

Useful FLL and EV3 Resources

This list was compiled by Droids Robotics (www.droidsrobotics.org). This is not an endorsement of any of these resources. You should try them yourself to decide what is best for your team and learning style.

Online Tutorials for Programming

CMU Robotics Academy: Complete introductory curriculum for the EV3 (www.education.rec.ri.cmu.edu/content/lego/ev3/)

EV3Lessons: Comprehensive programming tutorials for Beginner through Advanced users by a FIRST Team (www.ev3lessons.com)

LEGOEngineering: Developed by TUFTS CEE. Has a variety of resources and projects. (www.legoengineering.com)

STEMCentric: Video-based tutorials mostly at the introductory level with a few intermediate-level topics. (www.stemcenteric.com)

STEMRobotics: Repository for educational materials and curriculum guides for robotics. (<http://stemrobotics.cs.pdx.edu/node/2643>)

WAFFLES Community Robotics YouTube Channel: Most comprehensive of the YouTube based programming lessons by a FIRST team. (<https://www.youtube.com/playlist?list=PLJ9p4vPU79w6yjG7ndyn2xp-UMkSGFx9A>)

Organization and Planning Resources for FLL Teams

EV3Lessons: Has mission planning worksheets, calculators and templates useful for teams. Also host several online/interactive tools such as a Sketcher for teams to map out missions. Resources are updated every season. (www.ev3lessons.com)

TechBrick: Has worksheets, images and blank templates for use by teams. Resources are updated every season. Information from previous seasons are archived so if you need access to materials from older challenges, you can find them here. (www.techbrick.com)

Stores to buy parts for your EV3:

Lego.com, Legoeducation.com: Use for specific parts and complete sets

Bricklink.com, Brickowl.com: Use for specific parts

Books

Note: We have not owned or seen majority of these books, but see them referenced often.

Benedettelli, Daniele. The LEGO MINDSTORMS EV3 Laboratory: Build, Program, and Experiment with Five Wicked Cool Robots!

Griffin, Terry. The Art of LEGO MINDSTORMS EV3 Programming

Isogawa, Yoshihito. The LEGO MINDSTORMS EV3 Idea Book
Isogawa, Yoshihito. The LEGO Technic Idea Book: Fantastic Contraptions

Isogawa, Yoshihito. The LEGO Technic Idea Book: Simple Machines

Isogawa, Yoshihito. The LEGO Technic Idea Book: Wheeled Wonders

Isogawa, Yoshihito. Tora no Maki (Available free at www.isogawastudio.co.jp)

Kmiec, Pawel. The Unofficial LEGO Technic Builder's Guide

Kee, Damien. Classroom Activities for the Busy Teacher: EV3

Park, Eun Jung. Exploring LEGO MINDSTORMS EV3

Valk, Laurens. The LEGO MINDSTORMS EV3 Discovery Book: A Beginner's Guide to Building and Programming Robots