

# SkillsUSA Robotics and Automation Technology Competition Resources

## General Information

Students will have access to the Robocell application and instruction materials prior to the competition. Students can access the application and the instruction materials as much as they need in the weeks prior to the competition to become familiar and learn to use and operate the system and to verify computer compatibility. Students will be able to write sample programs and ask contest officials questions via email.

## Learnmate and Instructional Videos

In order to facilitate the use of the software we opened a special Learnmate E-learning site <https://skillsusa.intelitek.com/>

One can self-register and self-enroll into the relevant Robocell Courses:

- Fundamentals of Robotics for SCORBOT-ER4u
- Advanced Robotic Programming with SCORBOT-ER 4u

**Please Note: The Robocell Software is protected by a license. After setup one can work with the software for a short time. After the evaluation period expires, the only way to work with the software is by launching it from the Learnmate E-Learning suite. Please watch the video explaining how to do that.**

One can follow the video here: <https://www.youtube.com/watch?v=fx8dNjjeFl4> get started video. Here you can follow visual instructions to self-register acquire and setup needed applications.

One can follow the video here: <https://www.youtube.com/watch?v=b70mNm6Yq4M> to learn how to create a Simple Simulated Robotic cell Using Robocell and Cell Setup. More videos would be added and included in the Links to Instructional Videos File in the Fundamentals of Robotics for SCORBOT-ER4u Resources.

Software Links:

Robocell: [https://downloads.intelitek.com/Software/Robotics/ER-4u/Robocell\\_Scorbase\\_Setup\\_2020%20B2.exe](https://downloads.intelitek.com/Software/Robotics/ER-4u/Robocell_Scorbase_Setup_2020%20B2.exe)

Siemens LogoSoft Demo:

With a demo version of LOGO! Soft Comfort, you can easily familiarize yourself with the LOGO!. You can create, simulate, archive and print out circuit programs via a PC for all LOGO! devices.

**RESTRICTION: You cannot transfer (download or upload) the circuit programs to/from a LOGO!.**

Once you come to the contest you would need to install the full version of the software.

<https://support.industry.siemens.com/cs/document/109782616/logo!-soft-comfort-v8-demo?dti=0&lc=en-WW>

LogoSoft Manual:

[https://cache.industry.siemens.com/dl/files/807/100782807/att\\_924632/v1/Help\\_en-US\\_en-US.pdf](https://cache.industry.siemens.com/dl/files/807/100782807/att_924632/v1/Help_en-US_en-US.pdf)

LOGO manual

[https://support.industry.siemens.com/cs/attachments/109741041/logo\\_system\\_manual\\_en-US\\_en-US.pdf?download=true](https://support.industry.siemens.com/cs/attachments/109741041/logo_system_manual_en-US_en-US.pdf?download=true)

There are many instructional videos on YouTube, please use them to study the software.

The camera used is a Cognex [In-Sight 2000](#). You will not have to program the camera just use the information it provides (like a sensor). In order to better understand the camera and software please use the following links:

Manual

[https://support.cognex.com/docs/is\\_580/ISE/EN/Manuals/is2000inst.pdf](https://support.cognex.com/docs/is_580/ISE/EN/Manuals/is2000inst.pdf)

Demo Video

<https://www.youtube.com/watch?v=dpqOB7kzZAE>

Software

<https://support.cognex.com/en/downloads/detail/in-sight/4531/1033>

In order to use without a camera you would need to register with Cognex and get an emulator key here: <https://support.cognex.com/en/InsightEmulatorKey>