

avishkar



Advanced Microdegree Course

Ages 10+

Benefits of this program



24 one-hour live online sessions with expert trainers in 3/6 months



21 class projects + 21 additional challenges to master your skills



Demo Days to present personal projects and get expert feedback



Detailed reports of creative and conceptual learning



Global Community - Innovate with others and connect with experts



Free expert counselling to help with child's progress

Avishkaar's educational experience proudly bears
the **STEM.org** trustmark



Learn skills that are required for 85% jobs of the future



Robotics
Mechanism



Client Server
Communication



Automated
Systems



Smart Machines



Learn using



AMS

Avishkaar Maker Studio
Block Programming Software

Award Winning **Robotics Pro Kit (ER-Series)**



Additionally, specially curated

Pro Kit Add-ON

Curriculum Overview

Milestone 1



**Expert Mechanical
Engineering Course**

Milestone 2



**Expert Autonomous
Robotics Course**

Milestone 3



**Master Robotics
Course**

Milestone 1

Expert Mechanical Engineering Course



Sessions

01



Rack and Pinion Mechanism

- Rack and pinion mechanism
- Steering mechanism

02



Steering with Gears

- Steering with Gears Mechanism

03



Stamping Machine

- Linkage Mechanism
- Application: Force & Power

04



Archery robot

- Gear System
- Parabola Motion

5



Long range Ball Shooter

- Conversion of forms of energy
- Pull - Back Mechanism

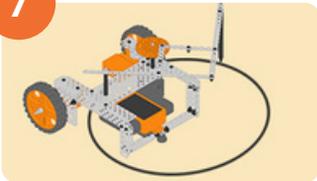
6



Mechanical press

- Generating High Torque using Gear Train
- Perpendicular Shift

7



Pantograph Robot

- Holder mechanism
- Pattern Generator using Gears

Demo Day



- Demonstration Skills
- Design Thinking Process

Milestone 1 Certificate

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Expert Mechanical Engineer

This certificate has been awarded to

for completion of "Milestone 1 : Expert Mechanical
Engineering Course " on
of
- Robotics Advance Microdegree.

Tarun Malhotra

Founder & CEO, Avishkaar



Milestone 2

Expert Autonomous Robotics Course



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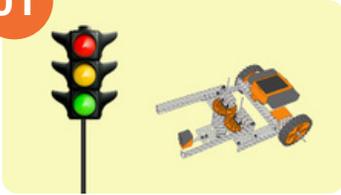


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Sessions

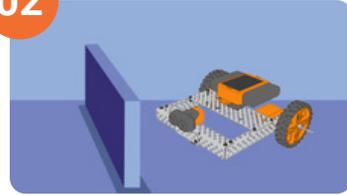
01



Traffic Light Observer

- IR Sensor Application
- Intensities of IR sensor

02



Obstacle Avoider on Count

- Speed, Distance and Time Application
- Ultrasonic Sensor Application

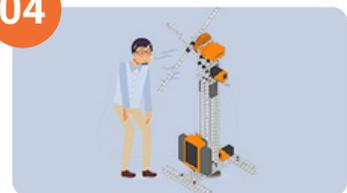
03



Automated Smart Dustbin

- Ultrasonic Sensor Application
- Feedback concepts with Sensor

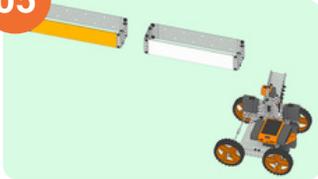
04



Automated Pedestal Fan

- Integration of 2 sensors
- Speed Control with Sensor

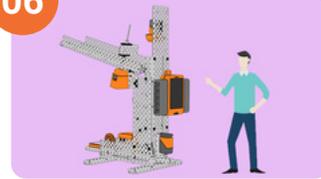
05



Automated Warehouse Management

- Integration of 3 sensors
- Sorting Mechanism

06



Smart Vending Machine

- Dispensing Mechanism
- Prototype Robot

07



Automated Flag Hoist Robot

- Linear motion mechanism
- Complex Machine

Demo Day



- Demonstration Skills
- Design Thinking Process

Milestone 2 Certificate

avishkaar



0001
0100

Expert Autonomous Robotist

This certificate has been awarded to

for completion of "Milestone 2 : Expert Autonomous
Robotics Course" on

of

- Robotics Advance Microdegree

Tarun Golla ..

Founder & CEO, Avishkaar



Milestone 3

Master Robotics Course



Sessions

01



Brain as Server

Initializing ER series FULL Brain as Server
Understanding Client and Server

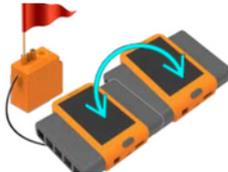
02



Phone Brain Talking

Sending messages from phone to ER
- Series FULL brain

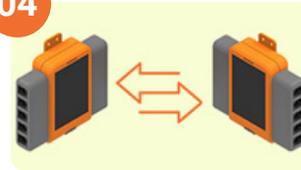
03



Controlling Motors

Control Motors using ER-series brain

04



Data Transfer

Send data from 1 ER Series FULL brain to another

05



Talking Brain

Chat Bot Application using
ER Series FULL brain

06



Speed Control

Control the Speed of Bot
using ER Series Brain

07



Wireless Remote

Application of WiFi module

Demo Day



- Demonstration Skills
- Design Thinking Process

Milestone 3 certificate

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Master Roboticist

This certificate has been awarded to

for completion of "Milestone 3 : Master Robotics

Course" on of

- Robotics Advance Microdegree.

Tarun Golla ..

Founder & CEO, Avishkaar



Stay on top of the child's progress



Parents get detailed reports including:



Projects made by students



Feedback from trainers



Badges earned



Progress on skills



Microdegree Certificate

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Certificate of Completion

Robotics Advanced Microdegree

is awarded to

on

for completion of all the three milestones:



Milestone 1
Expert Mechanical
Engineering Course



Milestone 2
Expert Autonomous
Robotics Course



Milestone 3
Master Robotics
Course

Tarun Bhatia

Founder & CEO, Avishkäär



**Curriculum designed
by alumni and
veterans from
prestigious universities
and companies**



Ace Design + Communication Skills



Let's Avishkaar

Your kids get access to our global community Let's Avishkaar with thousands of innovators from across the globe



Monthly expert webinars



Free workshops and how-to-videos



Exciting content on next-gen tech



Regular competitions win prizes upto Rs10,000/-



Avishkaar League

Prepare to participate in
Asia's Biggest Innovation
& Robotics Competition





United States



Dubai



Russia



China



Maldives



Singapore

Win prizes upto
Rs. 5 lacs
including sponsored
international competitions

Learn from the masters



Pragma
Robotics Trainer

6000+ hours

Pragma is passionate Robotics & Coding Instructor with 20+ years of experience.



Shweta
Curriculum Lead

6000+ hours

Shweta is a driven Robotics & Coding trainer with over 15+ years of experience.



Gautam
Robotics Trainer

6000+ hours

Gautam is one of our most beloved Robotics, Coding & App Dev trainers.



Amarpreet
Curriculum Lead

6000+ hours

Amarpreet is a young coding & electronics trainer full of passion and zeal.

Hear from our happy customers



Kiyansh, 10

"I made a humanoid robot to help take care of COVID patients in isolation"



Aarav, 7

"I have made a Smart Dustbin that works on my command. This will help in contactless disposal of the waste"



Adhiraj, 10

"I made an automatic screwdriver to help me and my dad with our robotic projects"

Still not convinced ?

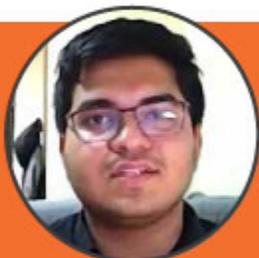
Trust the 200,000+ young innovators & the
'Stars of Avishkaar'
who're already flying high across the globe..



Sachi Sinha

3rd Year,
Electronics and Computer Engineering,
National University of Ireland, Galway

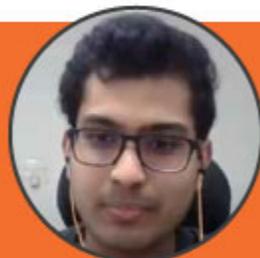
[Watch Video](#)



Mihir Vardhan

1st Year, Electrical Engineering,
University of Illinois,
Urbana-Champaign

[Watch Video](#)



Rishabh Garg

Student, Georgia Tech
IRC League Winner

[Watch Video](#)

Hear from 50,000+ students who are learning coding and robotics with us!



Use the link or scan
the QR code to
watch this video!



https://www.youtube.com/watch?v=mCfF8sBJ_l4

Watch Now!

FAQs

Is this suitable for kids who have never done any coding before?

Yes. This is the perfect course for kids aged 8+ who have never done any coding before. If your kids love tech and want to make their own awesome software and video games, then they should join this course today!

Do I need to pay separately for the software and kit used in the course?

The cost of the software and kit are already included in the MRP. If you are an existing Avishkaar customer who already have our kits and just want the training, then click on the 'I already have the kit' option to see the training only cost.

What is the format of the course?

It is a live online course with 1:3 batch strength, where each week the students make one new project with a trainer on video call, and get one project as homework.

Would I receive some guidance for the demo day projects?

Avishkaar's "Demo Day" is when your child learns to apply knowledge to action.

- It is probably the most significant part of the course as the child develops skills like self-learning, confidence, crisp and precise articulation, engaging with people, and problem-solving skills while working on creating an all-new project.
- While the child is preparing to present the demo day project, they can request guidance from the mentor. The mentor would answer the child's questions and direct the child in the right direction. However, making and presenting the project is entirely the child's responsibility.

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BUILD. SHARE. WIN

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