

VEXcode VR Lab Schedule

Unit A-1: Introduction to VEXcode VR Programming

1. VEXcode VR environment (web-based, <https://vr.vex.com/>), blocks panel, project panel
2. Simple programming example (follow square path), run program
3. Introduction to algorithm and program
4. Explain in details Drivetrain blocks, wait block, and random block. Explain other categories of blocks (briefly)
5. Playground, select different playground, coordinates for grid map playground, overhead view (2D), behind robot view (3D), front view (3D), dashboard indicators
6. Help button to display help information about each block
7. Monitor window (print and variable data), code viewer window (Python code)
8. Share your project as a PDF file, save your project on your device, load your saved project from your device

Unit A-2: Hands-on Practice - VEXcode VR Activities:

- 1) Basketball Drills
- 2) Program the robot to go forward for a **random** number of seconds (between 0 and 5), and then turn a random amount of degrees (between -90 and 90).
- 3) Save the project in both pdf file and vrblocks format.