Robotics
CAMPS

Using Pitsco products in your summer **STEM or robotics camps** or after-school camps offers children a hands-on experience like no other!

And we've made it easy for you to plan your camp.

With a teacher's guide and Pitsco products, follow this sample outline to be on your way to summer STEM fun!

Sample Camp:
Intro to Robotics

10-Day Robotics Camp for Grades 6-8

Day 1: Wheelee Bot and Activities

Day 2: Buggee Bot and Activities

Day 3: Pickee Bot and Activities

Day 4: Thinking Like an Engineer Activities

Day 5: Build the Car through Drivetrain Experiment Activities

Day 6: Straight Racer Drive and Speed Challenge

Day 7: Bull Moose Drive and Speed Challenge

Day 8: Tug-of-War Drive and Speed Challenge

Day 9: Robot Chassis and Racecourse Activities

Day 10: Sumo Bot Challenge Activity

Initial cost:

$5,995 – TETRIX® PRIME Dual-Control Class Pack

$149 – TETRIX PRIME Engineering Mobile Robotics Curriculum Pack

Note: The Dual-Control Class Pack will allow for 19 unique activities and 132+ hours of instruction. A one-time investment can serve students for multiple camps, year after year.

Students served: 24+ (year after year, multiple camps)

TETRIX PRIME building system ideal for students ages 12 and up.
TETRIX MAX building system ideal for students ages 14 and up.

Camp Topics

- **Coding Camp**

- **Remote Control Camp**

- **Dual Control Camp**

< hello world/>

CODING CAMP

KUBO

GRADES K-2 – OPTION 1

Coding License

HOURS	
3	Lesson 1: Introduction
2	Lesson 2: Communication
1	Lesson 3: Collaboration

Suggested course of activities

GRADES K-2 – OPTION 2

Coding License

HOURS	
3	Lesson 1: Introduction
2	Lesson 2: Communication
2	Lesson 3: Collaboration
3	Lesson 4: Creativity
2	Lesson 5: Critical Thinking

Suggested course of activities

Visit **Pitsco.com/Camps** to explore a list of recommended products and corresponding teacher guides.

TETRIX PRIME PROGRAMMABLE ROBOTICS SET

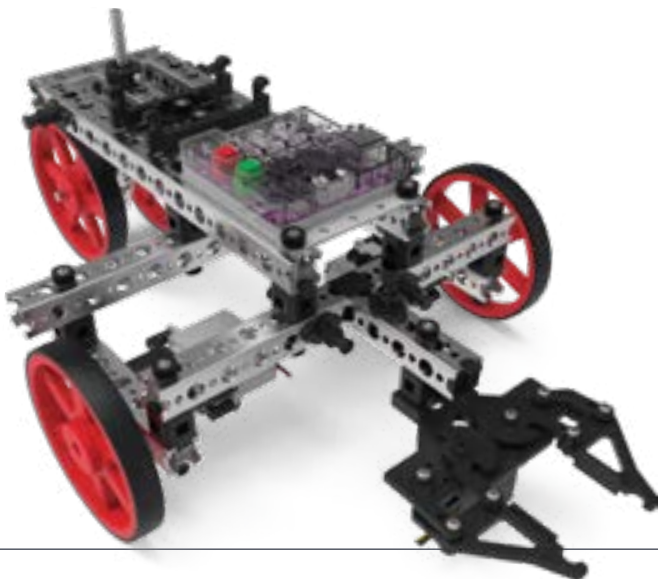## BEGINNER TO INTERMEDIATE

- PULSE Programming Guide (PPG)
- Engineering Challenge (EC)

HOURS	
3	Hello World! through Introduction to the Line Finder Sensor Activities (PPG)
3	Introduction to the Ultrasonic Sensor through Drive Forward Activities (PPG)
6	Drive in a Circle through Follow a Line Activities (PPG)
3	Drive Toward a Wall and Stop through Combining the Sensors Activities (PPG)
6	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)
3	You Choose Autonomous Activity (EC)

Suggested course of activities

NOTE: Activities could also be completed by substituting the TETRIX PRIME Programmable Robotics Set with the TETRIX PRIME Dual-Control Robotics Set.

BEGINNER TO ADVANCED

- PULSE Programming Guide (PPG)
- Engineering Challenge (EC)

HOURS	
3	Hello World! through Introduction to the Line Finder Sensor Activities (PPG)
3	Introduction to the Ultrasonic Sensor through Drive Forward Activities (PPG)
6	Drive in a Circle through Follow a Line Activities (PPG)
3	Drive Toward a Wall and Stop through Combining the Sensors Activities (PPG)
6	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)
3	You Choose Autonomous Activity (EC)

Suggested course of activities

TETRIX MAX PROGRAMMABLE ROBOTICS SET

BEGINNER TO INTERMEDIATE

- **PRIZM Programming Guide (PPG)**
- **Engineering Challenge (EC)**

HOURS		
	6	Hello World! through Introduction to the Line Finder Sensor Activities (PPG)
	6	Introduction to the Ultrasonic Sensor through Drive in a Circle Activities (PPG)
	6	Drive in a Square through Follow a Line Activities (PPG)
	6	Drive Toward a Wall and Stop through Combining the Sensors Activities (PPG)
	6	You Choose Autonomous Activity (EC)

Suggested course of activities

NOTE: Activities could also be completed by substituting the TETRIX MAX Programmable Robotics Set with the TETRIX MAX Dual-Control Robotics Set.

BEGINNER TO ADVANCED – OPTION 1

- **PRIZM Programming Guide (PPG)**
- **PRIZM Coding Essentials Guide (PCE)**

HOURS		
	6	Hello World! through Introduction to the Line Finder Sensor Activities (PPG)
	6	Introduction to the Ultrasonic Sensor through Drive in a Circle Activities (PPG)
	6	Drive in a Square through Follow a Line Activities (PPG)
	6	Drive Toward a Wall and Stop through Combining the Sensors Activities (PPG)
	12	Building the Bee-Dee Bot through Smart Cars, Smart Code Activities (PCE)
	12	Take a Drive by the Numbers and Beyond Comparison Activities (PCE)
	6	Decisions, Decisions Activity (PCE)
	6	Taxi, Please! Challenge (PCE)

Suggested course of activities

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TETRIX MAX PROGRAMMABLE ROBOTICS SET

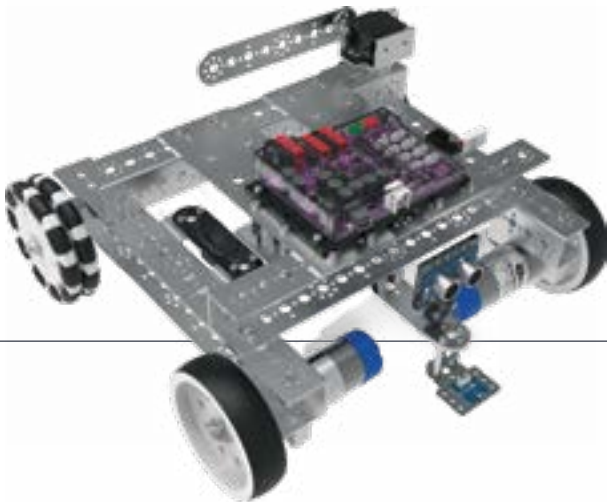## BEGINNER TO ADVANCED — OPTION 2

- PRIZM Programming Guide (PPG)
- Engineering Challenge (EC)
- Competition in a Box (CB)

HOURS	
6	Hello World! through Introduction to the Line Finder Sensor Activities (PPG)
6	Introduction to the Ultrasonic Sensor through Drive in a Circle Activities (PPG)
6	Drive in a Square through Follow a Line Activities (PPG)
6	Drive Toward a Wall and Stop through Combining the Sensors Activities (PPG)
6	You Choose Autonomous Activity (EC)
9	Autonomous Rescue Robots Overview and Making Modifications Activity (CB)
9	Combining the Sensors Revisited and Which Way? Activities (CB)
12	Nothin' but a Hound Dog Activity and Rescue Robots Competition (CB)

Suggested course of activities

NOTE: Activities could also be completed by substituting the TETRIX MAX Programmable Robotics Set with the TETRIX MAX Dual-Control Robotics Set.

BEGINNER TO ADVANCED — OPTION 3

- PRIZM Programming Guide (PPG)
- PRIZM Coding Essentials Guide (PCE)
- Competition in a Box (CB)

HOURS	
6	Hello World! through Introduction to the Line Finder Sensor Activities (PPG)
6	Introduction to the Ultrasonic Sensor through Drive in a Circle Activities (PPG)
6	Drive in a Square through Follow a Line Activities (PPG)
6	Drive Toward a Wall and Stop through Combining the Sensors Activities (PPG)
12	Building the Bee-Dee Bot through Smart Cars, Smart Code Activities (PCE)
12	Take a Drive by the Numbers and Beyond Comparison Activities (PCE)
6	Decisions, Decisions Activity (PCE)
6	Taxi, Please! Challenge (PCE)
9	Autonomous Rescue Robots Overview and Making Modifications Activity (CB)
9	Combining the Sensors Revisited and Which Way? Activities (CB)
12	Nothin' but a Hound Dog Activity and Rescue Robots Competition (CB)

Suggested course of activities

REMOTE CONTROL CAMP

TETRIX PRIME R/C ROBOTICS SET

BEGINNER TO INTERMEDIATE – OPTION 1

- Builder's Guide (BG)
- Engineering Challenge (EC)

HOURS		
	6	Wheelee Bot and Activities (BG)
	6	Buggee Bot and Activities (BG)
	6	Pickee Bot and Activities (BG)
	6	You Choose R/C Activity (EC)
	6	You Choose R/C Activity (EC)

Suggested course of activities

BEGINNER TO INTERMEDIATE – OPTION 2

- Builder's Guide (BG)
- Engineering Mobile Robotics (EMR)

HOURS		
	6	Wheelee Bot and Activities (BG)
	6	Buggee Bot and Activities (BG)
	6	Thinking Like an Engineer Activities (EMR)
	6	Build the Car Bot through Drivetrain Experiment Activities (EMR)
	6	Straight Racer Drive and Speed Challenge (EMR)
	6	Road Racer Drive and Speed Challenge (EMR)
	6	Bull Moose Drive and Speed Challenge (EMR)
	6	Tug-of-War Drive and Speed Challenge (EMR)
	6	Robot Chassis and Racecourse Activities (EMR)
	6	Sumo Bot Challenge (EMR)

Suggested course of activities

NOTE: Activities could also be completed by substituting the TETRIX PRIME R/C Robotics Set with the TETRIX PRIME Dual-Control Robotics Set.

TETRIX PRIME R/C ROBOTICS SET + EXPANSION SET

BEGINNER TO ADVANCED – OPTION 1

- Builder's Guide (BG)
- Expansion Builder's Guide (EBG)
- Engineering Challenge (EC)

HOURS	Activity
6	Wheelee Bot and Activities (BG)
6	Buggee Bot and Activities (BG)
6	Pickee Bot and Activities (BG)
6	Rover Bot and Activities (EBG)
6	Walker Bot and Activities (EBG)
6	Crane Bot and Activities (EBG)
6	You Choose R/C Activity (EC)
6	You Choose R/C Activity (EC)
6	You Choose R/C Activity (EC)
6	Wrap-Up/Create Your Own Challenge

Suggested course of activities

BEGINNER TO ADVANCED – OPTION 2

- Builder's Guide (BG)
- Engineering Mobile Robotics (EMR)
- Expansion Builder's Guide (EBG)
- Engineering Challenge (EC)

HOURS	Activity
6	Wheelee Bot and Activities (BG)
6	Buggee Bot and Activities (BG)
6	Pickee Bot and Activities (BG)
6	Thinking Like an Engineer Activities (EMR)
6	Build the Car Bot through Drivetrain Experiment Activities (EMR)
6	Straight Racer Drive and Speed Challenge (EMR)
6	Road Racer Drive and Speed Challenge (EMR)
6	Bull Moose Drive and Speed Challenge (EMR)
6	Tug-of-War Drive and Speed Challenge (EMR)
6	Robot Chassis and Racecourse Activities (EMR)
6	Sumo Bot Challenge (EMR)
6	Rover Bot and Activities (EBG)
6	Walker Bot and Activities (EBG)
6	Crane Bot and Activities (EBG)
6	You Choose R/C Activity (EC)
6	You Choose R/C Activity (EC)
6	You Choose R/C Activity (EC)

Suggested course of activities

NOTE: Activities could also be completed by substituting the TETRIX PRIME R/C Robotics Set with the TETRIX PRIME Dual-Control Robotics Set.

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TETRIX MAX R/C ROBOTICS SET

BEGINNER – OPTION 1

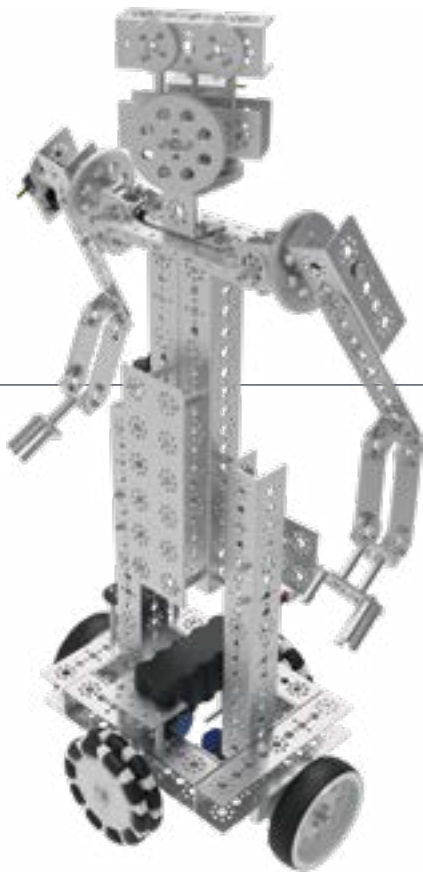- **Builder's Guide (BG)**
- **Engineering Challenge (EC)**

HOURS	
6	RangerMAX Bot and Activities (BG)
6	MiniMAX Bot and Activities (BG)
6	RotoGrip Bot and Activities (BG)
12	You Choose R/C Activity (EC)

Suggested course of activities

NOTE: Activities could also be completed by substituting the TETRIX MAX R/C Robotics Set with the TETRIX MAX Dual-Control Robotics Set.

BEGINNER – OPTION 2

- **Builder's Guide (BG)**
- **Engineering Mobile Robotics (EMR)**

HOURS	
6	RangerMAX Bot and Activities (BG)
1.5	Wave the Flag Activity (EMR)
1.5	Flex Your Muscles Activity (EMR)
1.5	Getting Stronger Activity (EMR)
1.5	Robot Waiter Activity (EMR)
1.5	Inchworm Activity (EMR)
9	Robot Picasso Challenge (EMR)
9	Ping-Pong Ball Smasher Challenge (EMR)
12	Herding Robot Challenge (EMR)
6	MiniMAX Bot and Activities (BG)
6	RotoGrip Bot and Activities (BG)

Suggested course of activities

Visit **Pitsco.com/Camps** to explore a list of recommended products and corresponding teacher guides.

BEGINNER TO INTERMEDIATE – OPTION 1

- **Builder's Guide (BG)**
- **Competition in a Box (CB)**

HOURS	
6	**RangerMAX Bot and Activities (BG)**
6	**MiniMAX Bot and Activities (BG)**
6	**RotoGrip Bot and Activities (BG)**
12	**Engineering for the Environment Activities and Competition (CB)**

Suggested course of activities

NOTE: Activities could also be completed by substituting the TETRIX MAX R/C Robotics Set with the TETRIX MAX Dual-Control Robotics Set.

BEGINNER TO INTERMEDIATE – OPTION 2

- **Builder's Guide (BG)**
- **Competition in a Box (CB)**

HOURS	
6	**RangerMAX Bot and Activities (BG)**
6	**MiniMAX Bot and Activities (BG)**
6	**RotoGrip Bot and Activities (BG)**
9	**Engineering for the Environment Activities (CB)**
9	**Engineering for the Environment Competition (CB)**
12	**Meeting the Needs of Industry Activities (CB)**
12	**Meeting the Needs of Industry Competition (CB)**

Suggested course of activities

Visit **Pitsco.com/Camps** to explore a list of recommended products and corresponding teacher guides.

PITSCO
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BEGINNER TO ADVANCED

- **Builder's Guide (BG)**
- **Engineering Mobile Robotics (EMR)**
- **Competition in a Box (CB)**

HOURS	
6	**RangerMAX Bot and Activities (BG)**
1.5	**Wave the Flag Activity (EMR)**
1.5	**Flex Your Muscles Activity (EMR)**
1.5	**Getting Stronger Activity (EMR)**
1.5	**Robot Waiter Activity (EMR)**
1.5	**Inchworm Activity (EMR)**
9	**Robot Picasso Challenge (EMR)**
9	**Ping-Pong Ball Smasher Challenge (EMR)**
12	**Herding Robot Challenge (EMR)**
12	**Robot Boogie Challenge (EMR)**

HOURS	
6	**MiniMAX Bot and Activities (BG)**
6	**RotoGrip Bot and Activities (BG)**
12	**Engineering for the Environment Activities (CB)**
12	**Engineering for the Environment Competition (CB)**
12	**Meeting the Needs of Industry Activities (CB)**
12	**Meeting the Needs of Industry Competition (CB)**

Suggested course of activities

NOTE: Activities could also be completed by substituting the TETRIX MAX R/C Robotics Set with the TETRIX MAX Dual-Control Robotics Set.

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PITSCO
EDUCATION
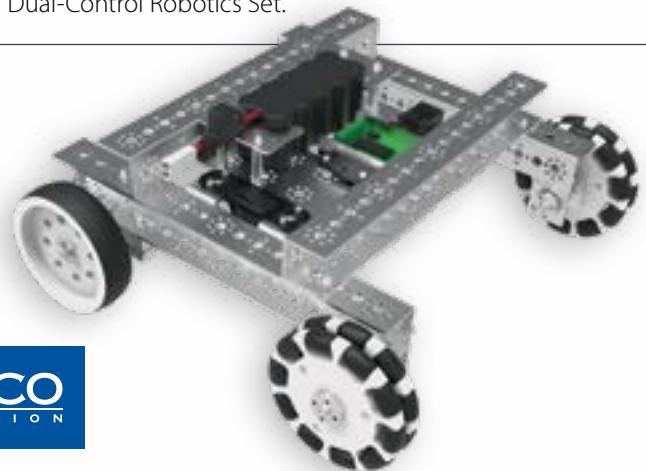
TETRIX MAX R/C ROBOTICS SET + EXPANSION SET

BEGINNER TO INTERMEDIATE

- Builder's Guide (BG)
- Engineering Mobile Robotics (EMR)
- Expansion Builder's Guide (EBG)

HOURS	Activity
6	RangerMAX Bot and Activities (BG)
1.5	Wave the Flag Activity (EMR)
1.5	Flex Your Muscles Activity (EMR)
1.5	Getting Stronger Activity (EMR)
1.5	Robot Waiter Activity (EMR)
1.5	Inchworm Activity (EMR)
12	Robot Picasso Challenge (EMR)
12	Ping-Pong Ball Smasher Challenge (EMR)
6	MiniMAX Bot and Activities (BG)
6	RotoGrip Bot and Activities (BG)
12	TrackBot and Activities (EBG)
12	WorkCell and Activities (EBG)
12	ScissorLift and Activities (EBG)
12	Herding Robot Challenge (EMR)
12	Robot Boogie Challenge (EMR)

Suggested course of activities

INTERMEDIATE

- Builder's Guide (BG)
- Expansion Builder's Guide (EBG)
- Engineering Challenge (EC)

HOURS	Activity
6	RangerMAX Bot and Activities (BG)
6	MiniMAX Bot and Activities (BG)
6	RotoGrip Bot and Activities (BG)
9	TrackBot and Activities (EBG)
9	WorkCell and Activities (EBG)
12	ScissorLift and Activities (EBG)
12	You Choose R/C Activity (EC)

Suggested course of activities

NOTE: Activities could also be completed by substituting the TETRIX MAX R/C Robotics Set with the TETRIX MAX Dual-Control Robotics Set.

TETRIX MAX R/C ROBOTICS SET
+ EXPANSION SET continued

INTERMEDIATE TO ADVANCED

- Builder's Guide (BG)
- Expansion Builder's Guide (EBG)
- Competition in a Box (CB)

HOURS		
6	RangerMAX Bot and Activities (BG)	
6	MiniMAX Bot and Activities (BG)	
6	RotoGrip Bot and Activities (BG)	
12	TrackBot and Activities (EBG)	
12	WorkCell and Activities (EBG)	
12	ScissorLift and Activities (EBG)	

HOURS		
15	Engineering for the Environment Activities (CB)	
18	Engineering for the Environment Competition (CB)	
15	Meeting the Needs of Industry Activities (CB)	
18	Meeting the Needs of Industry Competition (CB)	

Suggested course of activities

NOTE: Activities could also be completed by substituting the TETRIX MAX R/C Robotics Set with the TETRIX MAX Dual-Control Robotics Set.
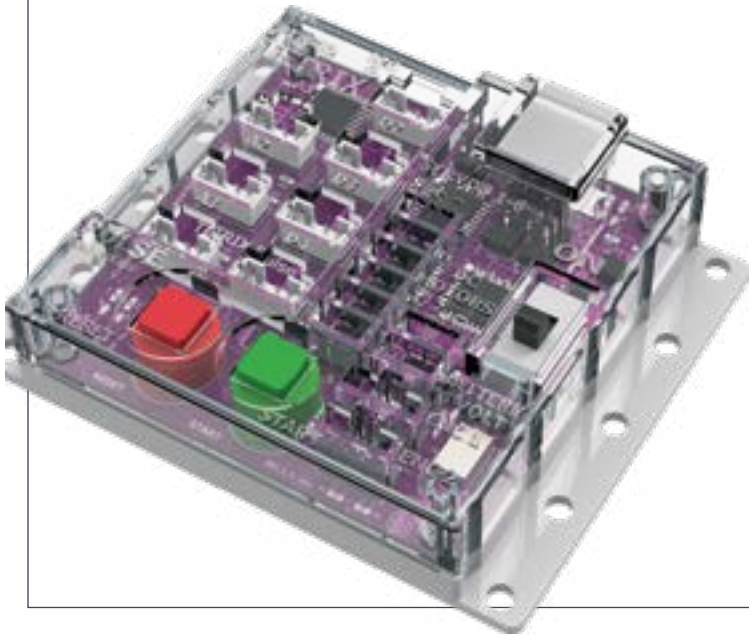
DUAL CONTROL CAMP

TETRIX PRIME DUAL-CONTROL ROBOTICS SET

BEGINNER TO INTERMEDIATE

- Builder's Guide (BG)
- PULSE Programming Guide (PPG)

HOURS	
6	Wheelee Bot and Activities (BG)
6	Buggee Bot and Activities (BG)
6	Pickee Bot and Activities (BG)
3	Hello World! through Introduction to the Line Finder Sensor Activities (PPG)
3	Build the PULSE Codee Bot through Simplify the Square Activities (PPG)
6	Drive to a Line and Stop through Combining the Sensors Activities (PPG)

Suggested course of activities

BEGINNER TO ADVANCED – OPTION 1

- Builder's Guide (BG)
- PULSE Programming Guide (PPG)
- Engineering Challenge (EC)

HOURS	
6	Wheelee Bot and Activities (BG)
6	Buggee Bot and Activities (BG)
6	Pickee Bot and Activities (BG)
3	Hello World! through Introduction to the Line Finder Sensor Activities (PPG)
3	Introduction to the Ultrasonic Sensor through Drive Forward Activities (PPG)
6	Drive in a Circle through Follow a Line Activities (PPG)
3	Drive Toward a Wall and Stop through Combining the Sensors Activities (PPG)
6	You Choose R/C Activity (EC)
6	You Choose R/C Activity (EC)
6	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)
3	You Choose Autonomous Activity (EC)

Suggested course of activities

BEGINNER TO ADVANCED – OPTION 2

- Builder's Guide (BG)
- PULSE Programming Guide (PPG)
- Engineering Challenge (EC)

HOURS

Hours	Activity
6	Wheelee Bot and Activities (BG)
6	Buggee Bot and Activities (BG)
6	Pickee Bot and Activities (BG)
3	Hello World! through Introduction to the Line Finder Sensor Activities (PPG)
3	Introduction to the Ultrasonic Sensor through Drive Forward Activities (PPG)
6	Drive in a Circle through Follow a Line Activities (PPG)
3	Drive Toward a Wall and Stop through Combining the Sensors Activities (PPG)
6	You Choose R/C Activity (EC)
6	You Choose R/C Activity (EC)
6	You Choose R/C Activity (EC)
6	You Choose Autonomous Activity (EC)
3	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)

Suggested course of activities

BEGINNER TO ADVANCED – OPTION 3

- Builder's Guide (BG)
- PULSE Programming Guide (PPG)
- Engineering Mobile Robotics (EMR)
- Engineering Challenge (EC)

HOURS

Hours	Activity
6	Wheelee Bot and Activities (BG)
6	Buggee Bot and Activities (BG)
6	Pickee Bot and Activities (BG)
6	Thinking Like an Engineer Activities (EMR)
6	Build the Car Bot through Drivetrain Experiment Activities (EMR)
6	Straight Racer Drive and Speed Challenge (EMR)
6	Robot Chassis and Racecourse Activities (EMR)
6	Sumo Bot Challenge Activity (EMR)
6	You Choose R/C Activity (EC)
3	Hello World! through Introduction to the Line Finder Sensor Activities (PPG)
3	Introduction to the Ultrasonic Sensor through Drive Forward Activities (PPG)
6	Drive in a Circle through Follow a Line Activities (PPG)
3	Drive Toward a Wall and Stop through Combining the Sensors Activities (PPG)
6	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)
3	You Choose Autonomous Activity (EC)

Suggested course of activities

BEGINNER TO ADVANCED – OPTION 4

- Builder's Guide (BG)
- PULSE Programming Guide (PPG)
- Engineering Mobile Robotics (EMR)
- Engineering Challenge (EC)

HOURS

6	Wheelee Bot and Activities (BG)
6	Buggee Bot and Activities (BG)
6	Pickee Bot and Activities (BG)
6	Thinking Like an Engineer Activities (EMR)
6	Build the Car Bot through Drivetrain Experiment Activities (EMR)
6	Straight Racer Drive and Speed Challenge (EMR)
6	Road Racer Drive and Speed Challenge (EMR)
6	Bull Moose Drive and Speed Challenge (EMR)
6	Tug-of-War Drive and Speed Challenge (EMR)
6	Robot Chassis and Racecourse Activities (EMR)
6	Sumo Bot Challenge (EMR)

HOURS

3	Hello World! through Introduction to the Line Finder Sensor Activities (PPG)
3	Introduction to the Ultrasonic Sensor through Drive Forward Activities (PPG)
6	Drive in a Circle through Follow a Line Activities (PPG)
3	Drive Toward a Wall and Stop through Combining the Sensors Activities (PPG)
6	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)
3	You Choose Autonomous Activity (EC)

Suggested course of activities

TETRIX PRIME DUAL-CONTROL ROBOTICS SET + EXPANSION SET

BEGINNER TO ADVANCED

- Builder's Guide (BG)
- PULSE Programming Guide (PPG)
- Engineering Mobile Robotics (EMR)
- Expansion Builder's Guide (EBG)
- Engineering Challenge (EC)

HOURS	Activity
6	Wheelee Bot and Activities (BG)
6	Buggee Bot and Activities (BG)
6	Pickee Bot and Activities (BG)
6	Thinking Like an Engineer Activities (EMR)
6	Build the Car Bot through Drivetrain Experiment Activities (EMR)
6	Straight Racer Drive and Speed Challenge (EMR)
6	Road Racer Drive and Speed Challenge (EMR)
6	Bull Moose Drive and Speed Challenge (EMR)
6	Tug-of-War Drive and Speed Challenge (EMR)
6	Robot Chassis and Racecourse Activities (EMR)
6	Sumo Bot Challenge (EMR)
6	Rover Bot and Activities (EBG)
6	Walker Bot and Activities (EBG)
6	Crane Bot and Activities (EBG)

HOURS	Activity
6	You Choose R/C Activity (EC)
6	You Choose R/C Activity (EC)
6	You Choose R/C Activity (EC)
3	Hello World! through Introduction to the Line Finder Sensor Activities (PPG)
3	Introduction to the Ultrasonic Sensor through Drive Forward Activities (PPG)
6	Drive in a Circle through Follow a Line Activities (PPG)
3	Drive Toward a Wall and Stop through Combining the Sensors Activities (PPG)
6	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)
6	You Choose Autonomous Activity (EC)
3	You Choose Autonomous Activity (EC)

Suggested course of activities

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