



الجامعة الافتراضية السورية  
SYRIAN VIRTUAL UNIVERSITY

# Information Technology Project Management

Course Definition

**I**nformation

**T**echnology

**E**ngineering



Powered by:



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## 1. Basic Information:

<b>Course Name</b>	IT Project Management
<b>Course Code</b>	GPM601
<b>Number of Presentational Sessions*</b>	24
<b>Number of Synchronous Sessions**</b>	12
<b>Number of Shorter Tests***</b>	2
<b>Number of Exams***</b>	1
<b>Theoretical Sessions Work Load (hrs.)</b>	72
<b>Practical Sessions Work Load (hrs.)</b>	36
<b>Credit Hours</b>	6

\*Each presentational session comprises both recorded lecture (1.5 hrs.) and interactive learning content (1.5 hrs.).

\*\*Each synchronous session comprises the interactive lecture carried out in real time in a virtual class (1.5 hrs.).

\*\*\*Each shorter test is 0.5 hr. long. The final exam is 2 hrs. long.

**N.B.**

Generally, each chapter requires two presentational sessions: one for the recorded content and one for the interactive content (unless the chapter is too long, in which case it may require more sessions (. This note applies to synchronous sessions as well, where each chapter requires one synchronous session generally.

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## 2. Prerequisites courses:

Course	Code
Software Engineering (1)	BSE601

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### 3. Course Objectives:

This course deals with the analysis and design phases of system building and operation.

The analysis phase addresses the definition of the life cycle concept of data systems development and development events by identifying requirements, including the different types of methodologies used in development, whether procedural or object-oriented and supportive schemes, including the necessary techniques and tools.

This phase also includes the architecture of use cases, modelling of procedures, their flow schemes and data models .

The design phase includes training in appropriate decision-making for the construction and operation of the system, including the preparation of relevant specifications and determinants, the design of the physical entity and the necessary programmes.

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#### 4. Learning Outcomes (LO):

By the end of this course, the learner is expected to acquire and learn the following subjects:

- Articulate the growing need for better project management, especially for information technology (IT) projects.
  - Explain what a project is, provide examples of IT projects, list various attributes of projects, and describe constraints of project management.
  - Define project management and discuss key elements of the project management framework, including project stakeholders, the project management knowledge areas, common tools and techniques, and project success.
- Discuss the relationship between project, program, and portfolio management and the contributions each makes to enterprise success.
  - Summarize the role of project managers by describing what they do, what skills they need, the talent triangle, and career opportunities for IT project managers.
  - Recall key aspects of the project management profession, including important components of its history, the role of professional organizations like the Project Management Institute (PMI), the importance of certification and ethics, and the advancement of project management software
- Define the systems view of project management and how it applies to information technology (IT) projects.

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- Summarize organizations, including the four frames, organizational structures, and organizational culture.
- Explain why stakeholder management and top management commitment are critical for a project's success.
- Distinguish between project and product life cycles.
  - Discuss the unique attributes and diverse nature of IT projects.
  - Summarize recent trends affecting IT project management, including globalization, outsourcing, virtual teams, and agile project management.
- Describe the five project management process groups, the typical level of activity for each, and the interactions among them.
  - Relate the project management process groups to the project management knowledge areas.
  - Discuss how organizations develop information technology (IT) project management methodologies to meet their needs.
- Describe an overall framework for project integration management as it relates to the other project management knowledge areas and the project life cycle.
  - Discuss the strategic planning process and apply different project selection methods.
  - Explain the importance of creating a project charter to formally initiate projects.
- Describe project management plan development, understand the content of these plans, and describe approaches for creating them.

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- Explain project execution, its relationship to project planning, the factors related to successful results, and tools and techniques to assist in directing and managing project work.
- Apply the principles of knowledge management to the various aspects of project integration.
- Describe the process of monitoring and controlling a project.
- Define the integrated change control process, relate this to the steps for planning for and managing changes on information technology (IT) projects, and create an appropriate change control system for a project that incorporates both.
- Explain the importance of developing and following good procedures for closing projects.
- Describe the process of planning scope management.
  - Discuss methods for collecting and documenting requirements to meet stakeholder needs and expectations.
  - Explain the scope definition process and describe the contents of a project scope statement, and discuss the process for creating a work breakdown structure.
  - Explain the importance of validating scope and how it relates to defining and controlling scope.
- Illustrate the importance that project schedules and good project schedule management can have in helping to make projects successful.
  - Discuss the process of planning schedule management.
  - Define activities as the basis for developing project schedules.
  - Explain how different tools and techniques help project managers estimate activity durations.

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- Explain the importance of project schedules and their good management in helping to make projects a success.
  - Discuss the process of planning schedule management.
  - Describe how project managers use network diagrams and dependencies to assist in activity sequencing.
  - Use a Gantt chart for planning and tracking schedule information, find the critical path for a project.
- Develop a justification for project cost management and its importance in achieving project success.
  - Explain basic project cost management principles, concepts, and terms.
  - Describe the process of planning cost management.
  - Discuss different types of cost estimates and methods for preparing them.
- Describe the processes of determining a budget and preparing a cost estimate.
  - Justify the use of earned value management and project portfolio management to assist in cost control.



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## 5. Assessment Results:

Chapter Number	Chapter Title	General Objectives	Assessment Type				
			Interactive Content & Recorded Sessions	Applied Activities (Synch. Sessions)	Final Exam*/ Shorter Tests	Presentations and Interviews	Reports
CH1	Introduction to Project Management – Part I	Comprehension –Analytical Thinking – Tools and Application Hands– On	√	√	√	√	√
CH2	Introduction to Project Management – Part II	Comprehension –Analytical Thinking – Tools and Application Hands– On	√	√	√	√	√
CH3	The project management and information technology context – Part I	Comprehension –Analytical Thinking – Tools and Application Hands– On	√	√	√	√	√

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<b>CH4</b>	The project management and information technology context – Part II	Comprehension –Analytical Thinking – Tools and Application Hands– On	√	√	√	√	√
<b>CH5</b>	The project management process groups	Comprehension –Analytical Thinking – Tools and Application Hands– On	√	√	√	√	√
<b>CH6</b>	Project Integration Management – Part I	Comprehension –Analytical Thinking – Tools and Application Hands– On	√	√	√	√	√
<b>CH7</b>	Project Integration Management – Part II	Comprehension –Analytical Thinking – Tools and Application Hands– On	√	√	√	√	√

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<b>CH8</b>	Project Scope Management	Comprehension –Analytical Thinking – Tools and Application Hands– On	√	√	√	√	√
<b>CH9</b>	Project Schedule Management – Part I	Comprehension –Analytical Thinking – Tools and Application Hands– On	√	√	√	√	√
<b>CH10</b>	Project Schedule Management – Part II	Comprehension –Analytical Thinking – Tools and Application Hands– On	√	√	√	√	√
<b>CH11</b>	Project Cost Management – Part I	Comprehension –Analytical Thinking – Tools and Application Hands– On	√	√	√	√	√

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CH12	Project Cost Management – Part II	Comprehension					
		–Analytical Thinking – Tools and Application Hands– On	√	√	√	√	√

**\*The final exam is two hours long and is given at the end of the course.**

**\*\*Shorter tests are about 30 minutes long and are given after three or four lectures throughout the semester during synchronous sessions.**

**\*\*\*Presentations, interviews, and reports are submitted once after each three or four lectures throughout the semester during synchronous sessions.**

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## 6. Course Syllabus:

Chapter	Subject	Content	Number of Learning Objects	Number of synchronous Learning Objects
CH1	Introduction to Project Management – Part I	<ol style="list-style-type: none"> <li>1. Introduction.</li> <li>2. What is the project?</li> <li>3. What is project management?</li> </ol>	3	1
CH2	Introduction to Project Management – Part II	<ol style="list-style-type: none"> <li>1. Program and portfolio management.</li> <li>2. The role of the project manager.</li> <li>3. Project management profession</li> </ol>	3	1
CH3	The project management and information technology context – Part I	<ol style="list-style-type: none"> <li>1. Introduction.</li> <li>2. Systemic view of project management.</li> <li>3. Understanding organizations.</li> <li>4. Focus on stakeholder needs.</li> </ol>	4	2
CH4	The project management and information	<ol style="list-style-type: none"> <li>1. Project and product life cycles.</li> <li>2. The context of IT</li> </ol>	3	1

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	technology context – Part II	<p>projects.</p> <p>3. Recent trends affecting IT project management.</p>		
CH5	The project management process groups	<p>1. Introduction.</p> <p>2. Project management process groups.</p> <p>3. Mapping process groups with knowledge areas.</p> <p>4. Develop IT project management methodology.</p>	4	2
CH6	Project Integration Management – Part I	<p>1. Describe the overall project integration management framework as it relates to other knowledge areas of project management and the project lifecycle.</p> <p>2. Discussing the strategic planning process and applying different methods for selecting projects.</p>	3	1

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		<ol style="list-style-type: none"> <li>3. Clarify the importance of creating a project charter for its official start.</li> </ol>		
CH7	Project Integration Management – Part II	<ol style="list-style-type: none"> <li>1. Develop a project management plan</li> <li>2. Directing and managing project work</li> <li>3. Project knowledge management</li> <li>4. Monitor and control project work</li> <li>5. Integrated change control process</li> <li>6. Closing projects or phases</li> </ol>	6	3
CH8	Project Scope Management	<ol style="list-style-type: none"> <li>1. What is project scope management.</li> <li>2. Scope management planning.</li> <li>3. Collect requirements.</li> <li>4. Determine scope.</li> <li>5. Create a WBS.</li> <li>6. Validate scope.</li> <li>7. Control scope.</li> </ol>	7	3

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CH9	Project Schedule Management – Part I	<ol style="list-style-type: none"> <li>1. Importance of project schedules.</li> <li>2. Schedule management planning.</li> <li>3. Define activities.</li> <li>4. Sequence activities.</li> <li>5. Estimate activity duration.</li> </ol>	5	2
CH10	Project Schedule Management – Part II	<ol style="list-style-type: none"> <li>1. Develop schedule.</li> <li>2. Critical path method.</li> <li>3. Control schedule.</li> </ol>	3	1
CH11	Project Cost Management – Part I	<ol style="list-style-type: none"> <li>1. Importance of project cost management.</li> <li>2. Basic principles of cost management.</li> <li>3. Cost management planning.</li> <li>4. Cost estimation.</li> </ol>	4	2
CH12	Project Cost Management – Part II	<ol style="list-style-type: none"> <li>1. Determine budget.</li> <li>2. Control cost.</li> </ol>	2	1



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## 7. Practical Activity:

- **Tools and Labs:**

Tool Name	Description
Microsoft Project	Program to assist in project planning and management

- **Practical Activities per Chapters:**

Chapter	Activities Type	Remarks
CH1	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Homework <input type="checkbox"/> Webinars <input checked="" type="checkbox"/> Project <input type="checkbox"/> Experiment <input type="checkbox"/> Other	
CH2	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Homework <input type="checkbox"/> Webinars <input type="checkbox"/> Project <input checked="" type="checkbox"/> Experiment <input type="checkbox"/> Other	
CH3	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Homework <input checked="" type="checkbox"/> Webinars	

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	<input type="checkbox"/> Project <input type="checkbox"/> Experiment <input type="checkbox"/> Other	
<b>CH4</b>	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Homework <input type="checkbox"/> Webinars <input checked="" type="checkbox"/> Project <input type="checkbox"/> Experiment <input type="checkbox"/> Other	
<b>CH5</b>	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Homework <input checked="" type="checkbox"/> Webinars <input type="checkbox"/> Project <input type="checkbox"/> Experiment <input type="checkbox"/> Other	
<b>CH6</b>	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Homework <input type="checkbox"/> Webinars <input type="checkbox"/> Project <input type="checkbox"/> Experiment <input type="checkbox"/> Other	
<b>CH7</b>	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Homework <input checked="" type="checkbox"/> Webinars <input type="checkbox"/> Project <input type="checkbox"/> Experiment	

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	<input type="checkbox"/> Other	
<b>CH8</b>	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Homework <input type="checkbox"/> Webinars <input type="checkbox"/> Project <input checked="" type="checkbox"/> Experiment <input type="checkbox"/> Other	
<b>CH9</b>	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Homework <input type="checkbox"/> Webinars <input type="checkbox"/> Project <input checked="" type="checkbox"/> Experiment <input type="checkbox"/> Other	
<b>CH10</b>	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Homework <input type="checkbox"/> Webinars <input type="checkbox"/> Project <input checked="" type="checkbox"/> Experiment <input type="checkbox"/> Other	
<b>CH11</b>	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Homework <input checked="" type="checkbox"/> Webinars <input type="checkbox"/> Project <input checked="" type="checkbox"/> Experiment <input type="checkbox"/> Other	

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<b>CH12</b>	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Homework <input checked="" type="checkbox"/> Webinars <input type="checkbox"/> Project <input checked="" type="checkbox"/> Experiment <input type="checkbox"/> Other	
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