

## Robotics & Materials Handling 1 With SCORBOT-ER 4u

### SPECIFICATIONS:

#### **Robotic system**

SCORBOT-ER 4u mechanical arm and Controller-USB

#### **Software:**

Course 1: SCORBASE for Controller-USB

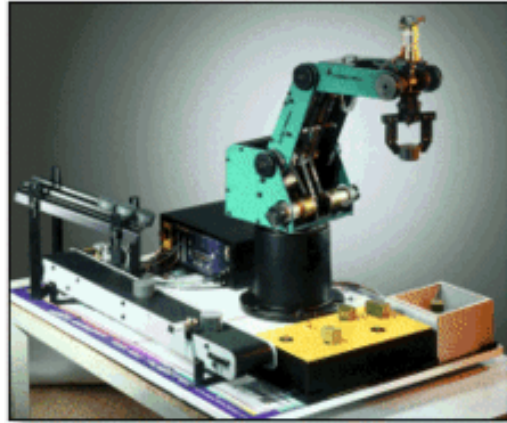
#### **Additional components:**

Linear conveyor with photoelectric sensor  
Gravity parts feeder  
Parts bin and parts  
I/O experiment table  
Laminated coordinate grid

### LEARNING & MANAGEMENT TOOLS:

#### **Topics - Course 1:**

Introduction to Robotics  
Using Robotic Control Software  
Recording Robot Positions  
Writing and Running a Robot Program  
Cartesian Coordinates  
Inputs and Program Jumps  
Outputs  
Joint and XYZ Coordinate Systems  
Relative Positions  
Joint and XYZ Coordinate Systems  
Subroutines  
Contact and Non-Contact Sensors  
Servo Control of the Conveyor  
I/O Control of the Conveyor  
Conclusion



Robotics & Material Handling 1 (RMH1)

***Content format and delivery:***

Delivered to student desktops via the Internet or LAN network

Interactive, multimedia format with high-quality graphics, animations, video, audio and demonstrations that teach complex procedures and show real-world applications

Contains small, easily assimilated segments of instruction

Contains approximately 15 activities, each of which provides 45-50 minutes of learning content

Each activity clearly defines learning objectives, materials required, related competencies and skills, self-check assessments, background and theory, and detailed procedures in the form of tasks

Includes computer-based tests and self-check assessments using many types of questions, such as multiple-choice, true/false, fill-in-the-blank, drag and drop, hotspot

Includes subject-related glossary and set of resource links

***Instructor resources (as appropriate)***

Hardware and/or software installation and operation guides in printable format  
Programming and/or project solution files