

SE 321 (953321) Software Requirement Analysis (2025 – 1st Semester)
Software Engineering, College of Arts, Media and Technology,
Chiang Mai University

Course Title: Software Requirement Analysis, SE 321 (953321) - 3 (3-0-6)

Course Description

Introduction to the requirement process. Requirement inception. Requirement elicitation. Requirement elaboration. Requirement gathering techniques. Requirement modeling. User Requirement Specification. System Requirement Specification. Negotiation. Requirement development. Requirement validation. Requirement management.

Prerequisite: SE 202 (953202) Introduction to Software Engineering

Time: 14.30 – 16.00, Tuesday and Friday
Room: ILC-B202

Lecturer: Asst. Prof. Pattama Longani, Ph.D. (sec. 701)

Office hours: Tuesday and Friday 16.30–17.00

Note: Please make an appointment in advance

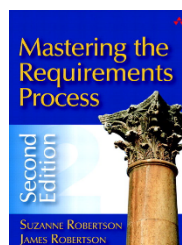
Dr. Siraprapa Wattanakul, Ph.D. (sec. 702)

Office hours: Wednesday 9.30–11.00

Note: Please make an appointment in advance

Study Resources:

- Microsoft Teams: 165-953321-701000 SOFTWARE REQUIREMENT ANALYSIS
- CMU-Online (KC-Moodle): for the exam and some exercises
- Lecturers' Book and PowerPoints
- Kahoot Application
- Text: Mastering the Requirements Process, Suzanne Robertson and James Robertson, 2nd Edition, Addison-Wesley, 2006,
ISBN 0-321-41949-9



- Recommended readings:
 - Requirements Engineering – A Good Practice Guide, Sommerville and Sawyer, Wiley, 1997, ISBN 978 0471974444
 - Berenbach, B., Paulish, D. J., Rudorfer, A., & Rudorfer, A. (2009). *Software and systems requirements engineering*. Retrieved from <https://oclc.lib.cmu.ac.th:2250>

- Software Requirements, Wiegers, K., 2nd Edition, Microsoft Press, 2003, ISBN 0-735-618798
- Software Requirement Patterns, Withall, S., Microsoft Press, 2007, ISBN 0-735-623988
- Software Engineering: A Practitioner's Approach, Pressman, McGraw-Hill, 2005, ISBN 978-0071238403 (Chapter 7)
- Software Engineering Body of Knowledge – <http://www.swebok.org>
- Requirement analysis for a large software system, downloadable at:
http://ftp.cs.ucla.edu/tech-report/198_reports/840048.pdf

Objectives:

Students will be able to

- Explain the requirements process
- Use methodologies, techniques, and tools appropriate to each requirement activity
- Find and elicit requirements using formal and informal techniques
- Organize and prioritize requirements
- Negotiate among stakeholders and handle conflicts
- Specify requirements and fit criteria
- Reuse and manage requirements

In short, students will be able to produce complete and well-documented specifications for software development projects (including the senior project!)

Schedule & Content:

Date	Day	Content	Activity
24/06	Tue	Activity Diagram	Lecture
27/06	Fri	Activity Diagram II	Lecture + Assignment
01/07	Tue	Understanding Requirement: Introduction to the course Inception + Elicitation + Objective	Lecture
04/07	Fri	Inception + Elicitation Workshop	Class Activity
08/07	Tue	Inception + Elicitation Feedback	Lecturer Feedback
11/07	Fri	Holiday	
15/07	Tue	Business Review + SWOT + Risk Analysis + Timeline Workshop	Lecture
18/07	Fri	Business Review + SWOT + Risk Analysis + Timeline Workshop Feedback	Class Activity
22/07	Tue	Business Review + SWOT + Risk Analysis + Timeline Workshop Feedback	Lecturer Feedback
25/07	Fri	Brainstorm + Interview Technique + Open-Closed Question + Lecture	Lecture
29/07	Tue	Functional - Feature - URS + Use Case Diagram	Lecture

01/08	Fri	Functional - Feature - URS + Use Case Diagram Workshop	Class Activity
05/08	Tue	Functional - Feature - URS + Use Case Diagram Feedback	Lecturer Feedback
08/08	Fri	Project Feedback	Lecturer Feedback
12/08	Tue	Holiday	
15/08	Fri	Project Feedback	Lecturer Feedback
18/08-23/08 Reading Week + 24/08-30/08 Midterm Exam			
02/09	Tue	User Journey + Wireframe	Lecture
05/09	Fri	User Journey + Wireframe Workshop	Class Activity
09/09	Tue	User Journey + Wireframe Feedback	Lecturer Feedback
12/09	Fri	User scenario + SRS + User case Description	Lecture
16/09	Tue	User scenario + SRS + User case Description + Activity Diagram Workshop	Class Activity
19/09	Fri	User scenario + SRS + User case Description + Activity Diagram Feedback	Lecturer Feedback
23/09	Tue	Nonfunctional Requirement + Specification + Document Template + Tracibility Metrix + fitcriteria	Lecture
26/09	Fri	Nonfunctional Requirement + Specification + Document Template + Traceability Metrix Workshop	Class Activity
30/09	Tue	Nonfunctional Requirement + Specification + Document Template + Traceability Matrix Feedback	Lecturer Feedback
3/10	Fri	Negotiation + Requirement Change + Presentation	Student Presentation
7/10	Tue	Negotiation + Requirement Change + Presentation	Student Presentation
10/10	Fri	Negotiation + Requirement Change + Presentation	Student Presentation
15/10	Tue	Project Feedback	Lecturer Feedback
18/10	Fri	Project Feedback	Lecturer Feedback
20/10 - 3/11 Final Exam			

Note: Some topics of the content might be subject to change or addition without notice in advance.

Evaluation: The course will be assessed as follows.

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| - Class Attendance | | 10% |
| - Class activities and assignments | 30% | |
| (Term Project, presentation, assignments, self-learning) | | |
| - Midterm Exam | | 30% |
| - Final Exam | 30% | |

Attendance and Grade Policies:

- Students with any impolite outfit according to the rules of Chiang Mai University will not be allowed to attend the class.
- Being over 15 minutes late is considered absent from the class. If students must be absent, please notify the lecturer before the date of their absence.
- Any submission that is not according to good English will be unscored. Any work will be accepted after checking by Grammarly.
- No late submission is allowed unless agreed ahead of time. (deduct scores)
- Academic dishonesty (e.g., cheating, plagiarism) is unacceptable and will not be tolerated.
- Any submitted work found with plagiarism or with references not cited will receive '0'.
- Students who do not take the final exam may fail this course.
- The letter grades will be A, B+, B, C+, C, D+, D, or F.
- The following letter grades may also be given:

“I”	Incomplete	“P”	In progress	“W”	Withdrawn
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- A request for revising your grade can be made within 30 days after the grade announcement day ONLY. No request will be accepted after the 30-day period.
- Submitted documents will be kept for 6 months after the class closes ONLY.