



BENHA UNIVERSITY



FACULTY OF ENGINEERING AT SHOUBRA

COURSE SPECIFICATIONS (2014-2015)

Model No.12

Course Specifications: Computers in planning analysis and control

University: Benha University

Faculty: Faculty of Engineering at Shoubra

Department offering the program: Mechanical Engineering Department

Department offering the course: Mechanical Engineering Department

1- Course Data

Course Code: MDP445

Course Title: Computers in planning analysis and control

Specialization: Mechanical Production Engineering

Course Type: Elective

Study Year: Fourth Year

Teaching Hours: Lecture: 3 Tutorial: 2

Practical: 0

Total: 5

2- Course Aim

For students undertaking this course, the aims are to:

- 1- Understand the concepts and basics of computer applications in planning, analysis, and control.
- 2- Provide the student with the steps of project management

3- Intended Learning Outcomes of Course (ILO's)

a. Knowledge and Understanding Skills: On completing this course, students will acquiring and understanding of :

- a.1) Approaches for solving planning problems. (A.5)
- a.2) Recent engineering technologies and computer programs such as primavera as related to Analysis and control. (A.8)
- a.3) Project management and business techniques and practices appropriate to manage the company or the factory (A.20)

b. Intellectual Skills: At the end of this course, the students will be able to:

- b.1) Select appropriate mathematical and computer-based methods for modeling and analyzing problems using primavera program.(B.1)
- b.2) Select and appraise appropriate ICT tools to a variety of engineering problems.(B.8)
- b.3)List interpret numerical data and apply analytical methods for the case studies of planning and control (B.16)

c. Practical and Professional Skills: On completing this course, the students are expected to be able to:

- c.1) Use computational facilities and techniques, measuring instruments, workshops and laboratories equipment to collect, analyze, and interpret results. (C.5)
- c.2) Apply numerical modeling methods to Planning and analysis problems.(C.7)
- c.3) Prepare the process plan for manufacturing.(C.19)

d. General and Transferable Skills: At the end of this course, the students will be able to:

- d.1) Collaborate effectively within multidisciplinary team. (D.1)
- d.2) Demonstrate efficient IT capabilities.(D.4)
- d.3) Effectively manage tasks, time, and resources.(D.6)



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4- Course Contents

Week no.	Topics
1	Project Management
2	Computer Application in Planning & Analysis
3	Computer Application in Planning & Analysis
4	Primavera 5.0 Overview
5	Primavera 5.0 Overview
6	Primavera Modules & Main Screens
7	Primavera Modules & Main Screens
9	Data Files
10	Data Files
11	Output Layouts & Reports
12	Output Layouts & Reports
13	Case Studies
14	Case Studies

5- Teaching and Learning Methods

- 5.1 Lectures
- 5.2 Class activity
- 5.3 Case study
- 5.4 Assignments/ Homework

6- Teaching and Learning Methods of Disables

3-Nothing.

7- Student Assessment

a- Student Assessment Methods

- 1. Six assignments to assess knowledge and intellectual skills.
- 2. Two quizzes to assess knowledge, intellectual and professional skills.
- 3. Midterm exam to assess knowledge, intellectual, professional and general skills.
- 4. Final exam to assess knowledge, intellectual, professional and general skills.

b- Assessment Schedule

NO.	Assessment	Week
1	Assignments	2, 4, 5, 7, 11, 12
2	Quiz	4, 10
3	Midterm exam	8
4	Final exam	15

c- Weighting of Assessments

Assessment	Weight (%)
Midterm Examination	20
Final Term Examination	64
Oral Examination	00
Semester Work	16
Other Types of Assessment	00
Total	100



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8- List of References

a- Course Notes: Course notes prepared by instructor.

b- Recommended Books

- Primavera 5.0 Manual, 2005
- B. Kumar, "Industrial Engineering & Management", Khana Pub.2004

Course Coordinator: Dr. Bilal Abdel Karim Salem

Head of Department: Prof. Dr. Osama Ezzat Abdelatif



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FACULTY OF ENGINEERING AT SHOUBRA

COURSE SPECIFICATIONS (2014-2015)

Model No.11A

Course Specifications: Computers in planning analysis and control

University: Benha University

Faculty: Faculty of Engineering at Shoubra

Department offering the program: Mechanical Engineering Department

Department offering the course: Mechanical Engineering Department

Matrix of Knowledge and Skills of the Course

No.	Topics	week	Basic Knowledge	Intellectual Skills	Professional Skills	General Skills
1	Project Management	1	a.1			d.1
2	Computer Application in Planning & Analysis	2	a.2	b.1	c.3	d.3
3	Computer Application in Planning & Analysis	3	a.1		c.1	
4	Primavera 5.0 Overview	4	a.3,a.2	b.1		d.1
5	Primavera 5.0 Overview	5	a.3,a.2		c.2	
6	Primavera Modules & Main Screens	6	a.1	b.2		d.2
7	Primavera Modules & Main Screens	7	a.2		c.1	d.2
8	Mid-term exam	8	a.1	b.2	c.1	d.2
9	Data Files	9		b.1		d.3
10	Data Files	10		b.1		d.1
11	Output Layouts & Reports	11	a.3	b.3	c.1	d.2
12	Output Layouts & Reports	12	a.2	b.3		d.3
13	Case Studies	13	a.1	b.2	c.3	d.1
14	Case Studies	14		b.3	c.2 , c.3	d.2
15	Final exam	15	a.1, a.2	b.2 , b.3	c.2 , c.3	d.3

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COURSE SPECIFICATIONS (2014-2015)

Matrix of course aims and ILO's

Course Title: Computers in planning analysis and control **Code:** MDP445

Lecture: 3 **Tutorial/Practical:** 2 **Total:** 5

Program on which the course is given: B.Sc. Mechanical Production Engineering

Major or minor element of program: Minor.

Department offering the program: Mechanical Engineering Department

Department offering the course: Mechanical Engineering Department

Academic year / level: **Fourth Year / Second semester**

Date of specifications approval: 2014

Course aims	Basic Knowledge	Intellectual Skills	professional Skills	General Skills
Understand the concepts and basics of computer applications in planning, analysis, and control.	a1,a2	b1,b2	c1, c2, c3	d1,d.2
Provide the student with the steps of project management.	a1,a2, a3	b2 b3	c1, c2, c3	d3,d.2

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