

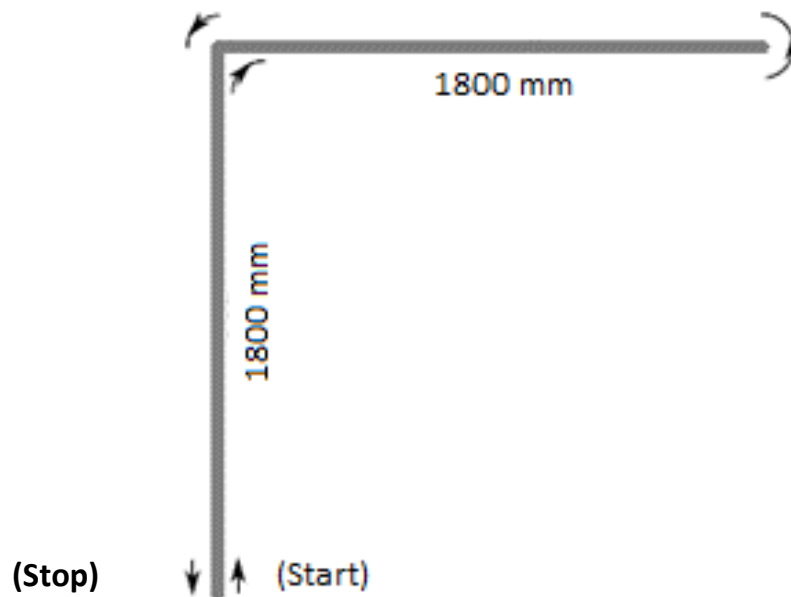
Unit A – Lab Assessment

Instructions:

1. For each project, first create an algorithm describing in detail how the robot solves the problem step by step. Write your algorithm in plain English as a numbered list of executable steps. Then create a corresponding VEXcode VR program and test it to make sure it works.
2. Submit your finished two projects as five files: 1) one PDF file containing the algorithms for the two projects 2) two PDF files for the two project programs 3) two .vrblocks files for the two project programs.

Project #1:

Program the robot to follow the Γ -shaped path – move forward, turn right, move forward and then move all the way back to the start position. The robot should move and turn in the right direction as indicated by the direction of arrows:



Project #2:

Random Turn: Program the robot to move forward for 3 seconds. Then make it turn left for a random angle between 45° to 135° . Then drive the robot backward without turning for a random distance between 600mm to 800mm.