ROBOTICS

ABB Robotics Education Package

Unlock the potential of STEM education with robots

About the Package

The ABB Robotics Education Package is a ready-to-use training kit that equips students with key skills and knowledge in robotics and automation, preparing them to excel in a future of work where robots are as common as laptops today.

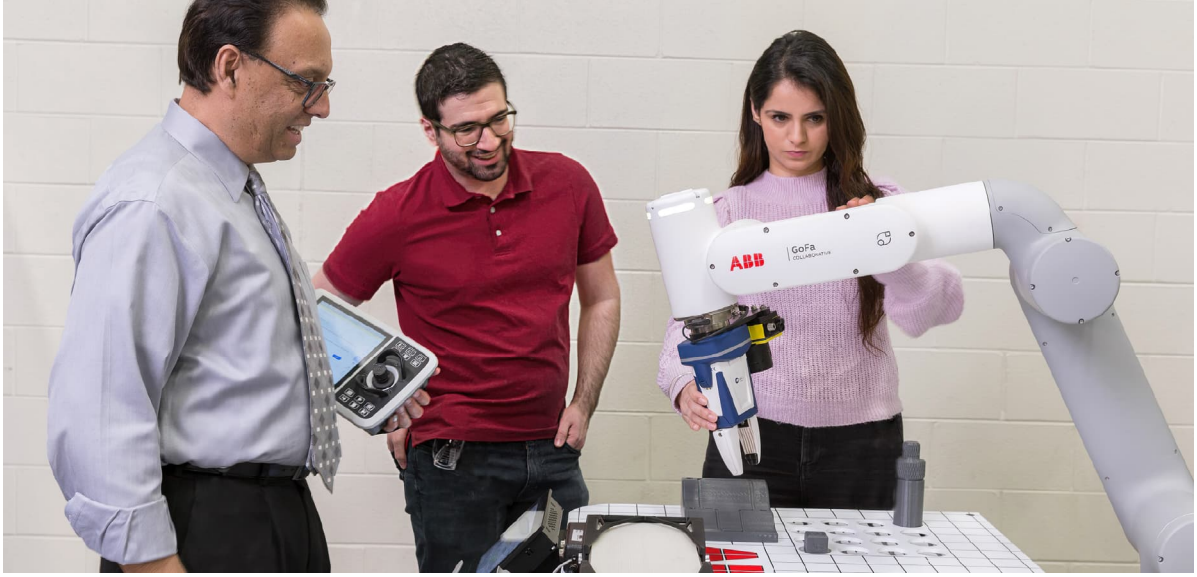
Featuring a collaborative robot cell, student-friendly coursework, and a globally recognized STEM certification, the package empowers both educators as well as students, anywhere in the world, to get hands-on experience in real-life robotics applications.

Designed by experts at ABB in collaboration with educators, the ABB Robotics Education Package provides a strong foundation in STEM (Science, Technology, Engineering, and Math), no matter the student's educational background.

80% of educators in a recent survey believe robots will shape the future of employment in the next decade.

Yet only **1 in 4** currently use robots in their teaching program, creating a crucial skills gap.

With the ABB Robotics Education Package, we aim to close this gap by providing a powerful, yet easy-to-use tool that students worldwide can train with to prepare for the future of work.



What's in the package?

1. Easy to Use Education Cell

2. Comprehensive course materials

3. Globally recognized STEM certificate

1. Easy-to-Use Education Cell – This turnkey STEM education cell is ideal for technical training at universities, trade schools, and workforce development organizations.

Components
- GoFa CRB 15000 robot with OmniCore controller
- Education desk
- Electric gripper
- STEM Education Activity Tabletop
- 3D Printed STEM Education Activity Kit

Options
- Conveyor System
- Integrated vision system
- B&R Touchscreen HMI

2. Comprehensive Course Material – A broad array of real-world robotics concepts and applications, designed for both students and teachers.

Components
- Instructor materials
- Student materials
- Online training modules
- Fun lab exercises
- RobotStudio simulations/pack and go files
- Education cells that are available in a virtual computer format as identical replicas of the real cell
- Question bank with over 400 tests and answer keys
- 100 free premium RobotStudio licenses per school

3. STEM certification programs – A globally recognized training certificate that boosts students' employment prospects across the world and increases appeal of the education institute.

Components
- Teacher certification
- Student certification

Benefits of the Education Package

Bridge the skills gap
Designed by experts at ABB in collaboration with educators, the package is an easy-to-understand interface for students to discover and learn industrial concepts and skills.

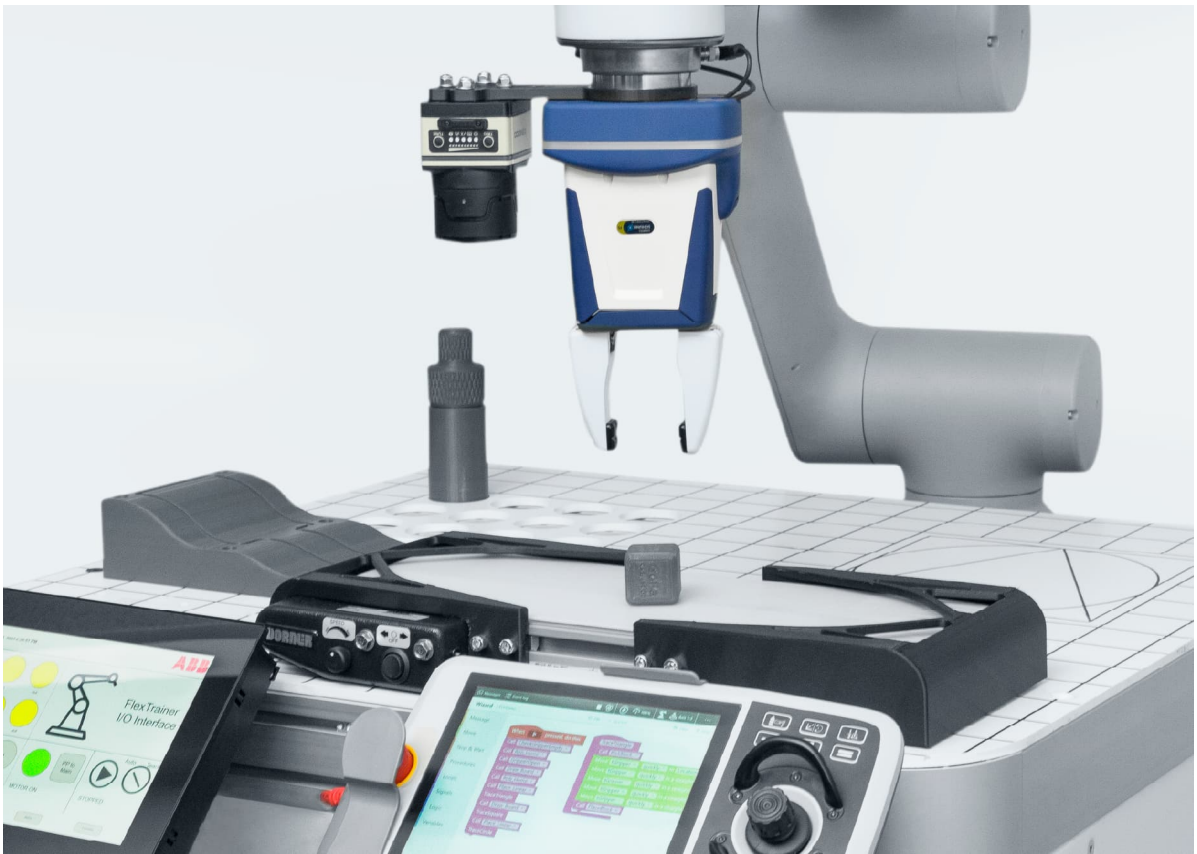
Create careers out of curiosity
Easy-to-use cobots and intuitive software encourage students from all streams of education to explore the possibilities of robotics.

Empower your educators
The ready-to-use turnkey package allows educators to swiftly integrate high-quality robotics training into your existing programs, allowing you to focus on delivering instructions that meet the needs of your students.

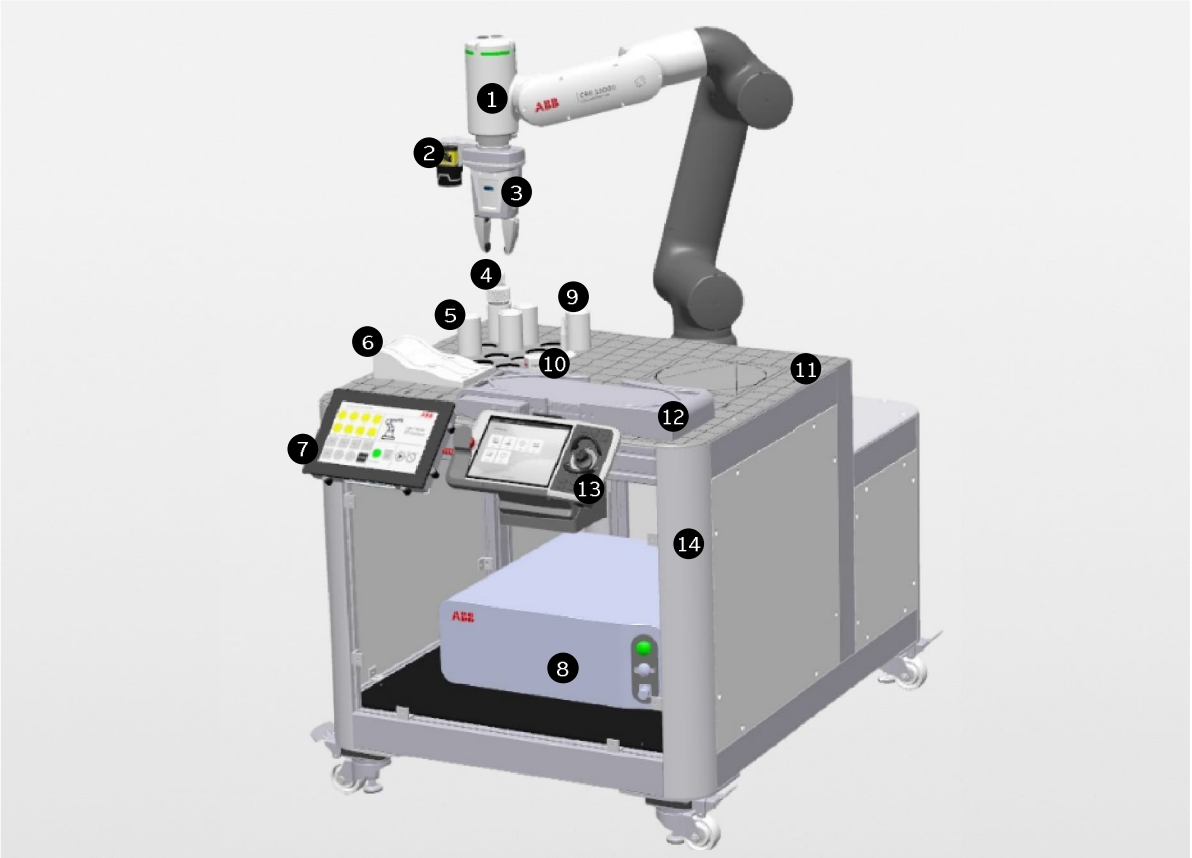
Customize curriculum
Additional advanced training lessons are included in the package so teachers can adapt the course to match students' skill levels.

Learn from the leaders
Access a world-class portfolio of hardware and software and learn from the best in robotics through comprehensive training and support.

Enhance employment opportunities
Students receive training in real-life industrial applications and pick up occupational skills that make them more marketable to potential employers.



Technical Specification



Reference Key		
1	CRB 15000 GoFa	Articulated 6-axis robot, designed for flexible robot-based automation
2	Vision Camera	Enables robot or machine to "see" and interpret its environment
3	Gripper	Schunk C64 Electric Gripper
4	Blocks	Three 3D printed blocks with round tips to support lab activities
5	Block holder	Five block holders to support lab activities
6	Wave Plate	One wave plate to support lab activities
7	B&R HMI	B&R Power Panel C50 with MappView HMI (optional)
8	Controller	ABB OmniCore controller (enclosed)
9	Pointer Tool	One pointer tool to support learning about tool center points
10	Dice	Two 3D printed dice to support lab activities
11	Education Activity Tabletop	Plastic detachable platform to conduct lab exercises
12	Conveyor	To be integrated with training desk (optional)
13	FlexPendant	Handheld operator unit used to run programs, jog manipulator, and modify programs
14	Education desk	Mobile desk to put robot on and easily move around in classroom

Education Cell	
Machine dimensions (L x W x H)	1143 mm x 838,2 mm x 863,6 mm
Weight	300 kg
Connection data	
Electrical connection	110 V single-phase three-wire supply with a NEMA 5-15 plug
Connected load	7,2 amp
Electrical control voltage	24 VDC