



Preparation Guide for EV3 Software Certification

The goal of the certification is to certify that a person is proficient in the use of the Lego EV3 system and programming environment. It tests for practical knowledge of the EV3 system, and familiarity with the EV3 software. It also checks for problem solving skills relating to common applications for the EV3 system, particularly with motors and sensors. Knowledge of programming logic and coding mathematical operations is also tested. Below is a list of things that may be helpful in preparation for certification.

1. Go to [Robofest eAcademy](#) and take the following courses:
 - a. **2020 Game using Lego EV3 and EV3 language** class code: **6G38-T4FQ-KTXD4**
 - b. **BottleSumo using Lego EV3 and EV3 Language** class code: **K2F7H-D53MB**
 - c. **Exhibition Projects using EV3 Language** class code: **QMSFV-QSR2Z**
2. Review EV3 brick [operation](#)
 - a. Inputs
 - b. Outputs
 - c. Navigating the menus
 - d. Viewing sensor values
3. Be familiar with EV3 software “lobby” environment ([pg 45-55](#))
4. Review Lego EV3 [tutorials](#)
5. Practice coding with the following
 - a. Switch blocks
 - b. Move Blocks
 - c. Following lines with a color sensor
 - d. Displaying values on the LCD screen
 - e. Use of data operations blocks
 - i. Variables and data wires
 - ii. Advanced Math block
 - iii. Logic blocks
 - f. Creating, copying, and modifying MyBlocks