

Robotics Course Brochure

by  Tutorx
REDEFINE LEARNING EXPERIENCE



Build, Program, and Innovate the Technology of the Future

Robotics Skills Can Open Doors to High-Growth Tech Careers From self-driving systems to smart devices and AI-powered automation, robotics is shaping the future of every industry. Learning robotics early helps students develop problem-solving, creativity, and technical skills that are in high demand globally.

This course is designed to help learners build, program, and understand intelligent machines through hands-on learning and real-world applications.

About TutorX

TutorX provides personalised one-on-one online learning for students across global curricula, including the UK, US, Australia, and Canada, with a strong focus on practical and future-ready skill development.



A Complete Introduction to Robotics and Innovation

Robotics combines electronics, programming, and intelligent systems to create machines that can perform tasks, solve problems, and interact with the world.

What Students Learn

01

How robots are designed, built, and controlled

02

How sensors and actuators enable movement and interaction

03

How coding is used to program robotic behaviour

04

How AI makes robots intelligent and autonomous

05

How robotics is applied in real-world industries



Tools and Technologies You Work With

01

Arduino and basic microcontrollers

02

Robotics kits and components

03

Sensors, motors, and control systems

04

Beginner-friendly coding platforms and languages

How Learning Happens

01

Step-by-step structured progression

02

Hands-on building and experimentation

03

Real-world examples and mini projects

04

One-on-one personalised sessions



Foundations of Robotics

Development

Learn the core concepts behind how robots function and interact with their environment.



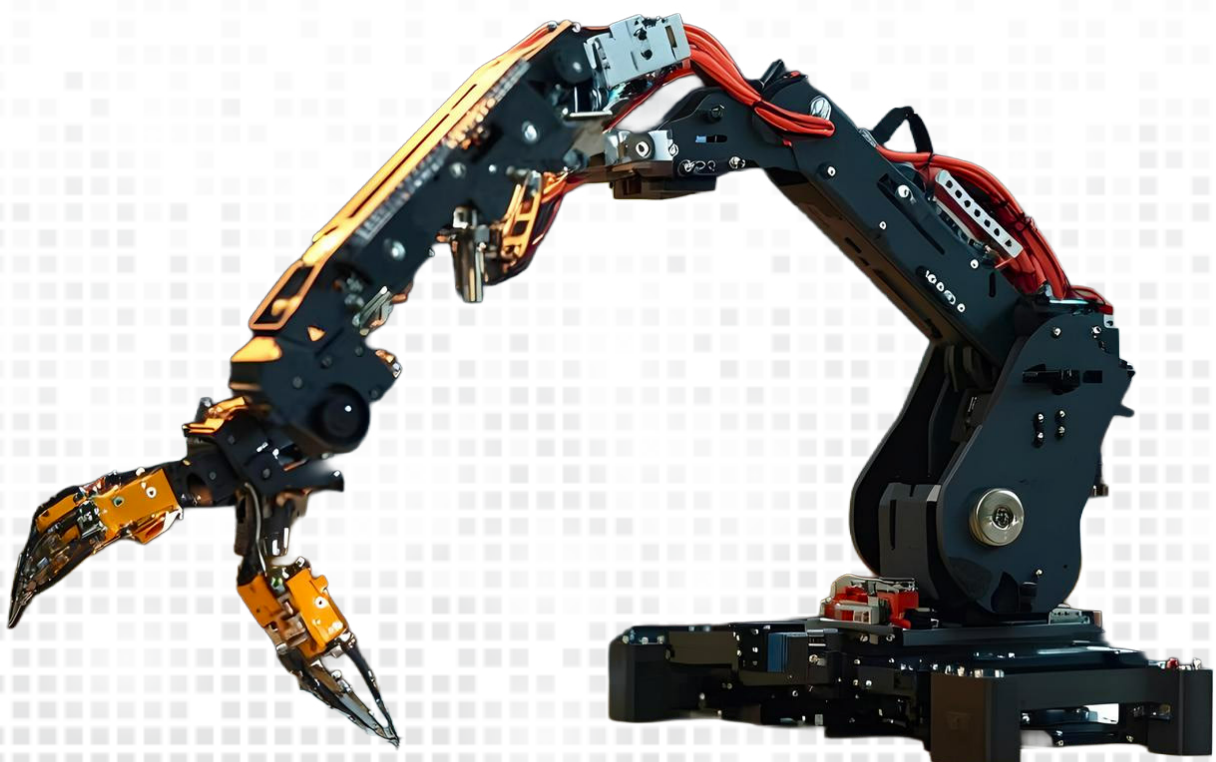
What You Learn

- Robot components and system structure
- How robots respond to inputs
- Sensors, actuators, and movement



Outcome

- Understand how robotic systems work
- Build a strong conceptual foundation
- Identify key components of robots



Electronics and Components

Understand the building blocks that power robotic systems.



WHAT YOU LEARN



Basics of
circuits and
electronics

Motors,
controllers,
and power
systems



Working with
sensors and
inputs



OUTCOME



Understand
how hardware
enables robot
movement

Gain
confidence in
handling
components



Connect theory
with real-world
applications



Robot Assembly and Design

Build robots using hands-on projects and structured guidance.



What You Learn



Designing
and assembling
robot
structures



Using
robotics kits
and tools



Testing and
improving robot
performance



Outcome



Build working
robot models



Develop
design and
engineering
thinking



Learn
through hands-on
experimentation

Robotics Programming

Learn how to control robots through coding and logic.

What You Learn

- Programming using Scratch for beginners
- Introduction to Python and C++
- Logic building and control systems

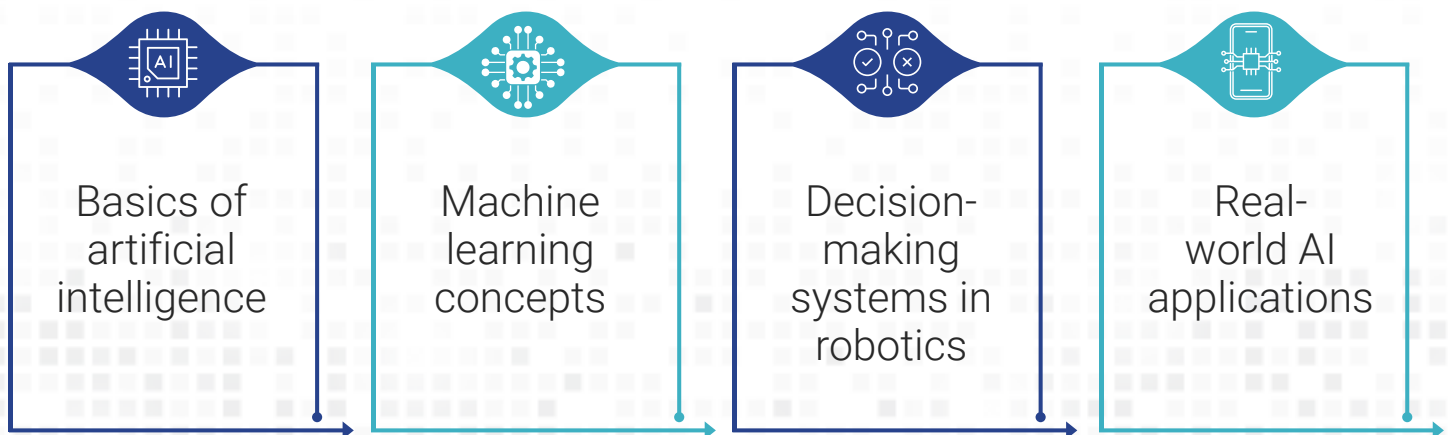
Outcome

- Program robots to perform tasks
- Build strong logical and coding skills
- Understand automation fundamentals

AI and Machine Learning in Robotics

Explore how robots become intelligent and make decisions.

What You Learn



What You Learn

- Understand how intelligent robots work
- Learn how machines process and respond to data
- Build a foundation for AI-driven systems

Robotics Simulation and Control

Learn how robots are tested, controlled, and optimised.



What You Learn



Simulation environments and tools



Robot movement and control systems



Basics of navigation and automation



Outcome



Understand robot behaviour and performance



Test and refine robotic systems



Gain exposure to advanced robotics concepts



Industrial Robotics

Understand how robotics is used in manufacturing and automation.



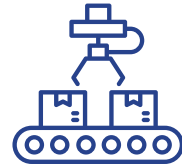
WHAT YOU LEARN



Automation systems
in industries



Machine
operations and
workflows



Robotics in production
environments



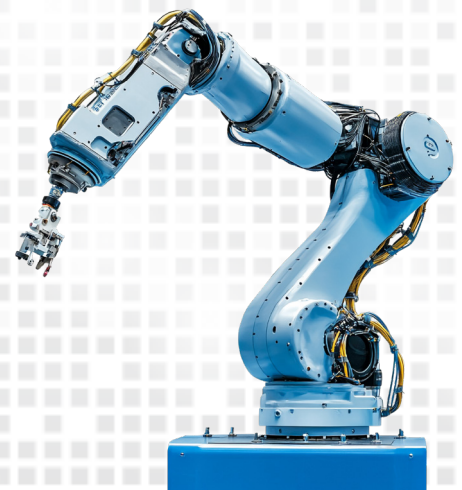
OUTCOME

Understand how
industries use robotics



Build awareness of
automation systems

Connect learning to
real-world applications



Robotics in Everyday Life

➤ What You Learn

Robotics in
healthcare and
medical devices



Smart home and
IoT systems



Robotics in
transportation
and AI systems



➤ Outcome

Understand how
robotics impacts
daily life



Recognise real-
world applications
of robotics



Build curiosity for
innovation and
technology



Real Project Experience

Students build and work on robotics projects to apply their learning.



WHAT YOU LEARN

- » Hands-on project building
- » Problem-solving through real scenarios
- » Portfolio development

CERTIFICATION

Students receive a course completion certificate recognising their robotics knowledge and practical skills.

CAREER OPPORTUNITIES

Robotics opens pathways to future careers such as:



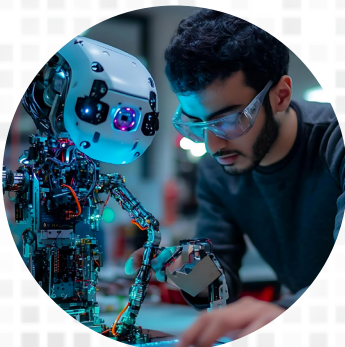
**Robotics
Engineer**



**Automation
Engineer**



**AI and Machine
Learning Specialist**



**Mechatronics
Engineer**



**Research and
Innovation Roles**

Why Choose TutorX

1:1 personalized
classes

01

Certified &
experienced tutors

02

Flexible scheduling

03

Real project-based
learning

04

Regular progress
tracking

05

Parent feedback
sessions

06

Start Your Robotics Journey Today

Robotics combines creativity, engineering, and intelligence. Learning it early prepares students for some of the most exciting and future-focused careers.

Book Your Free Trial Session Today



Email: info@thetutorx.com
Whatsapp: (+91) 9013504886

