

# Learning Robot Code

## FRCLadder

FRCLadder provides a series of videos that together serve as a great introduction into robot code. We've selected some below that are particularly relevant to the programming YETI does.

**Note:** The hardware and APIs available have changed quite a bit since some of these videos were published. However, the concepts and theory behind them remain the same.

## Introduction to FRC Programming and Basic Drivetrain Code

[https://www.youtube.com/embed/ihO-mw\\_4Qpo?si=23MMYKgGsUODgW9I](https://www.youtube.com/embed/ihO-mw_4Qpo?si=23MMYKgGsUODgW9I)

## How PIDs Work and How to Implement Them

**Part 1:** Dead Reckoning, Bang Bang, and using kP

<https://www.youtube.com/embed/jlKBWO7ps0w?si=FYxEzyTxH8kPpNjk>

**Part 2:** Using kI and kD

<https://www.youtube.com/embed/Z24fSBVJeGs?si=0kUkjiBfnQ8hoZy5>

**Supplemental:** A practical example of tuning a PID loop and how each value affects movement

<https://www.youtube.com/embed/qKy98Cbcltw?si=qPtB1oUdjG7YQsqq>

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