Subject: Computer Applications (2)
Class : Third Year
Hours : (1hour) Theoretical , (2hours) Practical

Objectives :

The students at the end of the year will be able to :

1. **complete all steps of creating the project plan**
2. **setting the Primavera program and creating new projects**
3. **defining the calendar system, Creating activity codes, adding and organizing activities, adding logic to activities, Creating and supporting resources, Evaluating the projects with resources and printing the records**
4. **use the engineering software programs related to its rules and theories has been taught to student previously.**

Week	Syllabus
1	Introduction to: PROJECT MANAGEMENT WORKSHOP, Project Definition, project Management, Project stages, planning, activity list, Dependency list, logic network analysis, scheduling and critical path calculation,
2&3	Instilling Primavera Software, open a previous project, adding a new project, Describing the program screen, Adding activities to a project, Logic relationship, activity codes, Creation and Deleting Codes dictionaries, Creating and Deleting Activity and Default Activity code
4	DEFINING CALENDARS: Daily Calendar, Daily Base Calendar, adding colander to activities,
5	Activity Types
6	Adding the Logic: Adding Relationship to the activities, Auto Link, Deleting Relationship, PERT View, Formatting your PERT View
7	Constraints: Date Constraints, Float Constraints
8	Scheduling the Project
9&10	Formatting The Display : Toolbars, Columns, Formatting the Bars in the Bar Chart, Format Individual Bars, Format Sight Lines, Format Row Height, Format Fonts, Format Dates, Changing Language for Column Description And Timescale, Screen separator , Thousand Separator
11	Filters & Layouts: understanding filters, Creating &

	Editing Filters , Understanding All & Any, Understanding Rolling Dates, Filter Levels, Modifying Filters, Replaying Filters
12	**Layouts**
13&14	**Work breakdown Structure WBS:**
15	**Creating & Using Resources : Resources definition, Creating Resource, Assigning Resources to Activities, Resources dialog block, Costs dialog block, Assign Resources Against Multiple Activities, Summary Percent Calculation, Editing Resources Calendar, Editing a Resource Calendar, Resource Histogram, Resources Table, Printing tables and Layouts**
16	**Introduction to ConcAD v.1.52.**
17	**Review theories and formulas using in analysis and design of beams and columns.**
18	**Explain of the program interface and use the program to analysis and design of beams, columns and footings.**
19	**Explain of icons and description of input data.**
20	**Discussion of the program results based on input data.**
21&22	**Examples and assignments with discuss the procedure of analysis and design different types of beams.**
23&24	**Examples and assignments with discuss the procedure of analysis and design of columns.**
25&26	**Examples and assignments with discuss the procedure of analysis and design of various types of footings.**
27&28	**Examples and assignments with discuss the procedure of analysis and design of torsion and shear reinforcements, development length of bars of a beam.**
29&30	**Examples and assignments with discuss the procedure of analysis and design of one way slabs.**

References :

1- تخطيط المشاريع باستخدام البرنامج بريمافيرا ، ترجمة الدكتور المهدس ابراهيم الحكيم ، شعاع للنشر والعلوم ، سورية – حلب 2002

2- Project Planning & Scheduling Using Primavera® P6, By Paul Eastwood Harris, http://www.damasgate.com/vb/t144508/

3- ا دارة المشروعات باستخدام برنامج (بريمافيرا انتربرايز Primavera Enterprise) المهندس خالد عبد العال 3- http://www.damasgate.com/vb/t144508/

4- James, K. Nelson, JR. 1998. User Manual, Version 1.52, Addison Wesley Longman, USA.

5- Nilson, Arthur H. et al. 2004, Design of Concrete Structures, 14th edition, Chapter I9, McGraw-Hill Companies Inc., New york.