study of senior thesis, students work with an advisor and carry out a research project. Your thesis will represent your ability to perform research and present it effectively.

Senior students are expected to take BIM 437 Computer Engineering Design course during the first semester of their last year. Each project should be designed by a group of two or three students. Deadlines and schedule is given below:

<table>
<thead>
<tr>
<th>Task</th>
<th>Explanation</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determine your group members</td>
<td>Each group should have two or three members (If you want to work alone or group of more than three students, see your advisor and department chair)</td>
<td>by 5PM, Wednesday, September 26, 2012</td>
</tr>
<tr>
<td>Choose your advisor</td>
<td></td>
<td>by 5PM, Friday, September 28, 2012</td>
</tr>
<tr>
<td>Determine your thesis topic</td>
<td></td>
<td>by 5PM, Friday, October 5, 2012</td>
</tr>
<tr>
<td>Hand in First Preliminary Report</td>
<td>The report should include project title, project definition, motivation, related work (literature review), background knowledge about the used technologies</td>
<td>by 5PM, Friday, October 19, 2012</td>
</tr>
<tr>
<td>Midterm (Hand in your midterm report and present your thesis proposal to your thesis committee)</td>
<td>The report (and your presentation) should cover the first preliminary report, user requirement analysis, functional and non-functional requirements, planning, high-level design, and low-level design. Make sure you design a set of use-cases for system analysis and draw the use-case diagram of your system</td>
<td>2PM, Friday, November 23, 2012</td>
</tr>
<tr>
<td>Hand in Second Preliminary Report</td>
<td>The report should include explanation about your design and coding completed so far</td>
<td>by 5PM, Friday, December 28, 2012</td>
</tr>
<tr>
<td>Final (Midterm grades will be published one week before the Final!)</td>
<td>Senior Thesis Qualifying Exam</td>
<td>2PM, Friday, January 18, 2013</td>
</tr>
</tbody>
</table>
MIDTERM-Thesis Proposal (Report & Presentation)
Each group must prepare a preliminary report about their senior thesis and hand in to their advisor before the presentation. The report should be 6-8 pages. Please follow the Senior Thesis Writing Guidelines given in our department web site. Please be sure that your report includes the followings:

1. Concise title
2. Group members and their e-mail addresses
3. Your motivation-reasons why you have decided to prepare such project (risk analysis)
4. Problem definition-briefly explain your project problem
5. Briefly explain what you are going to do-scope of your project
6. Explain how you are going to do-technologies that you will use (give brief definition of each technology and reasons why you have decided to use them)
7. List what you have done so far-each group is expected to complete related work, requirement analysis, functional and non-functional requirements, planning, overall design (high level design and preferably detailed design) and coding done so far.
8. Make sure you design a set of use-cases for system analysis and draw the use-case diagram of your system
9. Measure of success and B plan
10. Responsibilities of each group member
11. References
   
   Your report will be graded by your advisor.

Each group is expected to present their thesis proposal to their thesis committee, given below. Your presentation should be 8-10 slides and briefly cover your report. Please note that each group has at most 15 minutes for presentation and Q & A. Your presentation will be graded by each committee member and your presentation grade will be average of their marks.

Grading Policy for Report and Presentation:

1. Presentation (20%)- Your work should be typed, spell-checked, and well formatted.
2. Clarity of writing (20%)- The writing should be clear and plain.
3. Clarity of organization (20%)
4. Effectiveness and quality (20%)
5. General impressions (20%)

Midterm Grading:
Report: 40% (1st Report: 10%, 2nd Report: 20%, Midterm Report: 70%)
Presentation: 60%

FINAL EXAM-Senior Thesis Qualifying Exam
Each student has to take the senior thesis qualifying exam. The exam usually takes 90 minutes. It covers the following courses:
1. Programming Languages and Software Engineering
2. Data Structures and Algorithms
3. Database Management Systems
4. Computer Networks
5. Internet Programming and Web Server Programming
6. System Analysis and Design
Final Exam Grading:
There will be two questions about each part (12 questions in total), each worth 10 points. Each student is expected to choose 10 questions to answer.

Final Grading:
Midterm: 30%
Final: 70%

Grading Scale:
<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>76-100</td>
<td>AA</td>
</tr>
<tr>
<td>72-75</td>
<td>AB</td>
</tr>
<tr>
<td>68-71</td>
<td>BA</td>
</tr>
<tr>
<td>64-67</td>
<td>BB</td>
</tr>
<tr>
<td>60-63</td>
<td>BC</td>
</tr>
<tr>
<td>56-59</td>
<td>CB</td>
</tr>
<tr>
<td>52-55</td>
<td>CC</td>
</tr>
<tr>
<td>48-51</td>
<td>CD</td>
</tr>
<tr>
<td>44-47</td>
<td>DC</td>
</tr>
<tr>
<td>40-43</td>
<td>DD</td>
</tr>
<tr>
<td>0-39</td>
<td>FF</td>
</tr>
</tbody>
</table>

Thesis Committees

<table>
<thead>
<tr>
<th>Committee</th>
<th>Members</th>
</tr>
</thead>
</table>
| Committee I | Prof. Dr. Yasar HOSCAN  
Assist. Prof. Dr. Ozgur YILMAZEL  
Lec. Emre KACMAZ  
Res. Assist. Ahmet ARSLAN |
| Committee II | Assoc. Prof. Dr. Yusuf OYSAL  
Assist. Prof. Dr. Sedat TELCEKEN  
Dr. Ibrahim YAKUT  
Res. Assist. Alper K. UYSAL |
| Committee III | Assoc. Prof. Dr. Huseyin POLAT  
Assist. Prof. Dr. Serkan GUNAL  
Lec. Ozgur OZSEN  
Res. Assist. Alper BILGE |
| Committee IV | Assist. Prof. Dr. Cuneyt AKINLAR  
Assist. Prof. Dr. Muzaffer DOGAN  
Dr. Cihan KALELI  
Res. Assist. Burcu YILMAZEL |

Students cannot take the BIM 437 Computer Engineering Design and BIM 444 Computer Engineering Applications courses during the same semester. To take them during the same semester, the following conditions have to be satisfied:
1. The semester is your last semester
2. Your GPA (so far) ≥ 3.00
3. Department approval
P.S. For all your reports, please follow the Senior Thesis Writing Guidelines given in our department web site.
P.S. Please check our website for further announcements.