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|  | **KẾ HOẠCH TRIỂN KHAI HỌC PHẦN**  PLAN OF COURSE IMPLEMENTATION |

DANANG CAMPUS

**Tên học phần/***Course name:*  Yêu cầu phần mềm  
Software Requirement

1. **Thời gian triển khai: Học kỳ: FA24 từ 04/09/2024 đến 08/11/2024**

*Duration: Semester Fall from 04th September, 2024 to 08th November, 2024*

1. **Số lớp triển khai/***Number of classes: 1*
2. **Đề cương triển khai:** <nêu tên, link syllabus triển khai trên CMS>

*Implement in accordance with Syllabus: <name of syllabus and link to CMS>*

1. **Danh sách Giảng viên triển khai học phần/** *List of Classes and Lecturers:*

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| STT  *No.* | Tên giảng viên  *Lecturer* | STT  *No.* | Tên giảng viên  *Lecturer* |
| 1 | SE18B01- Lê Thị Bích Tra |  |  |
| 2 | SE18B03- Lê Thị Bích Tra |  |  |
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1. **Danh sách giảng viên hỗ trợ, trợ giảng, khách mời (nếu có),**

*Supporting Lecturers, assistants, guest speakers (if any)*

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| STT  No. | Họ và tên  Full name | Vai trò  Role | Nội dung  Content | Thời lượng  Duration | Thời gian  Time | Số lớp  No of Class | Kinh phí  Budget |
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1. **Các hoạt động phát sinh:** *Addtional Activities:*

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| STT  No. | Họ và tên  Full name | Mục tiêu  Target | | Thời lượng  Duration | Thời gian  Time | Số lớp  No of Class | Kinh phí  Budget |
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1. **Tài liệu tham khảo bổ sung/***Additional References:*

* Software Requirements Third Edition by Karl E. Wiegers, Microsoft Press, ISBN: 978-0-7356-7966-5
* Course slides (.pptx)
* Document GuideLines folder includes document template
* Example folder includes Case studies illustrating the actual system.

1. **Môi trường, công cụ triển khai bổ sung/** *Update Environments and Tools (if any):*
2. Thực hiện giảng dạy hoặc sử dụng trên những website nào:

*Websites for Teaching or Using:*

1. Yêu cầu về công cụ, kỹ thuật đặc thù gì *(cái gì, ở đâu, như thế nào…)*

*Specific Tools and technical required (What? Where? How?, etc.)*

* Microsoft office for documents and presentation.
* BOUML (http://bouml.free.fr/): UML Drawing software

1. Kênh trao đổi thông tin giữa thầy và trò *(kể cả việc nộp bài, cho điểm, nhận xét…)*

*Communication channels among lecturers and students (including submitting assignments, marking, and giving comment)*

**10*.* Lịch triển khai môn học**

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| Slot | Week | Chapter -Topic - Content | Assessment | Assignment Homework | Note |
| 1 | Week 1 | **Course Introduction**  **Chapter 1: The essential of software requirement**  - Software requirements defined  - Requirements development and management  - When bad requirements happen to good people  - Benefits from a high-quality requirements process  **Chapter 2: Requirements from the customer’s perspective**  **-** Who is the customer?  - The customer-development partnership  - Creating a culture that respects requirement |  |  |  |
| 2 | **Chapter 2: Requirements from the customer’s perspective cont’d**  - Identifying decision makers  - Reaching agreement on requirements |  |  |  |
| **Chapter 3: Good practices for requirements engineering**  -A requirements development process framework  - Requirements elicitation  - Requirements analysis  - Requirements specification  - Requirements validation  - Requirements management |  |  |  |
| 3 | Week 2 | Group discussion: Discuss what students have to do in their Assignment 1  Summary and Exercises  **Chapter 4: The business analyst**  - The business analyst role  - The business analyst’s tasks  - Essential analyst skills  - Essential analyst knowledge  - The making of a business analyst  - The analyst role on agile projects  **Chapter 5: Establishing the business requirements**  - Defining business requirements  - Vision and scope document  - Scope representation techniques |  |  |  |
| 4 | **Chapter 5: Establishing the business requirements (cont’d**)  - Keeping the scope in focus  - Vision and scope on agile projects  **Chapter 6: Finding the voice of users**  **-** User classes  - User personal  - Connecting with user representatives  - The product champion  - User representation on agile project  - Resolving conflicting requirements |  |  |  |
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| 5 | Week 3 | **Chapter 7: Requirements elicitation**  **-** Requirements elicitation techniques: Interviews, workshops, Focus groups, Observations, Questionaires, System interface analysis, User Interface Analysis, Document Analysis  - Planning and Preparing for elicitation on your project  - Performing elicitation activities  - Follow up after elicitation  - Classifying customer input  - Some cautions about elicitation  - Assumed and implied requirements  - Finding missing requirements  **Chapter 8: Understanding user requirements**  - Use cases and user stories |  |  |  |
| 6 | - The use case approach  - Benefits of usage-centric requirements  **Chapter 9: Playing by the rules**  - A business rules taxonomy  - Documenting business rules  - Discovering business rules  - Business rules and requirements  - Tying everything together  **Progress test 1** |  |  |  |
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| 7 | Week 4 | **Chapter 10: Documenting the requirements**  - The software requirements specification  - A software requirements specification template  - Requirements specification on agile projects  **Chapter 11: Writing excellent requirements**  -Characteristics of excellent requirements  - Guidelines for writing requirements  - Sample requirements, before and after |  |  |  |
| 8 | **Chapter 12: A picture is worth 1024 words**  - Data flow diagram; Swimlane diagram; State-transition diagram and state table ; Dialog map ;  - Decision tables and decision trees; Event-response tables ; Modeling on agile projects |  |  |  |
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| 9 | Week 5 | **Chapter 13: Specifying data requirements**  - Modeling data relationships  - The data dictionary  - Data analysis  - Specifying reports  **Chapter 14: Beyond functionality**  - Software quality attributes  - Exploring quality attributes  - Defining quality requirements  - Specifying quality requirements with Planguage  - Quality attribute trade-offs  - Implementing quality attribute requirements  - Constraint  - Handling quality attributes on agile projects |  |  |  |
| 10 | **Chapter 15: Risk reduction through prototyping**  - Prototyping: What and why  - Mock-ups and proofs of concept  - Throwaway and evolutionary prototypes  - Paper and electronic prototypes  - Working with prototypes  - Prototype evaluation  - Risks of prototyping  - Prototyping success factors |  |  |  |
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| 11 | Week 6 | **Chapter 16: First things first: Setting requirement priorities**  - Why prioritize requirements?  - Some prioritization pragmatics  - Games people play with priorities  - Some prioritization techniques  - Prioritization based on value, cost, and risk  **Chapter 17: Validating the requirements**  - Validation and verification  - Reviewing requirements  - Prototyping requirements  - Testing the requirements  - Validating requirements with acceptance criteria |  |  |  |
| 12 | **Chapter 18: Requirements reuse**  - Why reuse requirements?  - Dimensions of requirements reuse  - Types of requirements information to reuse  - Common reuse scenarios  - Requirement patterns  - Tools to facilitate reuse  - Making requirements reusable  - Requirements reuse barriers and success factors  **Chapter 19: Beyond requirements development**  - Estimating requirements effort  - From requirements to project plans, designs and code, tests, success |  |  |  |
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| 13 | Week 7 | Assignment 1 Review and Evaluation  - Assignment 2 Introduction  - Progress test 2 and Review  **Chapter 20: Agile projects**  - Limitations of the waterfall  - The agile development approach  - Essential aspects of an agile approach to requirements  - Adapting requirements practices to agile projects  - Transitioning to agile: Now what? |  |  |  |
| 14 | **Chapter 21: Enhancement and replacement projects**  - Expected challenges  - Requirements techniques when there is an existing system  - Prioritizing by using business objectives  - When old requirements don’t exist  - Encouraging new system adoption |  |  |  |
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| 15 | Week 8 | **Chapter 22: Packaged solution projects**  - Requirements for selecting packaged solutions  - Requirements for implementing packaged solutions  - Common challenges with packaged solution  **Chapter 23: Outsourced projects**  - Appropriate levels of requirements detail  - Acquirer-supplier interactions  - Change management  - Acceptance criteria |  |  |  |
| 16 | Group discussion  Summary and Exercises   Assignment 2 supporting |  |  |  |
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| 17 | Week 9 | **Chapter 27: Requirements management practices**  - Requirements management process  - The requirements baseline  - Requirements version control  - Requirement attributes  - Tracking requirements status  - Resolving requirements issues  - Measuring requirements effort  - Managing requirements on agile projects  **Chapter 28: Change happens**  - Change control policy  - Basic concepts of the change control process  - A change control process description  - The change control board  - Change control tools |  |  |  |
| 18 | - Measuring change activity  - Change impact analysis  - Change management on agile projects  **Chapter 29:** **Links in the requirements chain**  - Tracing requirements  - Motivations for tracing requirements  - The requirements traceability matrix  - Tools for requirements tracing  - A requirements tracing procedure |  |  |  |
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| 19 | Week 10 | **Chapter 31: Improving your requirements processes**  - How requirements relate to other project processes  - Requirements and various stakeholder groups  - Gaining commitment to change  - Fundamentals of software process improvement  - Root cause analysis  - The process improvement cycle  - Requirements engineering process assets  - Creating a requirements process improvement road map  **Chapter 32: Software requirements and risk management**  - Fundamentals of software risk management  - Requirements-related risks  - Risk management is your friend |  |  |  |
| 20 | - Progress test 3  - Assignment 2 evaluation |  |  |  |
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| Người phê duyệt/*Approver*  *GĐCS/Campus’s Director* | Người kiểm tra/*Reviewer*  *TBĐT/Head of Academic Affairs Board)* | Người lập/*Creator*  *CNBM/Head of department* |
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| Họ tên/*Name:*  Ngày/*Date:* | Họ tên/*Name:*  Ngày/*Date:* | Họ tên/*Name: Lê Thị Bích Tra*  Ngày/*Date: 02/09/2024* |