

Meritus AI

AI POWERED SOLUTIONS

for K-12 Schools



CATALOG 2026

STEM - CODING - ROBOTICS

Meet Meritus

Making Students Future Ready !

12+

Years of Global Experience

100000+

Users

25+

STEM & Robotic Products Developed

100+

AI Courses & Projects created

Who We Are



Meritus was founded by a team of educators and technologists who are passionate about helping students explore and understand the fundamentals of **STEM, Coding, Robotics & AI** and the role that it plays in our daily lives.

Our founders and governing board have been involved with education and computer science for decades.

Our mission is to help students become future-ready as they prepare for careers in the era of AI and ChatGPT.



Founder
IIT Madras Alumnus



Equity
Diversity
Inclusion



"Women
Transforming India"
award by Govt of
India



Phiro Robot
selected by Intel as
America's Greatest
Makers

Instructional Design Approach



We are using a comprehensive 3-step strategy to empower learners



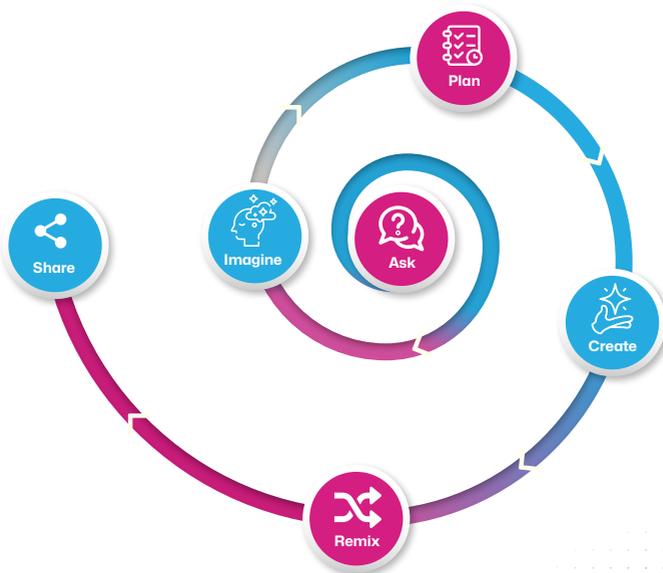
Solutions and Impact :

We believe that our 3 step approach will lead to student success measured by positive learning outcomes and educational impact.

Design Thinking



At Meritus, our Instructional Design methodology aligns with the visionary creative learning spiral concepts crafted by Dr. Mitch Resnick at MIT. Our goal is to intricately weave real-life scenarios with digital experiences, fostering an environment where student's creativity seamlessly take root, grows, and flourishes organically.



Prepared Educators



Embark on the journey of classroom transformation with Meritus AI, where the synergy of teacher-ready tools and AI technologies ignites creativity and innovation among your students.

Our commitment extends beyond providing resources: We empower educators and school leaders with the knowledge to leverage technology in alignment with learning science and the school's vision.

Pioneering a holistic AI learning experience, we seamlessly integrate AI-powered robots with our online courses, revolutionizing the way education embraces artificial intelligence.

Resources:

Empower your teaching journey with Meritus. Access our comprehensive online resources seamlessly through our Learning Management System (LMS).

Professional development:

Invest in your growth with our unwavering commitment to continuous professional development. Our focused and virtual training, mentoring, and coaching programs ensure your success.

Support:

Rest easy knowing that Meritus technical experts are at your service, providing reliable support whenever you need assistance. We are with you every step of your journey.

Pedagogy



Our pedagogy draws on years of collective experience running multiple K12 Schools, manufacturing Edtech products and curating online AI learning experiences. Our instructional design for educational activities and curriculum materials aims to craft high quality, authentic, and creative educational experiences for our learners.



Themes & Career Pathways



Aligned to AI4K12 Guidelines (CSTA & AAAI)



STEM.ORG Accredited



NSIM Accredited

Meritus Solutions at a Glance



Grade Band Progression : Primary (Grades 1 to 5)

STEM Solutions	Robotics Solutions	Robotics Powered by AI	AI & Data Science literacy On-Line Courses
STEM Explorer Kit (Grade 1)	Phiro Robotics Kit		Hello AI
STEM Innovator Kit (Grade 2)	Ta.Co Robobricks		Explore AI
STEM Mechanics Kit (Grade 3)			Discover AI
STEM Builder Kit (Grade 4 & 5)			AI Novus
Playbits Coding Kit (Grade 1 to 3)			

Grade Band Progression : Middle School (Grades 6 to 8)

STEM Solutions	Robotics Solutions	Robotics Powered by AI	AI & Data Science literacy On-Line Courses
Data Sciens Pro Kit	Phiro Robotics Kit	AI Lite Neo Kit	Space & Data Science
		AI Innovator Spark	AI Imagineer
			AI Tinkerer
			AI Inventor
			AI Primus

Grade Band Progression : High School (Grades 9 to 12)

STEM Solutions	Robotics Solutions	Robotics Powered by AI	AI & Data Science literacy On-Line Courses
Data Sciens Pro Kit	Phiro Robotics Kit	AI Lite Neo Kit	Data Science Explorers
		CV Pro Kit	AI Meritus
		AI Innovator Spark	Basics and Advanced Python
			Advanced AI & Data Science (CTE Pathways)
			Virtual Driverless Car Course

AI Robots

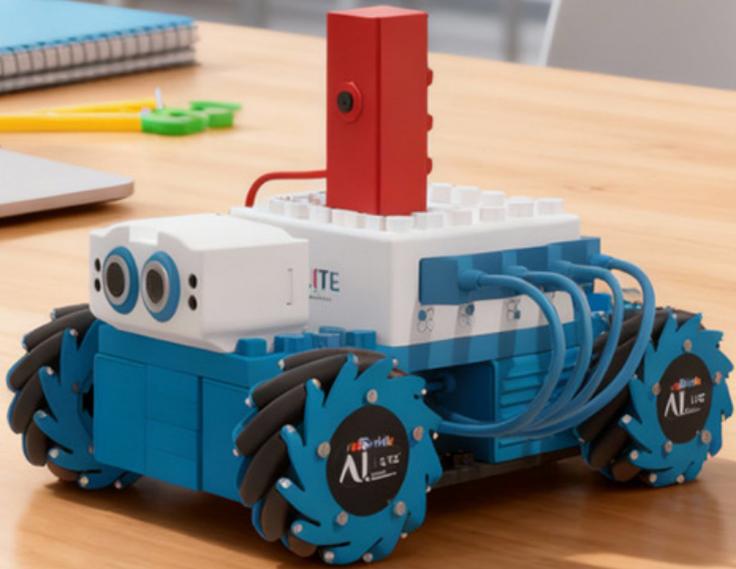
Making your Students Future Ready !

AI LITE NEO

For Grades **6 - 12**

Beginner

An AI-powered wheeled robotics kit designed for Grades 6-12, enabling students to explore computer vision, GenAI interaction, and multimodal AI projects.





Step into AI Learning

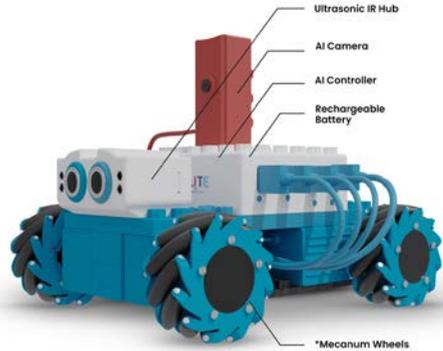


A wheeled robot with **Computer vision** and **Gen AI** interaction.

Who is it for ?

Ideal for **Grades 6–12** starting with robotics, vision, and GenAI.

Great for beginner competitions and classroom clubs.



4-Motor config



2-Motor config

Learn with **Programming Platforms** like



Highlights

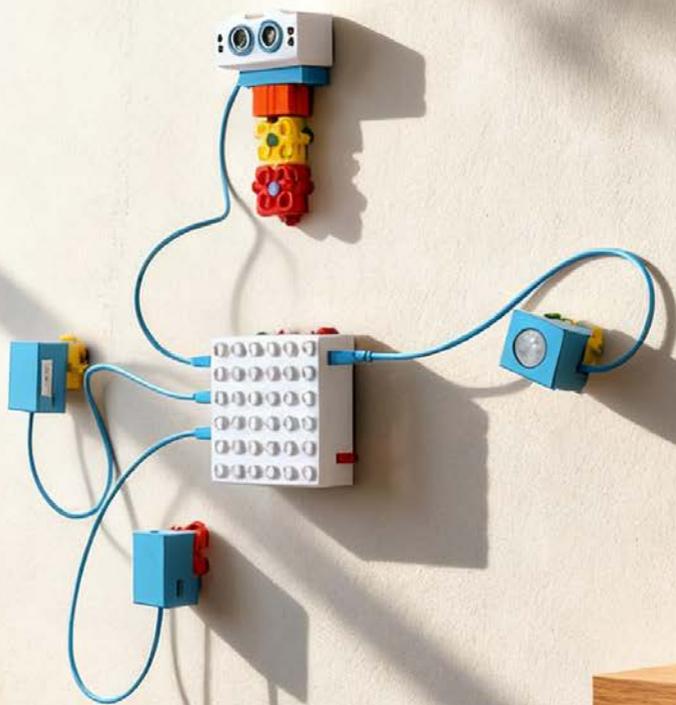
- ◆ **AI-powered robotics:** from basic AI to advanced AI projects.
- ◆ **Features:** Computer Vision Color recognition, Face recognition; Object tracking & Recognition; Gesture recognition.
- ◆ **GenAI:** Natural two-way interaction via the Meritus app.
- ◆ **Multimodal projects:** Combining vision, sensing, and GenAI.
- ◆ **Fast setup:** 5-minute classroom setup.
- ◆ **Using our construction blocks,** students can create limitless interactive models.
- ◆ **Teacher-ready instructional design** and lesson plans, driving student success.

AI INNOVATOR
SPARK

For Grades **6 - 12**

Intermediate

An integrated AI, Data Science, and GenAI kit for Grades 6–12, enabling students to build sensor-fusion and Smart IoT projects for real-world school and campus applications.





Integrated AI, Data Science & Gen AI



Deployable Smart IoT Guardian for Schools & Campuses.



Who is it for ?

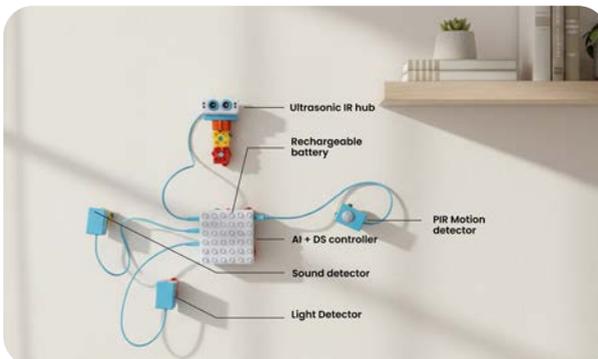
Ideal for Grades 6–12 in classrooms and labs.

Competition-ready (Sensor-fusion, IoT, Guardian challenges)

Highlights

- ◆ 5-minute classroom setup.
- ◆ With our construction bricks, students can build endless interactive models.
- ◆ Sensor-fusion projects with ready-to-use templates.
- ◆ GenAI: natural two-way voice via the Meritus app.
- ◆ Campus Guardian: With Smart IoT - alerts, thresholds, door counters.
- ◆ Teacher-ready instructional design and lesson plans, driving student success.

Learn with
Programming Platforms
like



CV PRO

For Grades 9 - 12

Advanced

An advanced autonomous vehicle learning platform enabling hands-on exploration of computer vision, machine learning, and deep learning through real-time self-driving vehicle applications and competitions.





CV Pro is a cutting-edge development and education platform with smart computer vision technology that utilizes the extensive sensor suites, powerful computational abilities and state-of-the-art communication channels.

Learn advanced AI technologies including Machine Learning, Deep Learning, and Neural Networks – applied to real-time autonomous vehicles. This kit is ideal for **Grades 9–12** and college projects, competitions, and hackathons.



With **CV PRO** you get to work with

- OpenCV
- python
- Android Studio
- ARDUINO
- TensorFlow Lite
- Deep learning Machine Learning Computer Vision
- Kotlin
- Keras

Get to learn the operational techniques

of advanced computer vision technologies used in real time self-driving vehicles such as:

- ◆ Vehicle or person-following
- ◆ Slow down for kerbs
- ◆ Stop at traffic lights & stop signs
- ◆ Platooning - follow vehicles
- ◆ Allowing vehicles to stay in lane
- ◆ Lane detection and lane changing
- ◆ Prevent many types of collision with object identification and emergency braking
- ◆ Yield for crossing
- ◆ Go around obstacles etc.

STEM + ROBOTICS

Inspiring Minds, Shaping Futures

Primary School Solutions



1	STEM Explorer Kit	Grade 1
2	STEM Innovator Kit	Grade 2
3	STEM Meckanics Kit	Grade 3
4	STEM Builder Kit	Grades 4 & 5
5	Playbits Kit	Grades 1 to 3
6	Phiro Robotics Kit	Grades 1 to 5
7	Ta.Co. Robobricks	Grades 4 & 5

Scan the QR code for sample lesson plans and product demonstration videos.



	100% Screen Free
	Supports 2-3 Students in the Classroom
	Enabling hands-on STEM Learning Experiences
	Teacher resources and training available
	24+ Hours of Lesson Plans
	Curriculum is aligned to NEP 2020, CBSE, ICSE, IGCSE, IB & State Boards.
	Our AI Digital Curriculum is aligned to UNESCO AI Competency framework for K12 students & also to AI4K12, AAAI, ISTE standards. Our Data Science curriculum is aligned to UNESCO SDGs & GAISE II standards.
	Our kits are durable and have anticipated service life of minimum of 5 years
	Learning resources are designed by In-House experts and guided by our International Governing Board
	Our kits are designed to facilitate year-long journey across grades
	Our kits can serve multiple sections in a grade & the kits can be used across multiple grades

Primary School Solutions



Presenting a collection of STEM Kits tailored for different ages

- STEM Explorer Kit (Ages 4 - 5)
- STEM Innovator Kit (Ages 5 - 7)
- STEM Mekanics Kit (Ages 7 - 9)
- STEM Builder Kit (Ages 9 - 11)

Learning outcome

- Explore physics hands-on with simple and compound machines
- Master math brick by brick with interactive manipulatives

What is special about our blocks ?

The wide range of patented rectangular and triangular plastic bricks and parts use the unique side joining and locking bricks. In addition the XITIR joiners are innovative plastic parts which can be used as direction changers.



playbits

Coding Unplugged

Learn computer science concepts and develop coding skills.

100% Screen - Free

Curriculum aligned to

robobricks

Discover the wonders of a remarkable tangible coding robotic kit. Students can unleash creativity by designing, building and programming their unique creations through immersive tactile play.

100% Screen - Free

PHIRO

The Intelligent Coding Robots

Screen-free, Tangible Coding

Curriculum aligned to

Swish Card Binary Coding

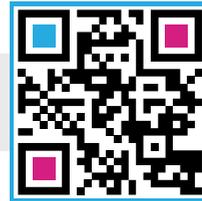
Sequential Programming

Middle School Solutions



1	Phiro Robotics Kit	Grades 6 to 8
2	AI Lite Neo Kit	Grades 6 to 8
3	AI Innovator Spark	Grades 6 to 8
4	Data Sciens Pro Kit	Grades 6 to 8

Scan the QR code for sample lesson plans and product demonstration videos.



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Middle School Solutions



The Intelligent Coding Robots
Screen-free, Tangible Coding

Curriculum aligned to



Swish Card Binary Coding



Sequential Programming

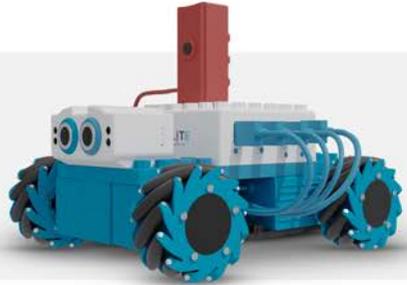


Scratch4Phiro
(For Desktop PCs)

Compatible with  



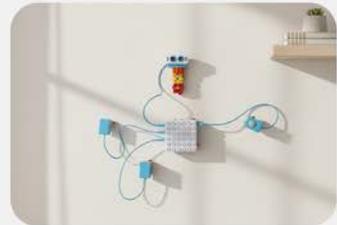
An AI-powered wheeled robotics kit designed for students to explore computer vision, GenAI interaction, and multimodal AI projects.



Data Science projects inspired by the United Nations Sustainable Development Goals (SDGs), using sensors to explore creating healthier and more eco-friendly communities for a fun learning journey.



An integrated AI, Data Science, and GenAI kit enabling students to build sensor-fusion and Smart IoT projects for real-world school and campus applications.



High School Solutions



1	Phiro Robotics Kit	Grades 9 to 12
2	Data Sciens Pro	Grades 9 to 12
3	AI Lite Neo Kit	Grades 9 to 12
4	CV Pro Kit	Grades 9 to 12
5	AI Innovator Spark	Grades 9 to 12

Scan the QR code for sample lesson plans and product demonstration videos.



	Supports 2-3 Students in the Classroom
	Enabling hands-on STEM Learning Experiences
	Teacher resources and training available
	24+ Hours of Lesson Plans
	Curriculum is aligned to NEP 2020, CBSE, ICSE, IGCSE, IB & State Boards.
	Our AI Digital Curriculum is aligned to UNESCO AI Competency framework for K12 students & also to AI4K12, AAAI, ISTE standards. Our Data Science curriculum is aligned to UNESCO SDGs & GAISE II standards.
	Our kits are durable and have anticipated service life of minimum of 5 years
	Learning resources are designed by In-House experts and guided by our International Governing Board
	Our kits are designed to facilitate year-long journey across grades
	Our kits can serve multiple sections in a grade & the kits can be used across multiple grades

High School Solutions



The Intelligent Coding Robots
App-Based Programming

Curriculum aligned to



Scratch4Phiro
(For Desktop PCs)

Compatible with



DATASCIENS>PRO

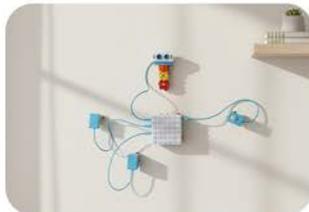
Data Science projects inspired by the United Nations Sustainable Development Goals (SDGs), using sensors to explore creating healthier and more eco-friendly communities for a fun learning journey.



AI LITE NEO



AI INNOVATOR SPARK



CV PRO



On-Line AI Courses

Designed for Schools of the Future

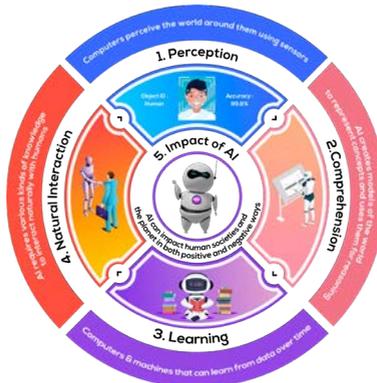


In our online learning platform, experiential cutting-edge technologies merge with innovative pedagogy, creating an immersive learning environment where students explore the boundless possibilities of artificial intelligence, unlocking their potential to shape the future.

Our Meritus AI curriculum is thoughtfully designed, aligning with the US Guidelines for AI education in K12 schools established by the **AI4K12 group sponsored by AAAI and CSTA**.

Embracing a hands-on approach, our curriculum development framework revolves around the 5 Big Ideas in AI, fostering a comprehensive understanding.

Dive into exploration with our project hub, featuring **30 short projects** that empower students to delve into the fascinating realm of AI.



Grade Band Progression and Coding Platform



#	Grades 3- 5 Ages 7-10	# of Hours	Course Type	Coding Platform
1	Fun AI Playgrounds	5	Micro Course	S4AIWS AI extensions on Scratch
2	AI for Me	10	Summer Camp	S4AIWS AI extensions on Scratch and intro to ChatGPT
3	My AI, My Future	10	Summer Camp	
4	Hello AI - 101	12	Level 1 Course	S4AIWS AI extensions on Scratch
5	Explore AI - 102	12	Level 2 Course	
6	Discover AI - 103	12	Level 3 Course	
7	AI Novus	24	Flagship Course	

#	Grades 6- 8 Ages 11-13	# of Hours	Course Type	Coding Platform
1	Playful AI Explorations	5	Micro Course	S4AIWS AI extensions on Scratch
2	Space and Data Science [Co-curated with Microsoft USA]	5	Micro Course	Excel
3	AI Meets AR	10	Summer Camp	S4AIWS AI extensions on Scratch and intro to ChatGPT
4	Future Ready AI	10	Summer Camp	
5	AI Imagineer - 101	12	Level 1 Course	S4AIWS AI extensions on Scratch
6	AI Tinkerer - 102	12	Level 2 Course	
7	AI Inventor - 103	12	Level 3 Course	
8	AI Primus	24	Flagship Course	

#	Grades 9 & above Ages 14+	# of Hours	Course Type	Coding Platform
1	Data Science Explorers [Co-created with Dr Boaler and Stanford University]	10	Mini Course	Colab, Codap and Tableau
2	VDC Virtual Driverless Car Course	20	Flagship Course	Google Colab, Unity Simulator and Python
3	AI Meritus	24	Flagship Course	Scratch AI Extension, Snap AI Extension, MIT App Inventor
4	Learn Basics and Advanced Python	44	Flagship Course	Python
5	Advanced AI & Data Science CTE Pathways	160	Flagship Course	Python, Tableau, Power BI

Fun AI Playgrounds

For Students of Grade 3-5



Lesson Name	Objectives
What is AI?	An introductory session to AI programming
Perception: Recognizing Language	Students will design a program that will recognize the language of the text provided by the user
Perception: Recognizing Sentiment	Students will create a program that will identify and determine if the emotional tone is positive, neutral or negative
Perception: Computer UPSion	Students will create a program that will track the movements of the user's fingers
Machine Learning	Students will teach a program using Machine Learning how to recognize numerals

Micro courses

Scratch AI Extension

Number of Lessons **05** Capstone Projects **01**

Duration : 6 Sessions
Mode : Online; Tutor-Led

Scan to view lesson plans

Playful AI Explorations

For Students of Grade 6-8



Micro courses

Scratch AI Extension

Number of Lessons **05** Capstone Projects **01**

Duration : 6 Sessions
Mode : Online; Tutor-Led

Scan to view lesson plans

Lesson Name	Objectives
Can AI Think?	An introductory session on how AI is different from other machines & computer programs
AI in Home Automation	Students will use machine learning models to build a working home-automation program
AI in Image Classification	Students will learn how Machine Learning models are used to classify images in real world AI Programs
AI in Security Systems	Students will train their program using Machine learning and Computer vision to recognize faces
AI in Sports	Students will create a Posenet Vision estimation program that will track the movements of the human body

Space + Data Science

Co-Curated with Microsoft USA



Students get to learn enhanced AI features in Excel for data cleaning and choosing appropriate chart types and formatting for effective communication to make “Go/No-Go” decision for the Rocket Launch.

For Grades : 6-8
Software Used : Microsoft Excel

Some of the topics covered:

- Rocket Science
- Data Cleaning
- Data Visualisation
- Data driven decision making



Number of Lessons **05**

Capstone Projects **01**

Data Science Explorers

Co-created with Dr Boaler & Stanford University



Number of Lessons **10**

Capstone Projects **02**

Students discover the imperative nature of developing skills in working with, understanding, and utilizing data as an essential life skill. The curriculum includes the formulation of statistically investigable questions, the collection and analysis of data, and ultimately, the interpretation and communication of results.

For Grades : 9 and above
Software Used : Colab, Codap, Tableau

Some of the topics covered:

- Data Exploration
- Statistics Fundamentals
- Music genre prediction result
- American community survey analysis
- Music recommendation using ML
- and so on...

Career Technical Education Pathways

For Students of Grade 9 and above



Advanced AI and Data Science

Students gain a solid understanding of **fundamental and advanced AI & ML concepts** with proficiency in Python programming. They will learn techniques for evaluating the performance of ML Models, including all the ML Metrics.

Explore applications in areas such as gaming, robotics and autonomous systems. Learn to deploy ML Models in production environments with considerations for scalability.



Number of Lessons **160**

Capstone Projects **10**

Some of the topics include

- Object Identification and classification
- Emotion Recognizer using FER & Deep Face
- Problem Solving using NLP Pipeline
- Data Analytics using Tableau, Power BI
- Linear and Logistic Regression
- Decision Trees

and more...

Learn AI

For Students of Grade 9 and above



Scan to
see Demo
video



Why is VDC Training course essential ?

From Simulations to Solutions

Our Virtual Driverless Car Course (VDC) is **similar to a flight simulator** for teaching students the process of training AI models using a simulation environment.

Just like flight simulations, our introductory VDC training program provides a safe and controlled environment for learners to gain hands-on experience without the risks associated with real-world operations.

The virtual training simulator provides for an engaging educational exploration for learners interested in **autonomous vehicles, robotics, or self-driving cars**.



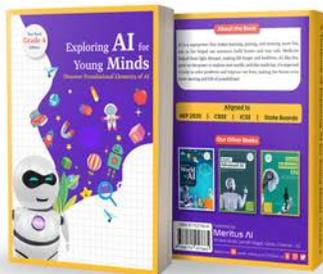
Coming Soon

Meritus AI Textbooks for Grades 3-12!

Empower your students to gain essential AI skills!

We are thrilled to announce the upcoming launch of our groundbreaking **Artificial Intelligence** textbooks, specially designed for students of Primary (Grades 3 to 5), Middle School (Grades 6 to 8) and High School (Grades 9 to 12).

These textbooks are the latest addition to our diverse educational product range and are crafted to equip the next generation with the knowledge and skills needed to thrive in an AI-driven world.



Curriculum Highlights

Knowledge Module: Core concepts of AI, Data Science and GenAI

Skills Module: Hands-on projects with Scratch 3.0+AI extensions (Grades 3 to 8)

AI Practicum Module: Hands-on Python Projects (Grades 9 to 12)

Experiential Learning Module: Gen AI, Prompt Engineering, and Applications

Applied Insights Module: Real-world AI applications

Values Module: Ethics, Bias, Privacy, and Societal Impact of AI

Discussion Prompts: Industry 4.0 skills, AI, and the Future of Work

Why Meritus AI Books?

Future Ready Learning: Dynamic hybrid environment blending theory & practicals

Expertly Curated: By Experts and guided by distinguished international governing board

AI Lab Practical Sessions: Free access to our online LMS & capstone projects

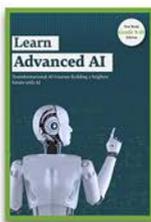
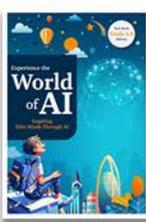
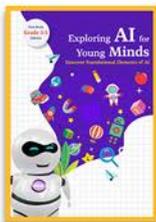
Flip Learning: Embedded educational videos for deeper exploration

Assessment Tools: MCQ's to gauge comprehension and critical thinking

Comprehensive Teacher Support: On request for training and support materials

Competition Preparation: Equips students to excel in national and international competitions

Aligned to
NEP 2020 | CBSE | ICSE | ISTE - USA
UNESCO's K-12 AI curricula | US Guidelines for AI Education in K12 Schools



Our Experiences & Success Stories



Selected to provide AI-in-education resources to train and prepare 72,000 teachers across six Southeast Asian countries in AI literacy.



Empowering students and educators with AI + robotics kits for real-world challenges, including autonomous-vehicle tech.



Trusted STEM partner, including the upcoming \$100M GEMS School of Research & Innovation (Dubai) focused on STEM, Robotics & AI.



UAE Interschool AI Hackathon: 37 schools, 200+students, 70 Teams. Designed and conducted a hands-on AI hackathon accelerating applied AI learning.



Delivered Autonomous Vehicles Tech training in Malaysia, Thailand, and Ghana, expanding access to practical AI powered Robotics.



Intel – Phiro Robot selected as America’s Greatest Makers.



Times Now Academic Excellence Awards 2025
Winner: Excellence in Tech-Enhanced AI.

Our Advisory Board



Ramana Prasad
Founder,
Meritus



Dr W Slany
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USA



Dr Ken Kahn
Professor, Oxford
University, UK.



Aditi Prasad
Co-Founder,
Meritus



Dr Umesh
Prof. Washington
State University, USA



Dr Swaminathan
Dean,
Sastra University.



Dr Pratyush Kumar
Researcher, Microsoft
Former Asst. Professor
at IITM

Testimonies



“

I enjoy taking the quizzes with my students and having them kind of respond and then us working together. It's a lot of fun, definitely interactive.”

- **Rachelle Dene Poth**
JD, MSEd, AI Teacher, Oakmont
PA USA



“

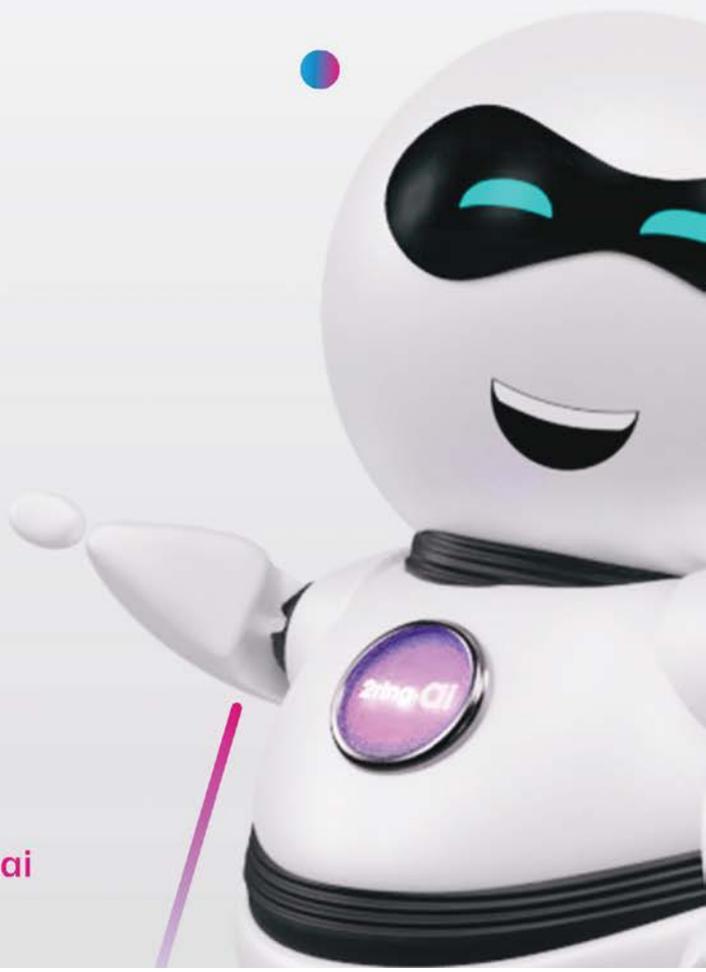
My daughter completed the AI course last summer and she really enjoyed getting first of all some knowledge about AI and I feel like especially this past school year had kind of jump start ahead of her peers so that she was able to understand concepts.”

- **Kate Ruecker**
Shawnee Mission, Kansas, USA.





Meritus AI



Reach us at



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