

Chapter 1

Introduction

The last century has witnessed a starting of a period of revolution and improvement in all the life aspects, and with the increasing demand of the people in the cities, it was very essential to cope up with this improvement in all of the fields, in such a way that suits and controls the environment.

Every one of us knows the importance of the administration building for Hebron University, the building society for culture, especially here in Palestine under occupation. So, it was necessary to think about the administration building that includes many of the functions that support science in the city, and that contribute to the development of the education aspect in Palestine.

1.1 General Identification

The idea of this project summarized in the structural design of the building which has a total area of 11200 square meter, this building will be built in the campus of the Hebron University in the north of Hebron city.

1.2 Reasons of Choosing Project

The project represent an important part in the field of developing the education process specially in the process of separate the management building from the college buildings. Because there is no buildings has this feature in the Hebron University.

Structural design is the most important design of the building after the necessary of architectural design, the distribution of columns, loads, offer durability, the best prices and the highest degree of safety are the responsibility of the structural designer.

1.3 The Project Objectives

The objectives of this project are divided into architectural and structural objectives.

1.3.1 Architectural Objectives

The main architectural aim is to create a design that is unique in views, representative and break the lack of architectural that Palestine suffers. So, the administration building is designed upon the latest architectural views.

1.3.2 Structural Objectives

The structural objectives of this project are:

- Increasing the ability to choose a structural system that suits the objectives of the building.
- To correlate what we have taken in the design courses with the practical thinking.
- To get a new skills and experiences while facing problems and obstacles rising while working in the project, which has not mentioned in the theoretical studying.

1.4 The Problem of Project

The problem of the project is to find the most appropriate structural system that satisfies the strength and serviceability requirements, and to design and analyze the structural components

that consiststhe project which is the administration building, so we will analyses and design these components like slabs, beams, columns, foundation, etc. After determining the loads on each of the structural member so we can select the required dimensions and reinforcement, after that all of the design outputs will be presented in the structural drawing that used to transfer the project from being a drawing to the practicalfield.

1.5 The Postulate of the Project

Our study aims to prepare the required structural drawings of the various structural members existing in the building in such away that takes the architectural design as the main outlet. The design will be based on the requirements of the American Code (ACI-318-14), and the Jordanian Code of Loads.

1.6 Chapters of Project

Chapter One: General introduction of the project.

Chapter Two: The architectural description of the project.

Chapter Three: The structural studying of the project including: the structural members, the loads, and the function description.

Chapter Four: The structural analysis and the design of some structural members like: beams, and slabs.

Chapter Five: Results and recommendations.

1.7 The Time Table of the Project Stages

The Table below shows the time line table of the project stages.

Table 1.1: The Time Line Table of the Project Stages

task \ Week No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Select project	█	█	█	█	█	█										
Inception report																
Collect information about the project																
Architectural study of the building						█	█	█	█							
Structural study of the building						█	█	█	█							
Prepare the introduction										█						
Display the introduction											█					
Structural analysis											█	█				
Structural design												█	█			
Prepare the project plans														█	█	
Write the project										█	█	█	█	█	█	
Project presentation																█