Robotics Starter Pack

1) Common

 Calculus + Differential Equations Link: 3BLUE1BROWN Series S2

2. Linear Algebra

Link: 3BLUE1BROWN Series S1

3. Robotics and Control theory

Link: IIT Roorkee: Robotics and Control

Link: <u>Awesome-robotics</u>
Book: <u>Elements of Robotics</u>

2) RoboCode

1. Linux /Unix commands

Link: https://youtu.be/BMGixkvJ-6w

2. Python

Link: Learn Python - Full Course for Beginners

3. C/C++

Book: Bjarne Stroustrup: The C++ programming language

Link: C++ Tutorial for Complete Beginners

4. OpenCV

Link: OpenCV Course - Full Tutorial with Python

Github Link: https://github.com/jasmcaus/opency-course

Framework:

5. ROS

Link: http://wiki.ros.org/Documentation

Github link: https://github.com/Flying-And-Robotics-Club-NITK/ROS-KEP

3) RoboTronix

1. Signals and Systems

Link: Fourier Series

Book: Signals and Systems by Alan V. Oppenheim

2. Control Systems

Link: Control of Mobile Robots by Georgia Tech

Book: Control Systems Engineering by Norman Nise

3. Arduino

Link: Coursera IOT Specialization Course 2

Link: Arduino Documentation

4) RoboTorque

1. Fusion360

Link: Autodesk Coursera Specialization

2. SolidWorks

Link: SolidWorks Tutorials

Book: Mastering SolidWorks by Ibrahim Zeid

3. Blender

Link: Blender Tutorials

5) AeroWing

1. Aerodynamics

Link: Introduction to Aerodynamics edX

Book: Fundamentals of Aerodynamics by John D. Anderson

2. MATLAB

Link: MATLAB Onramp

Link: MATLAB Documentation

3. ANSYS

Link: ANSYS Tutorials