CZ3003 – Software Systems Analysis and Design

<table>
<thead>
<tr>
<th>Course Code</th>
<th>CZ3003</th>
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<tbody>
<tr>
<td>Course Title</td>
<td>Software Systems Analysis and Design</td>
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<tr>
<td>Pre-requisites</td>
<td>CZ/CE2006: Software Engineering (co-requisite)</td>
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<td>No of AUs</td>
<td>3</td>
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**Course Aims**

Building upon software engineering and design concepts covered in Software Engineering (CZ2006), this course aims to introduce you to advanced software engineering management topics such as Requirement Engineering, various Software Architectures, Component Design, and Software Architecture Design.

**Intended Learning Outcomes (ILO)**

This course introduces software at an advanced level. Upon the successful completion of this course, you (as a student) shall be able to:

1. Describe the software engineering management and quality processes, their purpose and importance
2. Apply requirement engineering techniques to collect valid and detailed software system requirements
3. Apply software analysis and design methods to meet the requirements of software systems
4. Describe and consider the qualifications of system analysts and project managers to design better software systems
Course Content

<table>
<thead>
<tr>
<th>Topics</th>
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<tbody>
<tr>
<td>Introduction</td>
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<tr>
<td>Requirement Engineering (RE)</td>
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<tr>
<td>Software Design</td>
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<tr>
<td>Software Architecture and Style</td>
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<td>Software Architecture Design</td>
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<td>Architecture Thinking and Process</td>
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<td>Software Components</td>
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<td>Modeling Software Architecture using UML</td>
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<td>Architecture Basic Designs</td>
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<td>Reusables in Software Architecture</td>
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<tr>
<td>System Perspective and Stakeholder Impact</td>
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Assessment (includes summative assessment) CZ3003

a) Final Examination: 40%
   b) Laboratory/Assignments: 60%

Note:
School reserves the right that content and assessment criteria may be adjusted during a given semester possibly because of circumstantial reasons. Any such changes will be discussed with the students enrolled in a given semester.

Reading and References

References:

4. Lecture notes created for the course by the lecturers, as well as other reading materials and online resources curated by the lecturers.