

**Faculty of Computers and Information Technology**

**Software Project Management**

**Information :**

**Course Code :** CS453

**Level :** Undergraduate

**Course Hours :** 3.00- Hours

**Department :** Department of Information Systems

**Area Of Study :**

Understand knowledge that enhances the various techniques for planning and managing a technology project.  
Use and adopt various techniques for managing a software development team  
Comprehend deeply the basic methodologies for software design, development, testing and implementation.  
Learn project planning techniques and analytical skills through the use of Microsoft Project Management.  
Develop and evaluate different tools for managing users and user expectations.

**Description :**

This course is an introduction to the basic principles of managing a software development or maintenance project. To help understand the steps involved in establishing and managing a software project, we will walk through creating key elements of a project plan. Project planning, scheduling, and control. Project cost management. Resource constrained projects. Monitoring and controlling the software project throughout its life cycle will be presented. A case study approach is adopted during the course. Commercial software packages will be used throughout the course

**Course outcomes :**

**a.Knowledge and Understanding: :**

|     |   |
|-----|---|
| 1 - | Discuss different approaches, methodologies, practices and tools used for software project management           |
| 2 - | Identify the ethical and professional issues of software project management                                     |
| 3 - | Explain the principles and techniques of software project management and project management using real examples |

**b.Intellectual Skills: :**

|     |   |
|-----|---|
| 1 - | Analyze the limitations and constrains for software project management  |
| 2 - | Select and justify the appropriate model in developing software project management for a given problem domain |
| 3 - | Classify the goals, needs, and requirements of new software project management                                |

**c.Professional and Practical Skills: :**

|     |   |
|-----|---|
| 1 - | Deploy effective tools to analyze completely a new expert system  |
| 2 - | Apply effective information to construct a complete requirements document for an inference engine                           |
| 3 - | Write a technical report of the logic system design – knowledge representation document according to professional standards |
| 4 - | Use DMT facilities effectively for software project management  |

**d.General and Transferable Skills: :**

|     |   |
|-----|---|
| 1 - | Work on a team for the development of a requirements document |
|-----|---|

- 2 - . Apply communications skills in presentation and report writing of knowledge representation

**ABET Course outcomes :**

|     |   |
|-----|---|
| 1 - | Understand and use the various techniques for planning and managing a software project.         |
| 2 - | Comprehend the basic methodologies for software design, development, testing and implementation |
| 3 - | Use project planning techniques and analytical skills using a project management software tool. |
| 4 - | Evaluate different tools for managing users and user expectations.                              |
| 5 - | Understand ethical and professional issues of software project management.                      |
| 6 - | Analyze the limitations and constrains for software project management.                         |

**Course Topic And Contents :**

| Topic   | No. of hours | Lecture | Tutorial / Practical |
|---|--------------|---------|----------------------|
| Linear SDPM StrategyT                                 | 4            | 2       | 2                    |
| Linear SDPM Strategy – Continue                       | 4            | 2       | 2                    |
| The Linear SDPM Scoping Phase                         | 4            | 2       | 2                    |
| The Linear SDPM Planning Phase                        | 4            | 2       | 2                    |
| The Linear SDPM Launching Phase                       | 4            | 2       | 2                    |
| The Linear SDPM Monitoring and Controlling Phase      | 4            | 2       | 2                    |
| The Linear SDPM Closing Phase                         | 4            | 2       | 2                    |
| The Linear SDPM Strategy Summary                      | 4            | 2       | 2                    |
| Midterm Exam  | 2            |         |                      |
| Incremental SDPM Strategy                             | 4            | 2       | 2                    |
| The Incremental SDPM Scoping Phase                    | 4            | 2       | 2                    |
| The Incremental SDPM Monitoring and Controlling Phase | 4            | 2       | 2                    |
| Presentations   | 4            | 2       | 2                    |
| Final Exam  | 2            |         |                      |

**Teaching And Learning Methodologies :**

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|--|
| Interactive Lectures including Discussions                                 |
| Practical Lab Sessions   |
| Self-Study (Project / Reading Materials / Online Material / Presentations) |
| Case Studies   |

**Course Assessment :**

| Methods of assessment | Relative weight % | Week No | Assess What |
|-----------------------|-------------------|---------|-------------|
| Assignments           | 5.00              | 4       |             |
| Final Exam            | 40.00             | 14      |             |
| Midterm Exam (s)      | 20.00             | 9       |             |

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|                         |       |    |  |
|-------------------------|-------|----|--|
| Others (Participations) | 5.00  |    |  |
| Presentations           | 5.00  | 12 |  |
| Quizzes                 | 10.00 | 5  |  |
| Team Work Projects      | 15.00 | 12 |  |

**Course Notes :**

An Electronic form of the Course Notes and all the slides of the Lectures is available on the Students Learning Management System (Moodle)

**Web Sites :**

[www.ekb.eg](http://www.ekb.eg)