Introduction to Competitive Robotics

Introduction to Competitive Robotics introduces students to the world of robotics. This exciting course delivers fundamental engineering concepts related to robotic design, construction and programming. Using the VEX® robotics system, students build and program a robot that uses gear trains, sensors and both operator and autonomous control. They then use the robot in team oriented activities and classroom competitions.

Course Information

Type	Lab
Languages	English
Hours of instruction	15

Course Outline

- Building the BumperBot
- Writing Your First Program
- Programming in Autonomous
- User Functions
- Programming Operator Control
- Adding a Bumper
- BumperBot with Operator Control
- Multiple Autonomous Modes
- Robotic Arm
- Potentiometer
- Line Followers
- Ultrasonic Sensor
- Wheel Encoders
- Competitions

Excellent for after-school & extracurricular programs, summer camps and robotics teams!

Required Products

easyC® for Cortex

easyC enables you to produce effective programs in a short period of time. Designed with the student in mind, easyC's simple to use graphical interface does all of the syntax and spacing, allowing you to focus on program flow and design.

- EasyC provides a clean, simple interface for the beginner and experienced programmer
- EasyC enables beginners to quickly and easily learn basic programming by focusing on the core elements of program flow and design
- EasyC includes a text editor for experienced programmers to type their own code

Related Products

Introduction to STEM Pathways Program

Introduction to STEM Pathways provides an easy-to-implement solution for delivering early engagement and discovery of science, technology, engineering and mathematics topics. Courses feature all-in-one packages with classroom equipment and 45 hours of e-learning content per course.

Robotics Engineering Curriculum (REC)

Robotics Engineering Curriculum (REC) provides a comprehensive study of engineering concepts through relevant activities and projects using the award winning VEX Robotics hardware and EasyC robotic programming software.

VEX Projects

From software for world champion VEX teams to programs leading to robotics certification, Intelitek provides the most versatile and effective solutions for robotics teams and educators!

SkillsUSA© Mobile Robotics

SkillsUSA's Mobile Robotics competition presents a competitive team-oriented project. The competition tests the ability to perform and exhibit skills and knowledge from competencies determined by the SkillsUSA Mobile Robotic technical committee.

Green Street™

Green Street is an add-on to VEX programs. Modeled after current waste disposal technologies, this competition challenges players to create a fully autonomous robot that navigates Green Street neighborhood and collects trash bins at each home.

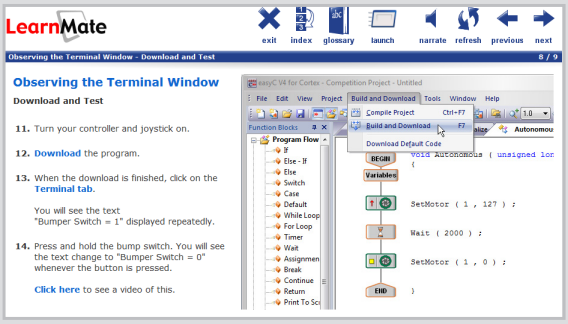
Robotics Competition Projects

Robotics Competition Projects are designed to stimulate student learning and engage participants to solve a variety of science, technology, engineering and math (STEM) problems. Projects are designed for VEX and include components to add to your existing VEX kits.

Introduction to Competitive Robotics (continued)

Introduction to Competitive Robotics may be deployed through LearnMate®, Intelitek's learning management system (LMS). LearnMate, fully hosted in the cloud, provides an easy-to-implement and easy-to-use LMS for education organizations of all types that provides the best technology and capabilities without the burden of IT support and maintenance. LearnMate provides everything needed for the ultimate blended learning experience:

- SCORM-compliant interactive content
- Anytime, anywhere accessibility
- Student and class management
- Flexible content leasing options for continuous updates



Ordering Information

Curriculum

Introduction to Competitive Robotics for Cortex	ITCR-CURR-ONLY
Introduction to Competitive robotics, Full Package for Out of School Programs, 2 students	ITCR-FULL-0002
Introduction to Competitive robotics; Full Package for Out of School Programs, 10 students	ITCR-FULL-0010
Introduction to Competitive robotics; Full Package for Out of School Programs, 20 students	ITCR-FULL-0020
Introduction to Competitive robotics; Full Package for Out of School Programs, 30 students	ITCR-FULL-0030

Required Products: easyC® for Cortex

easyC V5 for IQ/Cortex; Single Seat	63-2060-5001
easyC V5 for IQ/Cortex; 10 Seat	63-2060-5010
easyC V5 for IQ/Cortex; 20 seat	63-2060-5020
easyC V5 for IQ/Cortex; 30 seat	63-2060-5030
easyC V5 for IQ/Cortex; over 50 seats	63-2060-5050
Annual license; easyC V5 for IQ/Cortex (per seat)	63-2060-5101

Related Robotics Projects

Project, Cone Zone	10-7024-1001
Project, Puck Pile Up	10-7024-1002
Project, Safe Cracker	10-7030-1001
Project, Involution	10-7025-1001
Project, Cube Conundrum	10-7025-1003
Project, Full Pull XL	10-7025-2002
Project, Green Street	10-7026-1001
Project, Marbelous	10-7027-1001
Project, Pick & Place	10-7027-1002
Project, Vertigo	10-7027-1003

Contact Us:

intelitek®

Toll Free: 800-221-2763
Phone: 603-413-2600
Fax: 603-437-2137

Email:
info@intelitek.com
www.intelitek.com