

Grade 7

Distance Learning Module 4: Week of: 4/20/2020-4/24/2020

Grade 7 Robotics Engineering – Modified from [Introduction to Robotics Engineering](#)

Targeted Goals from Stage 1: Desired Results

Develop a product/solution that adheres to key parameters (e.g., cost, timeline, restrictions, available resources and audience).

Content Knowledge: Tele-operated, autonomous, and hybrid as methods to control robots.

Vocabulary: Python, block-based code, text-based code, and input

Skills: Create an autonomous program where several systems of the robot need to be programmed all together to serve a function.

Expectation: Students will practice their programming skills.

Description of Task (s):	Resources and Materials:	Daily Checks
Monday: <ul style="list-style-type: none"> Students will receive a brief overview on the Python programming language. 	<ul style="list-style-type: none"> Python Overview 	At the end of the week, students will be expected to “turn in” proof of the completed activities on the Coding Checklist.
Tuesday: <ul style="list-style-type: none"> Students will be asked to complete as many puzzles as possible within the Toxic Jungle activities. 	<ul style="list-style-type: none"> Python - Toxic Jungle Activities 	
Wednesday: <ul style="list-style-type: none"> Students will continue to gain experience with directional-based coding with the code.org activities. Complete Puzzles #1 - #10. 	<ul style="list-style-type: none"> Code.org - Artist Puzzles 	
Thursday: <ul style="list-style-type: none"> Continue working through the puzzles. Try to complete Puzzles #11 - #20. 	<ul style="list-style-type: none"> Code.org - Artist Puzzles 	
Friday: <ul style="list-style-type: none"> Code with Scratch. <ul style="list-style-type: none"> In both 5th & 6th grade, students used Scratch to program both games and animations. 	<ul style="list-style-type: none"> Scratch 3-Choices Animation Assignment 	

Week criteria for success (attach student checklists or rubrics):

Coding Checklist

Supportive resources and tutorials for the week (plans for re-teaching):

VEX IQ Curriculum