

Test and Experiment	
Course Code: CPE 103	Program: BSCPE
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1. Objective: Demonstrate testing procedures and results of the following: 1. Functionality of each subsystem (Success Rate) 2. Accuracy of Sensors	
2. Procedure <ul style="list-style-type: none">● Experimental Setup● Equipment Required● Attachments (showing experiments)● Link to video demonstration on requirement 2● Data Analysis of Testing	
3. Experimental Setup The device will have a tube where the water will be going through emulating a water source. The solenoid part will be connected to the sensor part via bluetooth and will open the solenoid once the sensor detects that the water is not full. After the container is full, the solenoid will close and stop the water flow.	
4. Equipment Required <ul style="list-style-type: none">● Control box of solenoid● Control box of sensor● Continuous water supply	
5. Attachments (showing experiments) 	



Trial	Status	Intended Result	Actual Result	Result
1	Bluetooth is connected	The bluetooth module from the receiver and transceiver will connect	The two bluetooth modules are connected	Success
2	Water Not Full	The valve is open automatically	The water is flowing through the faucet	Success
3	Water Full	The valve will close to shut off the water flow	The water flow was shut off	Success
			Total	3/3
6. Link to video demonstration				
Video Demo Link: https://drive.google.com/file/d/1y-6VVG3u5YAfDTVmh9FD58p5zwG4lpXy/view?usp=sharing				
7. Data analysis of testing				
In the testing results, our group was able to determine the functionality and results of the Automated Smart Water Valve, where it successfully achieved the expected outcomes, which are to establish automated water flow management utilizing hardware system integration of microcontrollers and Bluetooth modules for seamless communication. The results illustrate the trials that we have conducted in order to examine the intended outcome of our prototype, which is also significant for further improvements.				