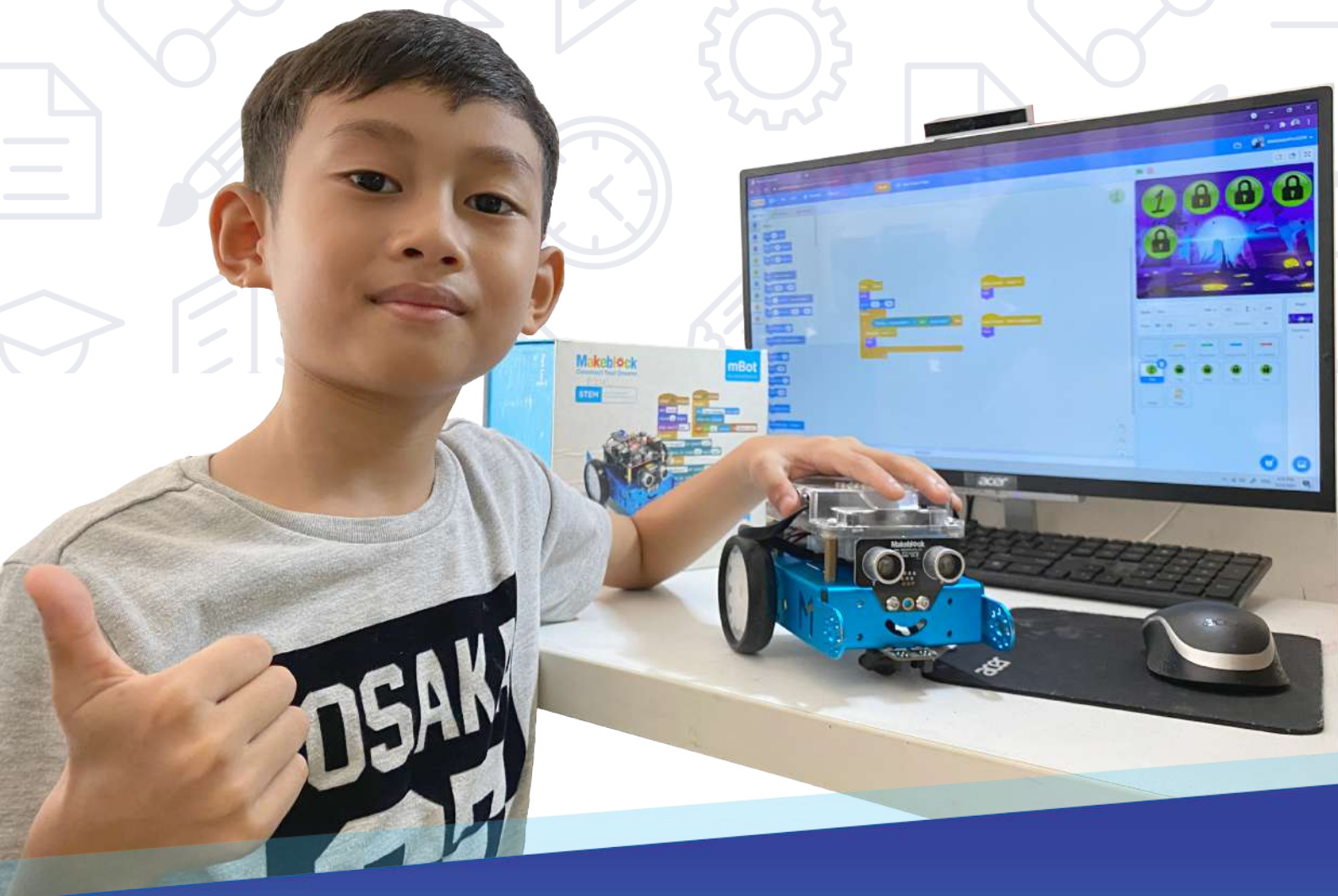




**JAZRO**<sup>TM</sup>

JAZRO TECHNOLOGY COURSE

**DEVELOP YOUR  
CHILDREN'S  
HIDDEN TALENTS WITH  
JAZRO ROBOTIC ACADEMY**



# Program Overview

**JAZRO is an acronym for JAZARI ROBOT. The name is inspired by a renowned Muslim scholar, Al-Jazari (1136-1206) best recognized as the Father of Robotics. We are a robotics education academy which aims to 'DEVELOP DIGITAL TALENTS' in Science, Technology, Engineering & Mathematics (STEM) fields from Malaysia.**

**Kids are naturally inclined towards anything joyful and fun. Enable them explore their hidden potential through our diverse multidisciplinary live fun-based programs.**

**At JAZRO Robotic Academy, we adopt a unique fun based approach so that learning becomes play, which allows kids to explore their passion and discover their hidden talents. Our curriculum covers the entire spectrum in a playful way, from coding foundation, computer science, creative innovator, #D design & innovation, data scientist, data analytics, up until the next generation rage, like artificial intelligence and machine learning.**

**The Little Jazari kid will discover and develop his interests to the maximum potential through our special curated programs. The skills are supplementary as well as complimentary to the school curriculum which also makes them perform better in their regular curriculum.**

**Our methodology enables them to grasp STEM concepts via learning coding, visualizations and simulations. We offer a unique curriculum which is meant to inculcate new age skills in your kids to make them poised for success and encourage them to take on challenges. Their fundamental relationship to technology changes from being a consumer to a creator & developer.**

**Our robotic academy is the official MDEC (Malaysia Digital Economic Corporation) Digital Maker Hub for #mydigitalmaker movement.**

# JAZRO COURSES



# JAZARIAN BENEFITS



## STEM EDUCATION & ROBOTIC CLASS LIKE NO OTHERS

Our program and classes are curated for beginners & higher level with guidance and advice from higher institute lecturers & experts with more than 20 years experience in STEM related education.



## CERTIFICATION FROM RECOGNIZED BODY IN MALAYSIA

Get certified by a Professional Engineer (accredited by Board of Engineers Malaysia) & MDEC #mydigitalmaker Official Digital Maker Hub (DMH) in Malaysia.



## INDIVIDUAL PERFORMANCE REPORT DASHBOARD

Get individual performance through Jazarian Performance Report. They will be assessed via Quarterly Assessment to gauge their understanding.



## LEARN FROM THE BEST

Our Certified Robotic Trainers will give the BEST learning experience to all Jazarians. They are among the experts to train other teachers in public and private institutions.



## INDUSTRY 4WRD CAREER

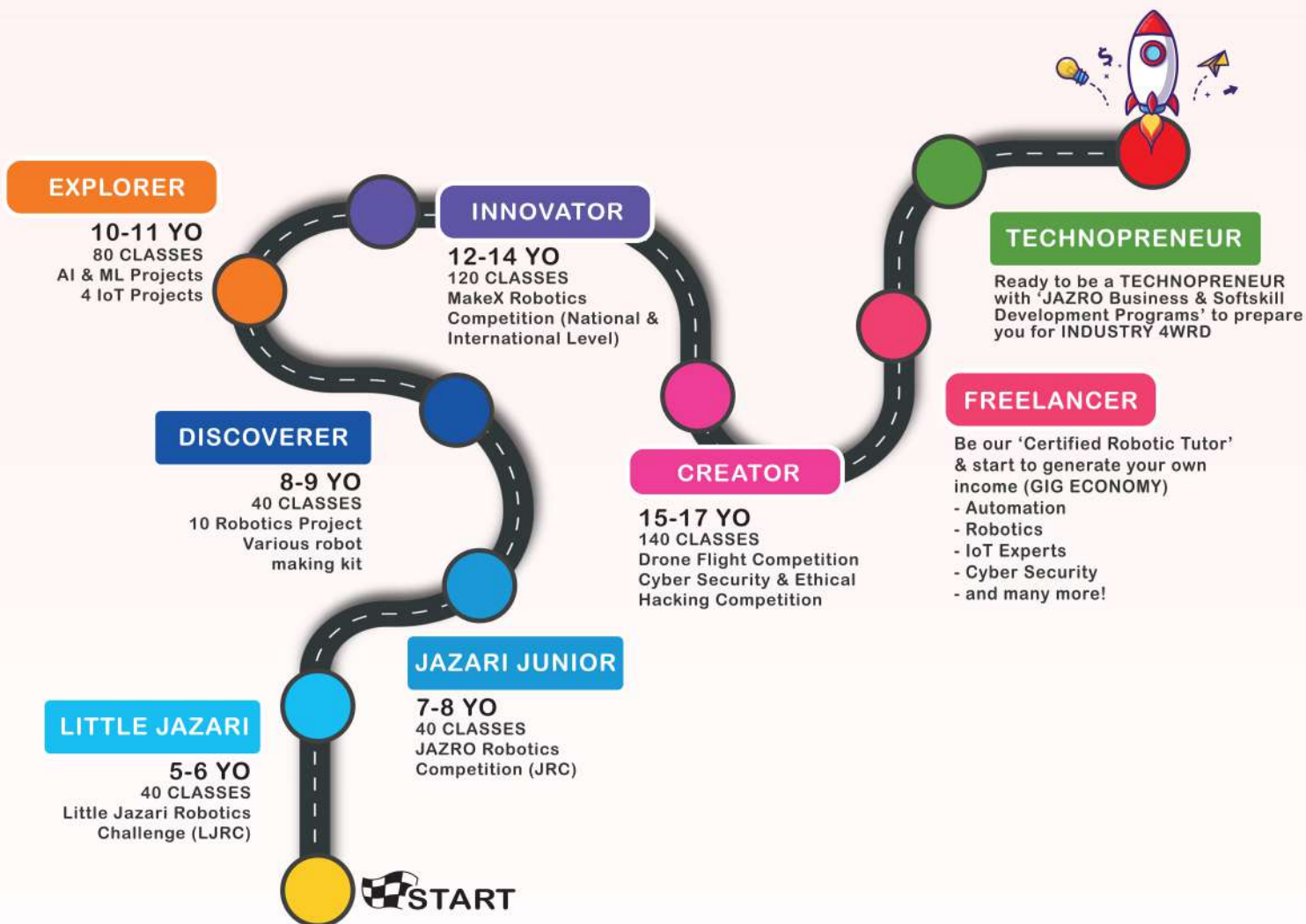
Clear career path towards future INDUSTRY 4WRD. Start exploring IR4.0 knowledge to catapult your children interest towards technology.



## EQUIPMENT PROVIDED

We provide all the equipments (robot, tablet, components, etc). No need to buy robotic kit for junior level. Focus on learning experience to accelerate their skills. Peace of mind.

# Learning Journey Towards IR4.0 Skills Expert (Future Jobs)





**JAZRO**



# AL-JAZARI MODULE

LEARN TECHNOLOGY INSPIRED BY  
ISLAMIC INVENTORS DURING THE  
GOLDEN AGE OF MUSLIM CIVILIZATION



# Program Summary

**Al-Jazari module is a special curated content from JAZRO to teach our Jazarians (students) about the importance of our intention to create any inventions. Either it will give us the good or bad results in the hereafter. Jazarians will be exposed to most of the Muslim Inventors with their great & ingenious inventions for the benefit of the community. Besides, they will also learn the relationship between the invention to our modern world today. They will also learn on basic values of life to be a good person.**

**The Golden Age of Muslim Civilization witnessed the birth of greatest Islamic inventors of all time. The technology documented serves as a guidance to the engineering and technology field in the modern world.**

**This module introduces the students to the prominent Islamic inventors during the Golden Age of Muslim Civilization. They will be exposed to the great invention and creations of these Islamic figures and relate the creations to the modern world. Our Jazarian will learn to see the world through Islamic Inventors' lens and envision new inventions for the future civilization especially to our modern world today.**

**They will reflect to themselves on all the good deeds & any good character building from the Muslim Inventors. At the end of Al-Jazari module, all Jazarians will read a sentence to declare their willingness to change for a betterment of themselves & becoming a better person.**

# **DETAILED COURSE Curriculum**



# Coding Foundation

(Class 1-10)

Coding is the new literacy. It sharpens problem solving skills, fosters creativity, makes kids learn perseverance and opens up numerous career opportunities. It requires high activity of multiple areas in the brain and altogether empowers children.



When children code they learn how to express themselves, develop computational thinking, and strengthen their confidence, they acquire a new set of skills that help them shift from just consuming information to becoming digital creators. Most next generation technologies have coding deeply ingrained in them, and actually form the basis of their development. Let's start the journey with our Level 1: Coding Foundation.

- 1 Introduction to scratch-based programming
- 2 Writing own line codes
- 3 Ways to run code in scratch
- 4 Learn coding pseudocode
- 5 Understand the basic of algorithm
- 6 Master the fundamental of flowchart
- 6 Loops: repeat & forever & more
- 7 'Hour of Code' modules
- 8 International Level e-certificate
- 9 Basic knowledge about computer science
- 10 Quiz to test Jazarian understanding
- 11 Individual performance monitoring for improvement



# Computer Science

(Class 11-20)

Computer science is the study of computers and computing which includes theoretical and algorithmic foundations. We cover the topic of software development (coding) and the uses of processing the information.

The course will give students hands-on experience in moving and controlling robots in virtual environment. They will have class mission to maneuver the virtual robot via their own coding instruction.

Additionally, this level will cover on game development using scratch-based (continuity from Level 1). They will make 4 games for their own learning purpose.

- 1 Introduction & Fundamental
- 2 Moving your robot
- 3 Repeating behaviours
- 4 Detecting walls from a distance
- 5 Developing robot algorithm
- 6 Game making basic fundamentals
- 7 Game making application
- 8 Create your own game



# Innovator

(Class 21-30)

Innovator level is where the students will learn the next step of digital knowledge. They will create a few innovative projects based on 3D design & Microbit microprocessor.



This level will increase their creative & critical thinking where they will learn on the fundamental of 3D design & how to code a microprocessor using simulation programming software (web-based). 3D is the next big thing in the future or also called as additive manufacturing where it will widely used in medical, robotics, automotive & other industries.

At the end of the level, they will be an awesome innovator of the future.

- 1 **3D design & innovation**
- 2 **Basic coding of Microbit**
- 3 **Fundamental of Tinkercad**
- 4 **Make own 3D keychain**
- 5 **Wait, Loop, Sounds makecode**
- 6 **Gyro sensor & button makecode**
- 7 **Servo motor for Microbit**
- 8 **Basic of 3D animation**
- 9 **Servo motor for Microbit**
- 10 **Wheel robot for Microbit**

# Digital Creator

(Class 31- 40)

The students will learn the advance level of programming skills using Arduino board microprocessor (simulation software) where they will create a few innovative projects using Arduino & coding knowledge of Arduino.



Advance level in 3D design is by learning about 3D printer, 3D printing industry & 3D animation. Learn to transfer your 3D design code to 3D printer to print your own 3D artwork. This is the skills of the future. The students can print anything they imagine. The design it & they can print it in 3D shape.

At the end of the level, they will be the master of digital creator.

- 1 **Arduino learning (simulation)**
- 2 **Creating 3D animation project**
- 3 **Introduction to Arduino microprocessr**
- 4 **Built innovative Arduino project**
- 5 **Tinkercad programming software**
- 6 **3D printer & 3D printing industry**
- 7 **Arduino block programming**
- 8 **Master your coding skills with Arduino**

# Data Scientist

(Class 41- 50)

This is the advance level for students that learnt about basic of programming, robotics, computer science & micro-processors.

The students will learn about the basic of data mining, data analytics, visual management dashboard & the introduction of artificial intelligence (AI) with machine learning capabilities. This is the level to prepare the students for future job career requirement. They will be equipped with the latest technology & advance programming in the market & ready for their next journey in Industry Revolution 4.0 (IR4.0) era & beyond.

At the end of the level, they will be the master of digital creator.

- 1 **Basic of data analytics**
- 2 **Data mining tools & process**
- 3 **Introduction to Artificial Intelligence (AI)**
- 4 **Learn about machine learning**
- 5 **Visual management dashboard**
- 6 **Foundation of Data Scientist career**
- 7 **How to read & analysis data report**
- 8 **Master data analysis skill to create more**



# JAZRO TECHNOLOGY COURSE

## Package Details & Descriptions

### DISCOVERER

**CLASS HOURS:** 20 hours

**CLASSES**

10 Classes

**GOALS**

Learn basic of coding (from zero), foundation of algorithm, pseudo code & flowchart. Beginner level of 'Hour of Code' modules.

**MODULES**

JAZRO TECHNOLOGY COURSE (Level 1)

**DEVELOPMENT AREA**

Computational Thinking Ability, Decision Making & Cognitive Flexibility

**CERTIFICATION**

JAZRO Discoverer Certification, International Level (Hour of Code) Certification & Basic Computer Science Certification

**RM20/hour**  
**RM400 (Total)**

### EXPLORER

**CLASS HOURS:** 60 hours

**CLASSES**

30 Classes

**GOALS**

(All in Discoverer Package) + Computer science learning skills, game making ability, 3D design, 3D innovations, & microbit learning.

**MODULES**

JAZRO TECHNOLOGY COURSE (Level 1-3)

**DEVELOPMENT AREA**

+Creativity, Design Thinking, Complex Problem Solving, Critical Thinking, Judgement & Decision Making

**CERTIFICATION**

+JAZRO Explorer Certification, JAZRO Game Making Certification, JAZRO 3D Design Certification & JAZRO Microbit Certification

**RM18/hour**  
**RM1080 (Total)**  
[Discount 10%]

### INNOVATOR

**CLASS HOURS:** 100 hours

**CLASSES**

50 Classes

**GOALS**

(All in Explorer Package) + Arduino foundation learning, create simple innovation project at home (DIY) projects, 3D printer & data analysis with analytics

**MODULES**

JAZRO TECHNOLOGY COURSE (Level 1-5)

**DEVELOPMENT AREA**

+Collaboration & Communication with others, Emotional Intelligence, Cognitive Flexibility, Creative Thinking, Competitive Spirit & DIY Ability

**CERTIFICATION**

+JAZRO Innovator Certification, JAZRO Arduino Certification, JAZRO Data Scientist & Data Analytics Certification

**RM15/hour**  
**RM1500 (Total)**  
[Discount 25%]

“

**Everybody should learn to  
program a Computer  
because it teaches you how  
to think**



Steve Jobs

“

**Learning to write programs  
stretches your mind, and  
helps you think better,  
creates a way of thinking  
about things that I think is  
helpful in all domains**



Bill Gates



# JAZRO

## TRUST CERTIFICATE

**JAZRO OFFERS A NO QUESTIONS  
ASKED, SAME DAY, 100% REFUND**

This is a trust certificate from Jazro Robotic Academy confirming that we have a no questions asked **same day 100% refund policy** for any unused credits/classes.

**Our Mission is to help kids unleash their true genius and equip them with the skills of next generation.** We are committed to provide an awesome learning experience to kids using the most innovative techniques.

However, at any point, if you find that your kids learning experience is not what you expected, please email us at **[jazroteam@gmail.com](mailto:jazroteam@gmail.com)**. We will immediately process your refund, on the same day, no questions asked.



# Contact Us

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 **018 - 5778242**

 **WWW.JAZRO.COM.MY**

