Engineering Education

Enhance your engineering program

Rethink Robotics is transforming engineering education with smart, collaborative robots powered by our revolutionary Intera® software platform. Our versatile robots increase access to advanced robotics in the classroom and help you educate students for future-facing careers in a variety of disciplines and industries.

Educate tomorrow's engineers, today

Safe and affordable, our cobots help prepare undergraduate and graduate students with the knowledge they need to meet ever-evolving global challenges. You can easily insert these robots into your current courses and bring complicated engineering theories to life, and students can use our ROS-based Sawyer SDK to build and test programs on the Sawyer robot.

Connect with global industry and research

Our cobots are already on the job in factories and research laboratories all over the world. By incorporating these cobots into engineering programs, colleges and universities can forge strong ties with local industry, and provide them with highly trained engineers and engineering managers.

Boost student recruitment and engagement

Collaborative robots are powerful recruiting tools that attract both traditional and nontraditional students to engineering and robotics. Our cobots help redefine the image of engineering education, and instill a new level of excitement and engagement. Educational institutions report dramatic increases in enrollment and retention by incorporating Rethink's robots into their curricula.

Deliver on the promise of STEM

Manufacturing executives report a severe shortage of engineers, with many expecting it to worsen by 2020.[1] Rethink's robots are practical learning tools for science, technology, engineering and math education. With their inherent safety, our powerful Intera software and Sawyer SDK, our robots help engineering students advance their knowledge in everything from mechatronics to machine vision to kinematics and motion planning.

[1] Manufacturing Institute and Deloitte, 2015.

Join our worldwide community

Rethink Robotics' online User Forum connects you to hundreds of educators and researchers globally who post their experiences and insights in this online community. From sharing best practices to sparking international collaboration, the Rethink Robotics' User Forum helps you get the most from your collaborative robot.
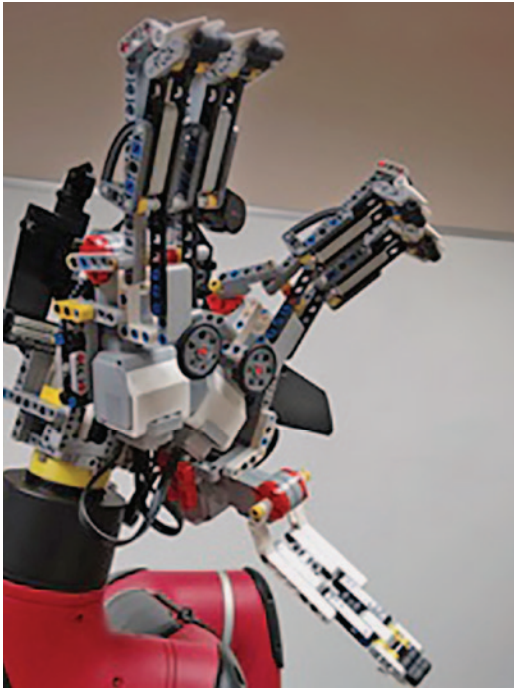
rethink robotics®

Engineering Education

Educational institutions are using Rethink's robots in a wide range of courses, including:

- Computer Programming
- Mechatronics
- Kinematics and Motion Planning
- Robotics and Control Systems
- Machine Vision

Robot Specifications

Pay Load	4 kg
Max Reach	1260 mm
Gantry Reach	900 mm
Task Repeatability	±0.1 mm
Typical Tool Speed	1.5 m/s
Degrees of Freedom	7
Operating Temperature	0°C - 40°C, 80% Relative Humidity
Joint Ranges	J0 - J3 = 350 degrees, J4 - J5 = 340 degrees, J6 = 540 degrees

Robot Specifications

Robot Weight	19 kg
Power Requirements	100-240 VAC, 47-63 Hz, 4A Max
I/O Ports (Controller)	8 digital in / 8 digital out
Communication	Modbus TCP, TCP/IP
Safety Circuit	PLd Category 3
IP Class	54
Collaborative Standards	ISO 10218-1:2011
I/O End of Arm	4 digital in / 4 digital out / 2 analog in / 24 VDC 2A, ClickSmart Plate Required

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