



## Cover page

Project title: .....Granomatic..... Academic Year: .....2025.....

Group Members: ...Masa Nabeel Mohammed Yaseen.... Department Name: Computer Engineering

...Hala Jalal Al-Din Hilal Atout.....

.....

.....

Project Type: Hardware

Supervisor Name: ..... Dr. Luai Malhis..... **Format:**

- Single space, Times New Roman.
- 12 pt,
- Maximum 1 page.

### Abstract Body:

#### Items must be provided in the Abstract:

- Why do you think this project is important? Please explain the significance of this Project in brief.
- In your point of view what are the important aspects that should be covered in the project?
- Objective(s): In your view, please explain the main objectives of the project.
- Methodology: Give a brief outline of the application development process.
- Had this project been done before? Are there any similar applications available today?
- 
- Note:** Please deliver this abstract early to ensure that your Project has been approved by the department's projects committee. **Registration will not be done without this approval.**



## Project's Abstract:

This project aims to develop a fully automated production line for granola, addressing the increasing demand for healthy and convenient food options. As more consumers shift towards nutritious diets, granola has become a popular choice due to its versatility and health benefits. This system ensures efficient production of high-quality granola that can be consumed as a standalone snack or added to various meals.

The production process is carefully designed to maintain consistency, taste, and quality at every stage:

1. **Ingredient Selection:** Customers can personalize their granola by selecting from a variety of ingredients, including grains, nuts, seeds, and natural sweeteners, allowing for tailored flavors and nutritional benefits.
2. **Mixing and Roasting:** The chosen ingredients are automatically transferred into a mixing chamber, where they are thoroughly blended and roasted at an optimal temperature to enhance texture, aroma, and flavor. The roasting process ensures a crunchy, golden-brown finish while preserving the natural goodness of the ingredients.
3. **Packaging:** Once the granola is roasted, it is packed into containers designed to maintain freshness and product quality.

By fully automating the production process, this system guarantees efficiency, hygiene, and precision while catering to the growing consumer preference for healthy and on-the-go snack options.

