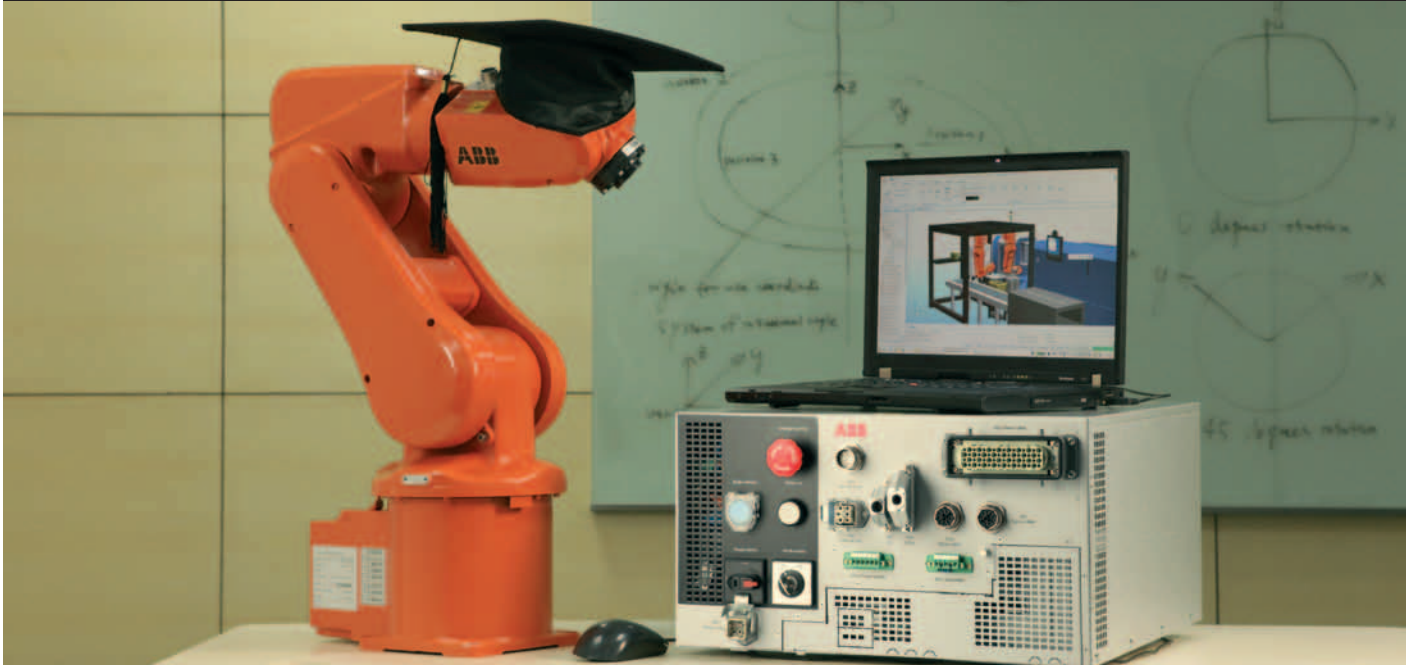# Learn with ABB
Robotic package for education

Robots are playing an increasingly vital role worldwide in helping manufacturers to boost their competitiveness. Capable of handling a multitude of tasks, from food packaging through to precision machining, today's industrial robots can help educate the engineers of tomorrow to achieve a raft of benefits including enhanced productivity, improved product quality and reduced wastage.

To help equip the engineers of tomorrow with the skills needed for a robotic future, ABB is offering schools and colleges a new robotic package, designed to demonstrate and teach real-life programming concepts in the classroom.

Based around ABB's smallest ever robot and its compact robot controller, the package enables students to increase their awareness and understanding of the principles and operation of industrial robots used in modern manufacturing applications.

Utilizing the same technology used throughout industry, ABB's educational package gives students hands-on experience and an opportunity to learn the skills needed for effective management of modern robotic manufacturing systems.

Power and productivity
for a better world™

ABB
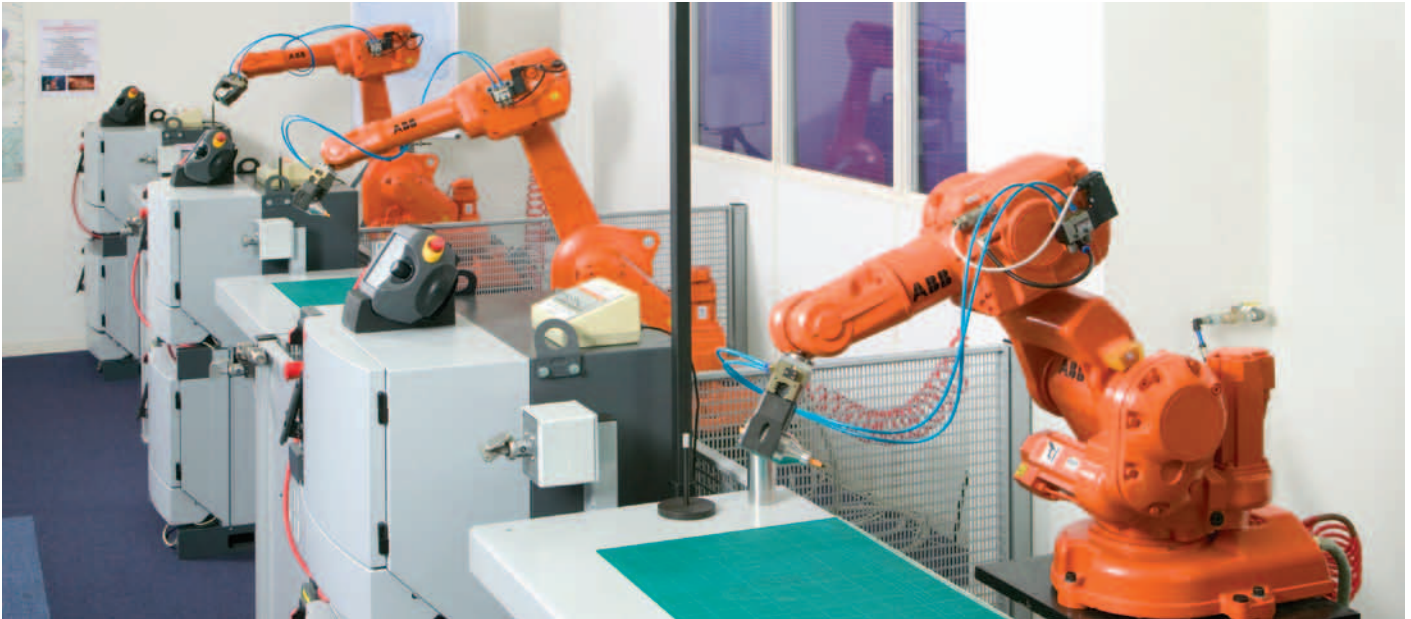
Schools, colleges and universities need an affordable yet high-quality means of teaching modern manufacturing concepts.

ABB's robotic package for education provides valuable opportunities for both students and teachers. Schools need an affordable means of teaching modern manufacturing concepts to encourage more students to move into the engineering and manufacturing sectors.

With ABB's robotic packages for education, classrooms across the world can explore these applications and expand their understanding of today's industrial environment.

ABB's robotic package for education is designed to give students an insight into:

– How industrial robots operate
– The design and control principles of industrial robots
– The design and control principles of robotic work cells
– Programming ABB robots using the offline programming software, RobotStudio
– Robotic cell hazards, health and safety and maintenance requirements

Big strides, small footprint
Whilst the package may be designed to give students a big stride forward into the world of robotic production, the amount of space needed for installing it is surprisingly small. It can be used to teach students about applications including robotic welding and plasma cutting; picking, packing and palletizing; machine tending, materials handling and product assembly; and advanced vision-related programming.

ABB's robotic package for education provides valuable opportunities for both students and teachers.

Many universities invest in multiple robot training packages.

With the ABB FlexPendant´s colorful screen, logical and simple visual language and graphical user interface programming, operation and information access is easy.

RobotStudio, ABB's simulation and offline programming software provides simulations of real-life robotic applications.

Learning with robots

With ABB's robotic packages for education, schools, colleges and universities receive instant access to the latest in automation software and robotic technologies, including:
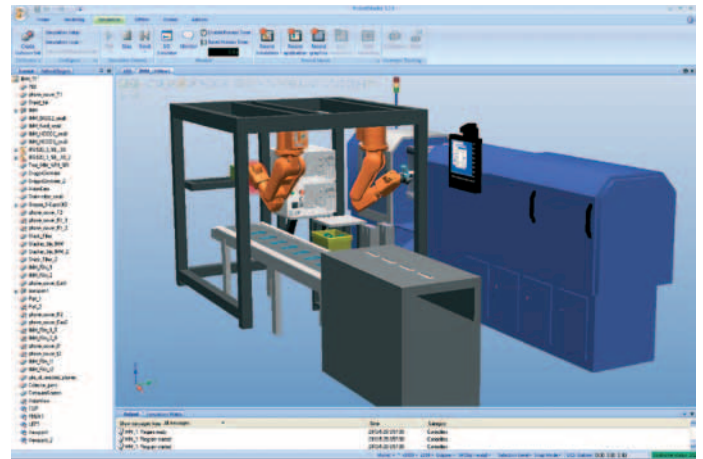
– ABB's IRB 120 robot
– IRC5 compact controller
– 50 licences for RobotStudio
– Exclusive software bundle (optional)

The IRB120 robot features a light, aluminium structure. Weighing just 25kg, it is not only easily portable but is ideal where space is at a premium in classrooms or practical work areas.

The IRC5 Compact controller transforms offline programming into online performance. Featuring sophisticated motion control technology, the controller ensures that the routines programmed into RobotStudio are mirrored on the production line.

ABB's simulation and offline programming software, RobotStudio, enables students to prepare realistic simulations of real-life robotic applications. The package includes 50 user licences, enabling 50 simultaneous users at any one time.

ABB also provides a number of interactive ways for budding robot programmers to share and learn. With the RobotStudio community, you can explore the latest discussions, post ideas, share and download simulations and learn about the latest product updates. This is your community.

Exclusive software bundle (optional): 13 additional software functions are available in a cost-effective bundle, including SoftMove, Multitasking and Collision Detection.

Weighing only 25kg, the IRB 120 offers a wealth of installation possibilities, whether inside a cell, on top of a machine or close to other robots.

ABB's world leading IRC5 robot controller, includes superior motion control and flexible RAPID language.

Training and technical support is under-pinned by an extensive global sales and services network.

Our training center is fully equipped for hands-on training with programs developed to address your individual training requirements.

Service and support

Our service offering

The services offered by ABB's robotics business span the entire asset lifetime, from purchasing, to disposal and recycling. Through the lifetime of a robot, ABB provides training, technical support and local engineers, supported by an extensive global sales and services network.

Parts

With a high availability of spare parts in stock, ABB can ship replacement parts from one of its local service units at any time of day or night within 24-hours. If needed, a service engineer will be dispatched to fit the new part.

Consultancy

With a focus on helping customers achieve greater efficiency from their production equipment, our engineers provide regular consulting visits, covering complete system upgrades or simple programming changes to major system layout and equipment changes.

Training Centers

ABB's state of the art robot training centers offer a wide range of training options, from standard robot training modules to system and process-based training combining formal class-based tuition with practical experience. Training is available to cover the most common robotic applications, whilst the use of purpose-built 'production booths' aids 'real-life' hands-on training.

For more information contact your local ABB representative, or visit

www.abb.com/robotics

Notes:

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB.

Power and productivity
for a better world™

ABB