



Princess Sumaya University for Technology



The AgriBot project successfully demonstrates the integration of embedded systems, robotics, and smart agriculture in a single multifunctional platform. Using a PIC16F877A microcontroller, various sensors, motors, and wireless communication modules, AgriBot efficiently performs essential lawn care tasks including grass cutting and irrigation. The robot responds to real-time environmental inputs—such as soil moisture levels and rainfall—ensuring resource-efficient operation and promoting sustainability.