

Introduce E.R.R.S.E.L.A. to Your Classroom!

New York Institute of Technology invites you to introduce an engaging new technology experience to your middle and high school students. Our E.R.R.S.E.L.A. robotics program, part of our Entrepreneurship & Technology Innovation Center (ETIC), teaches students ages 12 and up about robotics while actively engaging them in engineering and programming skills and principles. Each program session is designed to fit into a single class period and is accessible remotely from your classroom computers!

HOW THE PROGRAM WORKS

E.R.R.S.E.L.A. connects teachers and students to the ETIC right from their classroom! Students are led by New York Tech faculty in a series of fun and exciting hands-on robotic exercises and programming challenges. They're challenged to program the E.R.R.S.E.L.A. robot, a four-foot tall, 100-pound service robot designed at the ETIC, to navigate obstacle courses, deliver medications to patients in a simulated hospital environment, or move hospital equipment like wheelchairs and medical trays. Participating students learn about methods and career paths in engineering fields while getting firsthand experience in solving real-world engineering problems.

A sample classroom session includes:

- Class receives a 10-minute introduction to E.R.R.S.E.L.A., including robotic, software, and database design, and various control systems available. The class is introduced to, and challenged with, a simulated real-world problem that needs to be solved using the engineering method, analytical thinking, problem-solving skills, and custom programming tools on the E.R.R.S.E.L.A. website.
- After student teams develop programs and solutions using custom programming tools, control of E.R.R.S.E.L.A. is given to the team to test their solution! Students can watch the results of their carefully designed robotic routine from their classrooms as the E.R.R.S.E.L.A. robot navigates the obstacle course, moves medical equipment, or delivers medicine to a patient. Three separate camera views of the ETIC enhance the interactive experience.

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