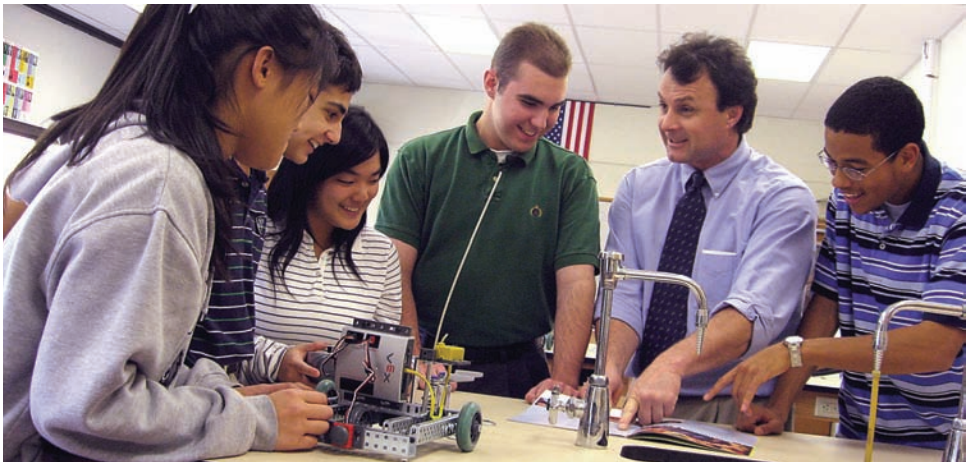


Robotics Engineering Curriculum



The superior robotics program

*"We are a veteran team of 12 years and have found easyC™ PRO and the REC Curriculum to be one of the best advances in **FIRST**. It accomplishes what the "I" in **FIRST** stands for - **Inspiration**. I would recommend this curriculum as a staple of any **FIRST** program."*

Mike Martus
FIRST Robotics "Teacher of the Year"
Pontiac Central High School
FRC Team 47 Chief Delphi

intelitek▶▶[®]

Ready-to-go Robotics Education

Just add students.

intelitek's Robotics Engineering Curriculum (REC) is a two-year robotics course for science, technology, engineering and math programs.

P O W E R E D B Y

LearnMate™

REC provides superior resources for both students and instructors, from award-winning hardware to teacher-friendly lesson guides.

Built on the power of LearnMate, intelitek's e-learning platform, REC delivers comprehensive, standards-based instruction via hands-on activities and compelling online curriculum.

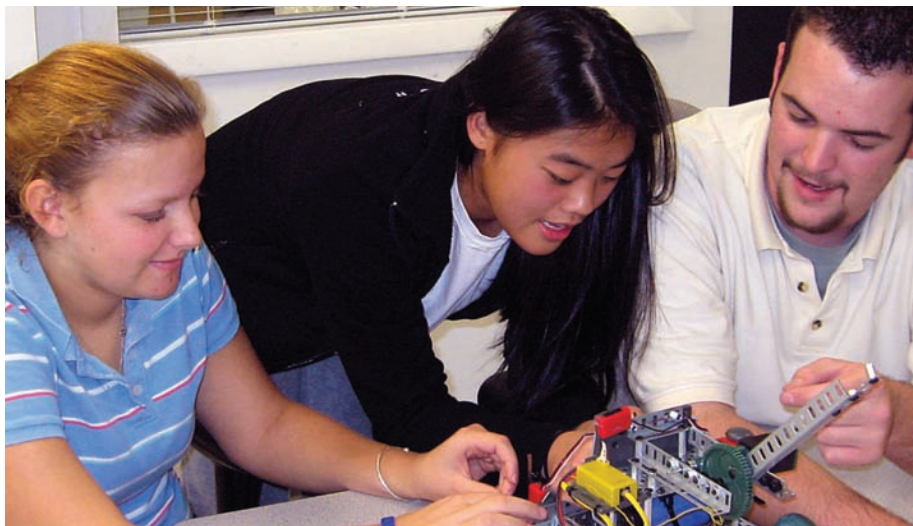
During each semester students build a solid foundation in robotics by:

- *building and programming their own robot.*
- *gaining hands-on knowledge about physics, technology, engineering and math while using their robot.*
- *completing a capstone project that challenges the student to solve a real-life problem.*



Combined with classic intelitek curriculum, the two-year program, outlined below, provides a thorough and engaging introduction to engineering.

Year One		Year Two	
Semester 1	Semester 2	Semester 1	Semester 2
Introduction to Robotics	Introduction to Electronics	Intro to Engineering	Electrical Systems
Introduction to Vex Programming	Mechanical Properties	CAD with SpectraCAD Engraving	Mechanisms
Physics and Robotics	Advanced C Programming	CAM with SpectraCAM Milling	Sensor Technology
Sensors	Industrial Robotic Arms	CNC Milling with Super proLIGHT 1000	Programmable Logic Control (PLC)
Arms and End Effectors	Advanced Mechanics	Mechanical Measurement & Quality Control	Robotics & Materials Handling
First Semester Project	Second Semester Project	Third Semester Project	Fourth Semester Project



Each semester includes everything you need to run an introductory robotics engineering program, built around three core features:

- LearnMate curriculum with optional classroom management
- easyC™ programming software
- Vex Starter Kit with required accessories

Each semester, your lab license of ready-to-install interactive curriculum includes:

- 75 combined hours of flexible lessons and projects.
- A lab license of easyC™ software.
- Hands-on activities designed especially for the award-winning Vex Robotics Design System.
- Instructional materials including activity instructions, teacher's guides, rubrics and sample programs.
- Integrated mapping to national STEM standards.

What else do I have to buy?

intelitek's **REC Package Kits** make it easy to incorporate REC into your lab. The package kits (sold separately) include everything you need in one package. No more hunting around for supplies!

How can I replenish my supplies?

Keep your class in top shape with the **REC Service Packs**, collections of parts to replace what your students will use most. Available in packs for 10, 20 or 30 students.

All materials are delivered directly to your school.

Developed in collaboration with the great minds at:



intelitek ▶▶

Competency Reporting

Your students progress - one click away.

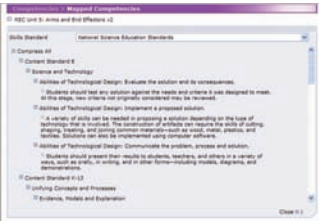
The LearnMate Learning Management System (LMS) allows teachers to track progress instantly.

LearnMate delivers real-time reporting for Science, Technology, Engineering and Math (STEM) Standards, including:



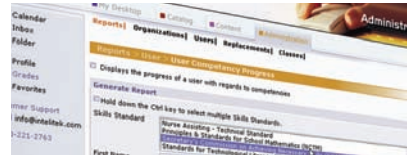
- Atlas of Science
- ITEA
- SCANS
- NCTM

LearnMate can also be mapped to the national, state or local standards of your choice.



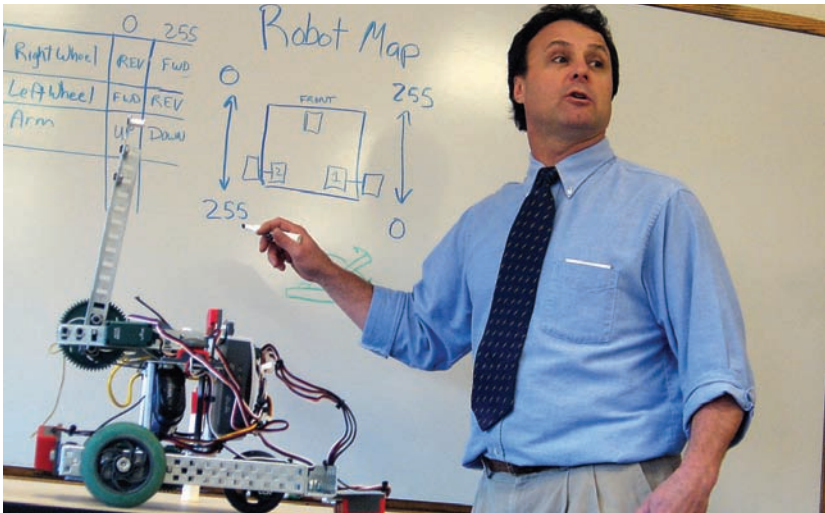
LearnMate enables seamless web-based classroom management.

Students can view content, interact in chats and forums, and complete assignments – anytime, anywhere.



Teachers can keep track of progress, create tests and assignments, and keep their entire gradebook online using the optional classroom management system.

LearnMate's graphic-based content editor allows teachers to customize existing content or create their own from scratch.



Comprehensive Lessons

You don't have to be an expert
to be the expert.

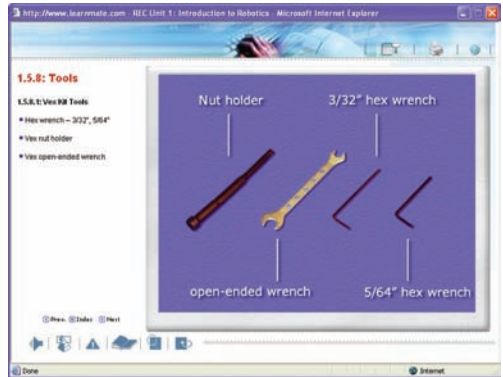
REC enables students to focus on learning,
so that teachers can focus on the students.

The curriculum assumes no previous robotics knowledge, guiding students step-by-step through the lessons.

When needed, help is never far away: glossaries, safety rules, and help files are available on each page.

Links to relevant Web sites are included for students who want more information.

A Professional Development training program is provided to teachers to help implement your REC program.

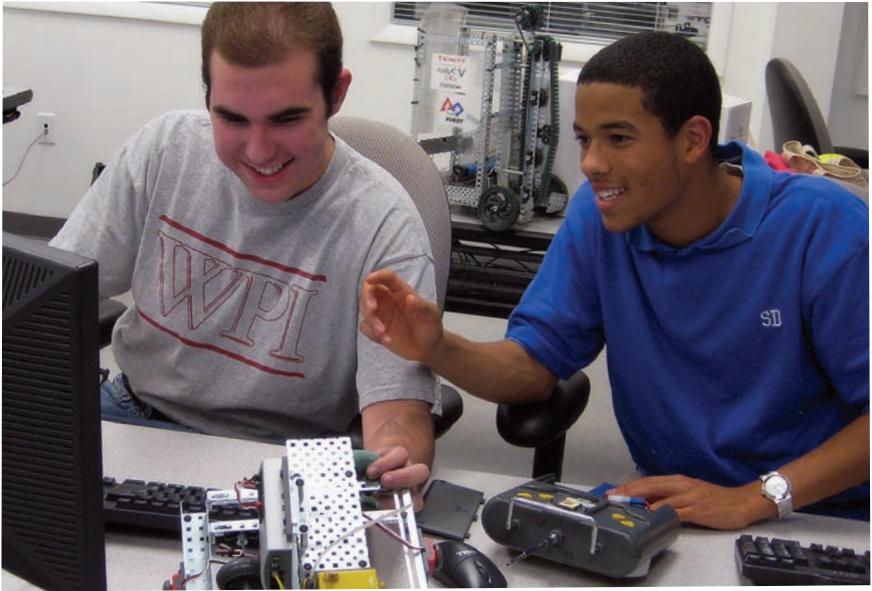


Teachers have instant access to handouts, tips, suggestions, sample programs and detailed instructions for activities and projects, included in the Teacher's Guide.



Learning and Fun

Together at last with engaging, hands-on learning.



Every student learns in a unique way. LearnMate delivers content in several ways to connect with varied learning styles.

Pictures, movies, or interactive animations are presented on every page to reinforce core concepts.

Tactical interaction with the Vex Robotics Design System engages students in the lessons.

Text-to-speech narration is available on every page to enhance reading and language skills.

Activities are designed with multiple levels of difficulty, allowing for stepped learning.

Content is presented using constructivist learning methods to build upon previous lessons.

Students can easily navigate through the content and focus on learning.

The 2:1 student to robot ratio enables both team-building and hands-on time with robots.



Cutting-edge Technology

The tools to turn imagination into innovation.



REC includes intelitek's easyC™ Programming Software, the easiest way to learn how to program your robot.

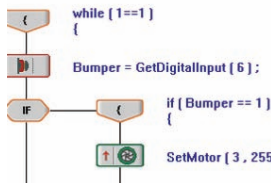
REC curriculum utilizes the Vex Starter Kit and necessary accessories for successful classroom implementation.



easyC™'s drag-and-drop interface takes the guesswork out of syntax.

Users can control the robot directly from the computer – great for experimentation and innovation.

The C code can be displayed in the same screen as the visual interface, reinforcing programming logic and preparing the student for advanced programming.



Combined, the Vex Starter Kit and accessories include more than 500 individual parts including sensors, gears, wheels, and metal. Also available are 20 accessory packs to let imaginations run wild!



Winner of the
Best of Innovation Award
at the
**International
Consumer Electronics Show**



Take a test drive.

Visit www.learnmate.com and log in for a free twenty minute demo.

Step 1

Log in to www.learnmate.com.
Username: recdemo
Password: recdemo




Step 2

In My Classes, click Robotics Engineering.



Step 3

In Modules, click the Launch Module icon  next to REC Demo.

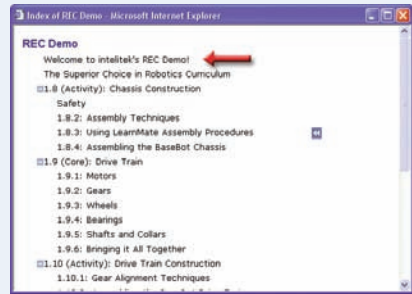


Step 4

Click the Index button.



The Index window opens.



Step 5

Scroll to the top of the index and click "Welcome to intelitek's REC Demo!"

Step 6

Follow the instructions in the LearnMate viewer and enjoy the demonstration.

Contact us to learn more about all of our great products and to get in touch with your local dealer.



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