

2019 Denver BEST Robotics Teacher Workshop Topics DRAFT (16-18 July 2019)

Training Goals
BEST Robotics Competition in STEM Education
Teamwork
Robot Game
Robot Competition
Safety
Robot Kits
Engineering Design Process (EDP)
Tools
Awards & Judging

Start	START OF DAY 1 - Tue, July 16, 2019
8:30 AM	Training Goals & Expectations
8:45 AM	Form Teams and Demographics
9:15 AM	TMI Game Intro & Rules
9:30 AM	TMI Kits Intro & Rules
10:00 AM	Hardware, Software, Firmware
10:15 AM	BREAK
10:30 AM	Awards & Judging Intro & Rules (& TMI EN Discussion)
11:00 AM	TMI Mini-Engineering Notebook Rules
11:15 AM	Notebook Start
11:30 AM	Engineering Design Process (EDP) - Introduction
11:45 AM	EDP - Goal & Ask Steps - HW, SW & Notebook
12:30 PM	LUNCH
1:00 PM	EDP - Imagine Step - HW, SW & Notebook
2:15 PM	EDP - Plan Step - Cardboard prototyping
2:30 PM	BREAK
2:45 PM	EDP - Hardware Create #1
3:00 PM	EDP - Software Create #1
3:15 PM	EDP - HW/SW Create #1
4:30 PM	END of DAY 1 -Tue., July 16, 2019

8:30 AM	START OF DAY 2 - Quick review
8:45 AM	TMI Competition Intro & Rules
9:00 AM	Team Organization & Skills
9:15 AM	Tools Intro & Safety
9:30 AM	EDP - Robot Test & Improve #1
10:00 AM	BREAK
10:15 AM	EDP - Notebook Update
10:45 AM	EDP - Hardware Create & Improve #2
11:30 AM	LUNCH
12:00 PM	EDP - Software Create & Improve #2
12:45 PM	EDP - HW/SW /EN Create and Improve #2
1:45 PM	BREAK
2:00 PM	Practice Day EDP - Robot Test & Improve #2
3:45 PM	Practice Day EDP - Notebook Update & Submit
4:30 PM	END of DAY 2 - Wed., July 18, 2019

8:30 AM	START OF DAY 3 - Quick review + Safety Quiz
8:45 AM	Game Day EDP - Robot Test & Improve #3
9:00 AM	Mini Competition with Compliance, Staging & Judging
10:00 AM	BREAK
10:15 AM	Awards Ceremony
10:30 AM	Review Notebook Judging
10:45 AM	BEST Competition Rules
11:00 AM	BEST Robotics Competition
11:15 AM	Safety Training Examples
11:30 AM	LUNCH
11:45 AM	Forming a Team (Panels)
12:45 PM	BREAK
1:00 PM	BEST Competition Awards
1:15 PM	The BEST Award
1:45 PM	Advanced Software
2:30 PM	BREAK
2:45 PM	Wrap Up
3:30 PM	END of DAY 3 - Thurs., July 19, 2019