

**22. Project Management (PH056IU)**

Module designation	<i>This course is developed to provide the principal concept on project management which was characterized by the project management body of knowledge guide (PMBOK Guide). This guide emphasizes the five project process groups of initiating, planning, executing, controlling and closing, and the nine knowledge areas of project integration, scope, time, cost, quality, human resources, communication, risk, and procurement management. Students will also apply all project management knowledge in a specific satellite development project to understand more about satellite life cycle via a mini project and final report. In addition, this course also provides computer aid for project management by introducing the application of Microsoft Project and project scheduling.</i>
Semester(s) in which the module is taught	1, 2, summer semester
Person responsible for the module	Dr. Lê Xuân Huy
Language	English
Relation to curriculum	Compulsory
Teaching methods	Lecture, lesson, project.
Workload (incl. contact hours, self-study hours)	(Estimated) Total workload: 127.5 Contact hours (please specify whether lecture, exercise, laboratory session, etc.): lecture: 37.5 Private study including examination preparation, specified in hours: 90
Credit points/ECTS	3 credits/4.62 ECTS
Required and recommended prerequisites for joining the module	None



<p>Module objectives/intended learning outcomes</p>	<p>Upon the successful completion of this course students will be able to:</p> <table border="1" data-bbox="507 353 1364 922"> <thead> <tr> <th data-bbox="507 353 722 472">Competency level</th> <th data-bbox="727 353 1364 472">Course learning outcome (CLO)</th> </tr> </thead> <tbody> <tr> <td data-bbox="507 479 722 598">Knowledge</td> <td data-bbox="727 479 1364 598">CLO1. Show the understanding of important aspects of project management</td> </tr> <tr> <td data-bbox="507 604 722 768">Skill</td> <td data-bbox="727 604 1364 768">CLO2. Show the abilities of formulating, organizing and managing projects. CLO3. Show the abilities of team working</td> </tr> <tr> <td data-bbox="507 775 722 922">Attitude</td> <td data-bbox="727 775 1364 922">CLO4. Show the recognition of professional ethics and responsibilities in formulating, managing and executing projects.</td> </tr> </tbody> </table>	Competency level	Course learning outcome (CLO)	Knowledge	CLO1. Show the understanding of important aspects of project management	Skill	CLO2. Show the abilities of formulating, organizing and managing projects. CLO3. Show the abilities of team working	Attitude	CLO4. Show the recognition of professional ethics and responsibilities in formulating, managing and executing projects.							
Competency level	Course learning outcome (CLO)															
Knowledge	CLO1. Show the understanding of important aspects of project management															
Skill	CLO2. Show the abilities of formulating, organizing and managing projects. CLO3. Show the abilities of team working															
Attitude	CLO4. Show the recognition of professional ethics and responsibilities in formulating, managing and executing projects.															
<p>Content</p>	<p>The description of the contents should clearly indicate the weighting of the content and the level.          Weight: lecture session (3 hours)          Teaching levels: I (Introduce); T (Teach); U (Utilize)</p> <table border="1" data-bbox="507 1104 1262 2049"> <thead> <tr> <th data-bbox="507 1104 987 1149">Topic</th> <th data-bbox="992 1104 1153 1149">Weight</th> <th data-bbox="1158 1104 1262 1149">Level</th> </tr> </thead> <tbody> <tr> <td data-bbox="507 1155 987 1364">           + Course introduction            + Introduction of Project management            + The project life cycle and organization         </td> <td data-bbox="992 1155 1153 1364">1</td> <td data-bbox="1158 1155 1262 1364">I</td> </tr> <tr> <td data-bbox="507 1370 987 1534">           - Project management processes for a project            + Stakeholders Interaction            + Project Planning &amp; Control         </td> <td data-bbox="992 1370 1153 1534">1</td> <td data-bbox="1158 1370 1262 1534">T, U</td> </tr> <tr> <td data-bbox="507 1541 987 1794">           Project Planning Phase            - Communication            - Stakeholders            - Scope            - Work breakdown structure (WBS)         </td> <td data-bbox="992 1541 1153 1794">1</td> <td data-bbox="1158 1541 1262 1794">T, U</td> </tr> <tr> <td data-bbox="507 1800 987 2042">           - Resource management            + Critical path method – Crashing a project            + Resource allocation problem            + Resource loading            + Resource leveling         </td> <td data-bbox="992 1800 1153 2042">1</td> <td data-bbox="1158 1800 1262 2042">T, U</td> </tr> </tbody> </table>	Topic	Weight	Level	+ Course introduction + Introduction of Project management + The project life cycle and organization	1	I	- Project management processes for a project + Stakeholders Interaction + Project Planning & Control	1	T, U	Project Planning Phase - Communication - Stakeholders - Scope - Work breakdown structure (WBS)	1	T, U	- Resource management + Critical path method – Crashing a project + Resource allocation problem + Resource loading + Resource leveling	1	T, U
Topic	Weight	Level														
+ Course introduction + Introduction of Project management + The project life cycle and organization	1	I														
- Project management processes for a project + Stakeholders Interaction + Project Planning & Control	1	T, U														
Project Planning Phase - Communication - Stakeholders - Scope - Work breakdown structure (WBS)	1	T, U														
- Resource management + Critical path method – Crashing a project + Resource allocation problem + Resource loading + Resource leveling	1	T, U														



	+ Constrained resource scheduling		
	- Schedule management. + Constructing the network: AON & AOA + Gannt chart + Solving the network	1	T, U
	- Project cost management Project budgeting & Cost estimation + Top-Down budgeting + Bottom-Up budgeting + Improving the process of cost estimation	1	T, U
	- Mini project (for a pico satellite development project) - Planning Phase - Review	1	T, U



	- Mini project (for a pico satellite development project) - Planning Phase - Review	1	T, U
	- Risk management. + Risk management planning + Risk identification + Risk analysis + Risk monitoring and control + Using Crystal Ball software	1	T, U
	- Project quality management + Plan quality + Perform quality assurance + Perform quality control	1	T, U
	- Project human resource management + Develop human resource plan + Acquire project team + Develop project team + Manage project team	1	T, U
	- Project procurement management + Plan procurements + Conduct procurements + Administer procurements + Close procurements	1	T, U
	- Project control Phase. + Gather data + Integrate and analyze data + Access & recommendation actions + Implementation and Monitor Impact.	1	T, U
	- Project (for a pico satellite development project) closing - Presentation of term project (part 1)	1	T, U
	- Presentation of term project (part 2) - Review	1	T, U



Examination forms	Project
Study and examination requirements	Attendance: A minimum attendance of 80 percent is compulsory for the class sessions. Students will be assessed on the basis of their class participation. Questions and comments are strongly encouraged. Assignments/Examination: Students must have more than 50/100 points overall to pass this course.
Reading list	<b>Textbooks:</b> [1] <i>A Guide to the project management body of knowledge</i> (PMBOK® Guide). 4th Edition, Newtown Square, Pa.: Project Management Institute, Inc., 2008. [2] Jack R. Meredith ; Samuel J Mantel, <i>Project management: a managerial approach</i> . 7th edition, Hoboken, N.J.: Wiley ; Chichester : John Wiley [distributor], 2018. <b>References:</b> [3] Jason Westland, <i>The project management life cycle</i> . Kogan Page Limited, 2006.