



**Assessment of Some Isra University Buildings Using
Leadership in Energy and Environmental Design (LEED) Standard**

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A Thesis

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AUTHORIZATION FORM

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DETECTION

هاهنا تنتهي مسيرتنا الدراسية الشكر لله تعالى اولاً ...

عندما وقفت على بداية المشوار الذي كان طويلاً حينها ، لم يستطيع بصري على رؤية مداه ، فقد كان لا يتجاوز خطواتي والان وقد أوشكت على الانتهاء ... أشعر بالفخر لما قد أنجزته في سنواتي الدراسية رغم الظروف والبعد وقسوه الغربيه و بلادي " اليمن السعيد " الذي لم يعد يوماً سعيداً ...

وأيقنت أنني مهما واجهت من صعاب بأني قادرة على النهوض والتطلع لتمييز دون سواها ، و اتمنى اني في بحث رسالتي كنت خير من يمثل بلادي في غربتي ...

إلى مثلي الاعلى : " أبي " الذي لم يبخل علي يوماً بشيء

رافعة رأسي عالياً ... واقتخر بك يا أبي

إلى جنه الله في الارض : " أمي " التي كان دعائها كل ليلة سر نجاحي

وما أوسع صدرها عندما تغلق في وجهي الدروب

لا يعلو فضل على فضلكم اقبل تراب اقدامكم واليكم اهدي تخرجي ...

إلى " اخواني وإخواني "

لقد كنتن سندي وقوتي وملاذي بعد الله منذ أن حملنا حقائق المدرسة حتى الان ... أدامكم الله لي مهما حييت ...

إلى " أصدقائي "

الذين معهم سعدت وبرفقتهم سرت دروب الحياة الحلوة والمرة . لقد كنتم معي على طريق النجاح والخير

وعلمتموني أن لا أضيعكم

إلى " معماريات "

شريكات (ورفيات دربي) في مكتبنا اعمار معماريات هن سندي بعد اهلي... ومعان احلامنا وابداعنا لا حدود

لها ...

إلى " طلابي "

بالامس كنتم طلابي واليوم انتم زملائي افتخر بكل ابداعكم على الواقع شكرا لانكم الدعم الكبير لي بعباراتكم

الجميله ...

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" لهم مني كل الشكر والامتنان "

Eman Naji

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Supervisor:

Associate Prof. Dr. Ibrahim A. Mohammed

ABSTRACT

The study aims at evaluating some buildings at the Isra University according to LEED standards.

Further , proposing the development the selected buildings for the purpose upgrading the standards according to LEED which includes (location transportation , site sustainability , water sufficiency , energy and atmosphere , quality of internal environment and innovation) Three building where selected for the study: the faculty of Engineering , Arts , and pharmacy.

The buildings were evaluated based on field survey, personal interviews blueprints designs and the examining of documents.

The researcher found that when evaluating using the LEED rating system , the faculty of Engineering obtained an acceptable grade of (45.5) points out of 110 , faculty of arts (51.5) , and pharmacy (45) points ,the implementation of all mandatory conditions .

The researcher recommends on current status: (1) documenting executive plans and information related to specialization. (2) Water, electricity, and energy of each building should be separated.

The researcher after suggestion of strategic measures to raise the efficiency of those buildings , concluded that the assessment of the faculty of Engineering rose to the golden level with (79) points , Arts the platinum level with (82.5) points ; and Pharmacy the golden level with (76.5) points , after LEED standards were implemented , which can be achieved with in the university resources .

The researcher and study recommends :

- 1) The study should be taken into consideration to raise the environmental efficiency level of the university buildings to become the first university in Jordan to apply American LEED rating system.
- 2) Disseminate awareness among employees and students highlighting the significance of sustainability and team work in achieving an architectural project.

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LIST OF ABBREVIATIONS

USGBC	United State Green Building Council
LEED	Leadership Energy Environmental Design
LEED-AP	Leadership of Energy and Environmental Design-Accredited Professional
BREEAM	Building Research Establishment Environmental Assessment Method
CASBEE	Comprehensive Assessment System for Built Environment Efficiency
M&V	Measurement and Verification
BD+C	Building Design + Construction
O+M	Operations + Maintenance
ID+C	Design + Construction
ND	Neighborhood Development