

Design of an innovative engineering project in NEOM starting from Diriyah

Evaluating the participation of students for the design of an innovative engineering project in the city of NEOM starting from Diriyah, according to the following criteria:

Criteria	Maximum Score
Project Idea	20
Design and implementation	40
Use of programming in project design	15
Final Presentation (2 minute video)	25
Final maximum score	100

Criterion (1): Project Idea

Evaluation guides	Specifications
* Fill out the participation form	5
*Project implemented by Minecraft	5
	5
	5

* Identifies the problem facing the environment or innovation in the city of NEOM, formulates it correctly, shows the extent to which the problem or innovation affects society, and develops proposed solutions and alternatives to the problem.
 * Provides evidence (from sites and sources related to the problem) on the extent to which the problem affects the beneficiaries of the project.
 * Explains the solutions and alternatives offered by the innovative engineering design, and identifies the obstacles that may face the proposed solutions or alternatives.
 * It clarifies in the registration form the advantages of the project in the following: The Kingdom's Vision 2030, and explains how the project will achieve sustainable development and be environmentally friendly.

Criterion (2): Design and Implementation

Evaluation guides	Specifications
Project implemented by Minecraft	5
	10
	10
	10
	5

*Designs an engineering project to solve a problem or innovate in the virtual world dedicated to the city of NEOM
 *Interact with the user through the use of instructions and characters
 *Designs characters compatible with the environment and Saudi society
 *Designs the virtual world (backgrounds and places) compatible with the city of NEOM
 *The design takes into account the rules of safety, security, service for the elderly and special needs

Criterion (3): The use of programming in project design

Evaluation guides	Specifications
Errors phrase does not appear ERROR	10
	3
	2

*Employment of programming in a way that serves the idea and objectives of the project
 *Run the code correctly
 *Innovation in employing programming in the project

Criterion (4): Final Presentation (2-minute video)

Evaluation guides	Specifications
The Video	5
	5
	10
	5

*A marketing presentation of the project's design, indicating the challenge it is working on or the innovation it seeks to achieve and the services provided by the project to the city of NEOM
 *Indicates the extent of interaction (characters / users.)
 *Presents the presentation in a convincing and effective manner, with a review of the application of criteria (such as the idea, design, implementation and employment of programming in the project), with a logical sequence of ideas, clarity in the sound and image used, and the use of appropriate sound and visual effects.
 *The video comes out distinct so that it includes the title of the project and the conclusion is brief, and takes into account the timing of the presentation of the content