



مدرسة هابيتات الخاصة
HABITAT SCHOOL

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Cir no: HBT ATH / GEN/ 52 /23-24

Date: 22.03.2024

CYBER SQUARE WORKSHOP FOR STUDENTS (GRADES 1- 10)

Dear Parents,

Habitat School in association with Cyber Square is organizing an online workshop with Maths + Coding, Artificial Intelligence etc for students in this March break. We recommend our students to make use of this opportunity to enhance their technology related skills.

Courses

1. Math + Coding (For Grade 1 to 10)
2. Little Coder (Age: 5 - 9)
3. Design Your Website (Ag: 7+)
4. JavaScript Game Development (Age 9+)
5. Jr Python Developer (Age: 9+)
6. AI Developer (Age: 9+)

Workshop Duration: 12 days (1 hour/day, 5 sessions/week, Monday, Tuesday, Wednesday, Thursday & Saturday)

Batch Start Date: 18 March 2024

Classes On: March (25, 26, 27, 28, 30), April (1, 2, 3, 4, 6, 8, 9)

Batch Time: (Choose your preferred time slot)

1. 10 AM - 11 AM UAE Time
2. 11.30 AM - 12.30 PM UAE Time
3. 2 PM - 3 PM UAE Time

Fee for Workshop: AED249

Certification: Cyber Square UK Certificate upon completion.

Website Registration Link: <https://goo.by/FunsPp>

Please find the attached brochure.

Students who are interested to continue their learning after the workshop will be offered at a discounted fee of AED100/month with weekly 1 session, 4 classes per month.

Regards,

Principal
Ms. Mariyam Nizar Ahamed

CODING FOR KIDS

The Complete Coding for Kids Course

Preparing kids for the future with coding and entrepreneurship skills.
Enjoy instructor-led live online coding classes for kids at your comfort.



UK CERTIFICATION

FOR GRADED

1 - 10

NEW

Math + Coding

Math concepts using coding

REGISTER NOW



WhatsApp Me





MATH + CODING

For Grades 1 to 10



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What Makes Our Program Unique?

Dual Focus

Python & Scratch

Experienced Instructors

Grade-Specific

Practical Skills

Community of Learners

REGISTER
NOW!

DURATION

Workshop: 12 Sessions

Full Course - 32 Sessions

LITTLE CODER

BEGINNER

Cyber Square Little Coder

course will be a perfect start for kids from the age of 5 to 9 to learn the basics of coding. This is a perfect introduction to coding for kids, by making them build simple games and animations in a fun & interactive way. By enrolling in this course, kids will get a chance to enhance their logical skills and creativity along with their presentation skills at an early age.



Course Fee:

Workshop: 249 AED

Full Course: 100 AED/month

DURATION

Workshop: 12 Sessions

Full Course - 24 Sessions



UK CERTIFICATION



REGISTER NOW

https://code.cybersquare.org/mathcoding_summercamp.html

About this Course

This is an introductory course for kids that will help them learn the basics of coding using games and visual blocks. Through this course, kids will learn the basics of programming, sequencing, loops, conditionals, painting, animation, and game development. By completing this course, kids will get a chance to develop an interest in learning coding at an early age and create something useful out of it eventually.



SKILLS YOU WILL GAIN

Chapter 1

Introduction to Visual Coding

This module consists an introduction to coding. Kids will learn basics of events & loops. Students will start to learn typing and introduction to Visual Coding. At the end of the module, there will be assessment tests.

Chapter 2

Lets explore

In this module, kids will learn about looks, control and end blocks in Visual Coding. Students will create interesting animations and projects by the end of this module.

Chapter 3

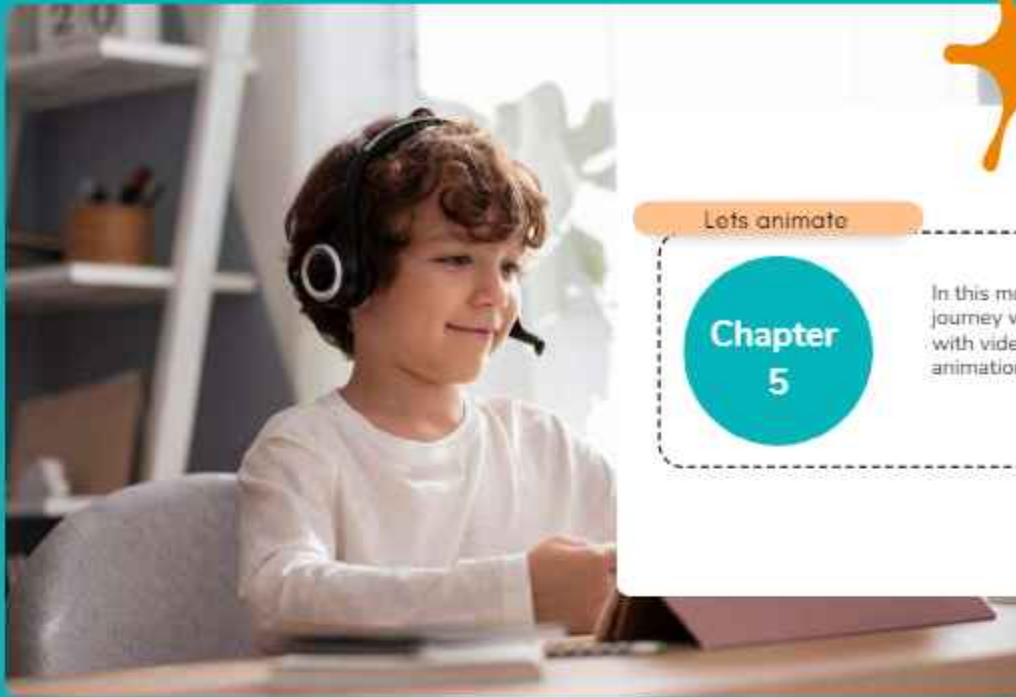
Coding Adventure

This module gives an introduction to Visual Coding. Kids will learn about coordinates, loops, clones & variables. Various assignments will be given to improve their coding skills.

I am an animator

Chapter 4

In this module, kids will learn turtle graphics, how to create animations & stories, and learn the importance of operators.



Lets animate

Chapter 5

In this module, kids will embark on a creative journey where they learn to create projects with video extensions and build interesting animations.

Game development using visual programming

Chapter 6

This module introduces students to the exciting world of visual programming and game development. This module unleashes the game developer within every kids. They will create their own platform game, complete with characters, obstacles, and challenges.



LITTLE CODER ADVANCED



Today's kids are growing up in a world that is surrounded by applications that run based on AI algorithms and other technologies. It's essential for them to understand how these technologies work so that they can consume them effectively. Cyber Square Little Coder Advanced course helps kids to identify their hidden skills and extra talents way before someone else from their age. This gives a sense of empowerment for the kids, encouraging them to explore and learn more. Cyber Square is providing the best Online Programming Courses For Kids to teach kids how to make small games & animations through coding in a fun way.

Course Fee:

Workshop: 249 AED
Full Course: 100 AED/month



DURATION

Workshop: 12 Sessions
Full Course - 32 Sessions



UK CERTIFICATION



REGISTER NOW

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SKILLS YOU WILL GAIN

Chapter 1

I am a video creator

In this module, kids explore video editing using Fluvio on laptops/desktops and Kinemaster on mobiles, learning essential editing tools, effects, and audio integration to craft their own videos. An assessment at the end evaluates their understanding of video editing on different platforms.

Chapter 2

I am an AI programmer

This module introduces kids to PictoBlox, a platform for creating AI applications. They'll engage in hands-on projects, such as crafting a face-recognizing door lock, delving into the world of AI technology.

Chapter 3

I am an animator

This module initiates kids into visual coding using Tynker, introducing concepts like events and cloning, fundamental to programming logic. Through hands-on activities, they'll develop an understanding of coding principles and showcase their skills by crafting interactive animations.

Chapter 4

I am a Robotics programmer

This module introduces robotics through VEX Code VR, mastering VEX navigation while understanding distance detection, and exploring the intricacies of VR pen tools and loops.

Chapter 5

I am a mobile app developer

In this module, kids will engage in practical learning by creating a calculator using AppLab, followed by developing a "Find Me" app and a Fruit game within the same platform. Also in building a calculator using Thinkable, offering a diverse perspective on app development tools and methodologies.

Chapter 6

I am a game developer

This module immerses learners in the realm of game development, initiating with an exploration of Game Lab. Within this module, students will dive into the creation of an animated aquarium, a tennis game, and a "Catch the Ball" interactive experience.



DESIGN YOUR WEBSITE



BEGINNER

Cyber Square Design Your website Beginner course is suitable for kids from age 7 and above. This web design course for kids will help them to understand the working of the web and design a website by themselves.



Course Fee:

Workshop: 249 AED

Full Course: 100 AED/month

**100%
GUARANTEE!**



DURATION

Workshop: 12 Sessions

Full Course - 24 Sessions



UK CERTIFICATION



Registration Link | https://code.cybersquare.org/mathcoding_summercamp.html

About this Course

This web development course for kids helps them to learn the working of the web, how to use HTML to structure web pages, how to implement CSS, web hosting, visual coding, photo editing with Pixlr, and JavaScript.

SKILLS YOU WILL GAIN

Learn About Google Apps

Chapter 1

In this module, kids will learn how to access G suite, how to create & edit Google Sheets, Google Docs, and Google Slides. They will learn basic formatting in Google Docs, Sheets, and Slides. Assignments will be given to teach them basic formatting.

Basics: Internet & Google Sites

Chapter 2

Learn Basics of The Internet & Google Sites

Introduction to HTML

Chapter 3

In this module, kids will learn how to use sublime text editor, HTML tags, HTML editors, HTML attributes, entities & symbols, block-level elements, inline elements, links in HTML, lists, forms, iframes, how to create a table, audio tag, video tag, how to play a YouTube video in HTML, and how to create a website.

Introduction to CSS & Bootstrap

Chapter 4

This module helps students to learn the basics of CSS & Bootstrap. They will learn about CSS syntax, different selectors in CSS, styling HTML with CSS, CSS box model, how to use bootstrap, and the basics of JavaScript.

I am an animator

Chapter 5

In this module, young learners will dive into the exciting world of graphic design using Pixlr. Children will explore the basics of graphic design, using Pixlr to create colorful and imaginative graphics for web projects.

I am a HTML developer

Chapter 6

In this module, kids will embark on a comprehensive journey into the world of web development. This chapter covers various facets of web page design and development, starting with the essentials of structuring web content using HTML, styling web pages with CSS, and learn how to host your HTML website.



I am a web designer

Chapter 7

In this module kids will master the use of display, overflow, and float properties to create visually appealing and responsive designs. Additionally, this chapter covers the art of creating navigation menus and drop-downs, enabling students to craft user-friendly and intuitive web interfaces.

I am a Novice Coder

Chapter 8

In this module, aspiring young programmers will begin their coding journey with an introduction to JavaScript and provides a gentle and accessible entry point into JavaScript, covering its basic syntax and structure.



DESIGN YOUR WEBSITE



ADVANCED

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100%
GUARANTEE!

Course Fee:
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Full Course: 100 AED/month



DURATION

Workshop: 12 Sessions
Full Course - 32 Sessions



UK CERTIFICATION



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About this Course

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SKILLS YOU WILL GAIN

Create your videos

Chapter 1

This module is an engaging venture into video creation, focusing on platforms like Fluvud and Biteable. Students will delve into the art of crafting compelling videos, exploring the features and functionalities of these tools.

Create interactive web pages

Chapter 2

This module delves into the creation of interactive web pages, emphasizing form design and validation for sign-up and login forms. Kids will explore JavaScript programming, essential for implementing interactive elements on web pages.

More about designing



Chapter 3

This module dives kids deeper into the art of web design, focusing on advanced techniques such as CSS grid layout and the creation of a photo gallery. Students will explore the intricacies of CSS grid layouts, mastering their application to create dynamic and responsive web page structures.

Introduction to JQuery

Chapter 4


This module introduces learners into the realm of advanced web technologies, centering on the JQuery slider, implementation of JQuery sliders, emphasizing their significance in enhancing user experience on web pages.



Introduction to WordPress

Chapter 5

This module is a hands-on journey into website design using WordPress. Students will learn how to create and customize websites using the WordPress platform.



Create a progressive web application

Chapter 6

This module focuses on the creation of PWAs, offering insights into their significance in modern web development. Students will learn to build applications that function seamlessly across various devices, providing an engaging user experience similar to native applications.



: Mobile application development

Chapter 8

This module is a deep dive for kids into mobile application development using MIT App Inventor. This module focuses on guiding young learners through the process of creating mobile applications using this user-friendly platform.

JavaScript Game Development



BEGINNER



UK CERTIFICATION



The Live Online Coding for kids provided by Cyber Square is so helpful for them to understand the basic coding concepts and to make their creations come true by connecting them with each other. Cyber Square JavaScript beginner game development course will lead them to create games and learn the basics of programming languages such as JavaScript, HTML, and CSS, Visual coding, DOM manipulation using JavaScript, JavaScript calculator, JavaScript animations, and Phaser game development. kids who don't have prior experience can also join this course.

Course Fee:

Workshop: 249 AED

Full Course: 100 AED/month



DURATION

Workshop: 12 Sessions

Full Course - 24 Sessions

About this Course

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SKILLS YOU WILL GAIN

Introduction to Visual Coding 2.0

Chapter 1

This module includes an introduction to visual coding 2.0 and the basics of programming. Kids will learn about events, loops, conditionals, functions, the basics of VPL, how to draw shapes using visual coding, flowcharts, and how to create a game.

Introduction to HTML & CSS

Chapter 2

In this module, kids will learn about sublime text editor, basics of HTML like tags, HTML editors, how to create visual coding windows, basics of CSS, and how to modify visual coding HTML pages using CSS.

Introduction to JavaScript

Chapter 3

This module helps kids to learn how to create a calculator with JavaScript, how to create a web page, how to add Js into HTML page, message boxes in JavaScript, JavaScript syntax, comments, conditional statements, and loops & functions in JavaScript.

Introduction to JavaScript Game Development

Chapter 4

In this module kids will be introduced to the exciting world of JavaScript game development and visual coding. Students will be learning the fundamentals of creating interactive games and visual elements using JavaScript.



Pixlr and Basics of Audio Creation

Chapter 5

In this module kids explore the world of digital art and audio for game development. Students get hands-on experience with Pixlr, a versatile online image editing tool, to enhance your graphic design skills. Additionally, you'll delve into the basics of audio creation, discovering how to craft sound effects and music for games.

Game development with Phaser

Chapter 6

This module introduces kids to the powerful Phaser game framework. You'll learn how to create engaging animations using Phaser, host your games online, and explore the fundamentals of building a platform game.



Phaser Platform Game with IndexedDB

Chapter 7

In this module kids take their Phaser game development skills to the next level by building a platform game with the help of IndexedDB. This module dives deep into game level design, data management, and the use of IndexedDB for seamless game progression.



JavaScript Game Development



ADVANCED



UK CERTIFICATION



Cyber Square Advanced JavaScript Game Development course for kids will help them to learn the fundamentals of game design, including an understanding of the game world, storytelling, gameplay, user experience, game technology, and basic programming for kids. Instead of playing games, they could make their own games and animated stories. This will in turn help them to boost up their creative mind.

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Course Fee:

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Full Course: 100 AED/month

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DURATION

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Full Course - 32 Sessions

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SKILLS YOU WILL GAIN

Chapter 1

Introduction to forms and validation designing

This module immerses learners in the intricate art of form validation, creation of login, signup, and home pages. And also focuses on the construction of these crucial elements, ensuring data integrity and security through signup, login form validation and hosting on a platform.

Chapter 2

Introduction to Object-oriented programming

In this module, kids are introduced to the realm of object-oriented programming (OOP), specifically focusing on elucidating the OOP concepts within JavaScript.

Chapter 3

Introduction to jQuery

This module, introduces learners to the dynamic world of jQuery, offering a comprehensive overview of its functionality and application. The module covers the fundamentals of jQuery, guiding students through the creation of a slider using this powerful library.

Chapter 4

Introduction to JSON parsing

In this module, kids immerse in the world of JSON parsing within JavaScript, focusing on introducing JSON and its practical usage within the language. The module extends to the creation of a TO-DO application using JavaScript and Firebase.





Introduction to Ajax

Chapter 5

This module is an engaging exploration into the MIT App Inventor platform, and kicks off with the development of a simple calculator using MIT App Inventor and progresses to the creation of a Talking Tom application. Also integration of TO-DO web application with a mobile application.



Building a game application

Chapter 7

This module is an exciting journey for the young learner into game development, focusing on the creation of a simple yet engaging game application called "Jumping Rabbit."



Adapting JavaScript Games for Apps

Chapter 8

This module presents an innovative exploration into transforming JavaScript-based web applications into mobile apps. This module focuses on the process of converting a JavaScript game developed for the web into a mobile application using Android Studio.



Artificial Intelligence



BEGINNER



UK CERTIFICATION



Cyber Square's Online Artificial Intelligence Course inviting smart kids to the eventful journey to the world of artificial intelligence through project-based learning. Cyber Square aims to transform the kids into creators of technology. Cyber Square nourishes young aspiring minds to get a clear vision of their ideas. They guide them in analyzing and building their vision and ideas into reality.

Course Fee:

Workshop: 249 AED

Full Course: 100 AED/month



DURATION

Workshop: 12 Sessions

Full Course - 24 Sessions

About this Course

Cyber Square is trying to help children learn to code in a fun way. The AI beginner course is covering the basics of Python programming, Computer Vision, Speech Signal Processing, Natural Language Processing, and Machine Learning. The AI Advanced course will examine educational, behavioral, and practical aspects of AI, Robotics, and Coding, and how children interact with them.



SKILLS YOU WILL GAIN

Basics of Artificial Intelligence

Chapter 1

In this module, kids will learn how to access G suite, how to create & edit Google Sheets, Google Docs, and Google Slides. They will learn basic formatting in Google Docs, Sheets, and Slides. Assignments will be given to teach them basic formatting.

Computer Vision & Natural Language Processing

Chapter 2

In this module, kids will learn computer vision, speech signal processing, hardware required for speech signal processing, natural language processing, applications of NLP, rule-based systems, and machine learning.

Learn AI Programming

Chapter 3

In this module, kids will learn the basics of AI programming. They will get an introduction to NumPy, Jupyter, and Grafana.

Draw in the Air

Chapter 4

Art truly resides in the air. How? With the human body detection feature of PictoBlox! Learn to use the blocks in PictoBlox's Human Body Detection Extension and the tip of your finger to create your favorite images in the air, then trace them on the screen of your computer. The world may be used as a canvas with just your finger!

Face Detecting Lock

Chapter 5

By examining the facial landmarks in a digital image, face recognition systems enable computer programs to recognize a person. Lets unlock a screen using Face detection!!!



Color Changing Chameleon

Chapter 6

Chameleons change color in different conditions to camouflage, regulate body temperature, or signal intent to fellow chameleons. Lets create software that uses HTML, CSS, and JavaScript to simulate a chameleon! It will be amazing!

Speech Signal Processing

Chapter 7

Speech processing is the study of speech signals and how these signals are processed digitally by computers. Children will learn how to create programs using voice signal processing in this module.

Speaking Calculator

Chapter 8

Lets build a calculator that speaks its calculations: Just like when we type it, we can ask the calculator questions to be answered.



Junior Python Developer



BEGINNER



UK CERTIFICATION



Python is a beginner-friendly and widely used programming language. Knowledge in coding enables kids to achieve great heights in the future. We are introducing the best way of learning through gamification that encourages kids to learn more. Cyber Square provides Live Online Coding For Kids. Jr. Python Developer Beginner Course at Cyber Square helps kids to have a strong foundation in Python programming concepts and visual coding.

Course Fee:

Workshop: 249 AED

Full Course: 100 AED/month



DURATION

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Full Course - 24 Sessions

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SKILLS YOU WILL GAIN

Introduction to Visual Coding

Chapter 1

In this module, young learners will take their first steps into the exciting world of coding with basics of programming and the concept of visual coding, making it accessible and engaging. Students will have the opportunity to explore Visual Programming Languages (VPL) with activities like Catch and Win, where they'll learn how to create simple programs through visual elements, fostering a strong foundation for future coding adventures.

Introduction to Python Programming

Chapter 2

In this module, introduces fundamental programming concepts such as variables, operators, loops, decision making, and data types in a playful and engaging manner. Students will not only have a blast creating a race game with Python but will also build a solid foundation in programming, setting the stage for their coding journey.

Python Programming with Pygame

Chapter 3

This module introduces students to Pygame, a popular library for creating games in Python. Students will dive into the world of interactive game design by creating a playful Catch and Win game using Pygame.

Introduction to Pixlr and Audio Editing

Chapter 4

This module introduces students to Pixlr, a versatile online image editing tool, where they will learn to craft stunning images and designs. Simultaneously, students will dive into the world of music creation with a Beautiful Audio Editor, enabling them to compose and edit sounds and melodies.

Pygame Space Invaders

Chapter 5

This module focuses on the creation of a classic Space Invaders game using Pygame. You will dive into the fundamentals of game development, including game mechanics, graphics, and interactivity.



Junior Python Developer

ADVANCED



UK CERTIFICATION



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Course Fee:

Workshop: 249 AED

Full Course: 100 AED/month



DURATION

Workshop: 12 Sessions

Full Course - 32 Sessions

Registration Link | https://code.cybersquare.org/mathcoding_summercamp.html

About this Course

Jr. Python Developer Advanced Course includes OOP concepts, Photo editing, Music creation, Python programming, and Database programming. Cyber Square is providing challenging and engaging classes where kids will learn to create Python games and get professional-level development in Python and HTML/CSS.



SKILLS YOU WILL GAIN

Create a Python application

Chapter 1

In this module, kids will learn Python application development, covering key components such as Git version control and the creation of a GUI calculator. Students will explore the foundations of version control using Git, understanding its importance in managing and tracking changes in their Python projects.

Introduction to Object-Oriented Programming

Chapter 2

This module introduces principles of Object-Oriented Programming (OOP), its concepts and illustrates their application within Python. And also a foundational understanding of OOP, guiding learners through its core principles and demonstrating how these concepts are implemented in Python programming.

Create a web application

Chapter 3

This module is a journey for kids into web application development, focusing on various elements such as website design, an introduction to Django, and the creation of a mobile app with deployment using PythonAnywhere.

Mobile application development

Chapter 4

This module immerses students in mobile application development, focusing on the MIT App Inventor 2 (AI2) platform. Learners will be introduced to MIT AI2, delving into the creation of a practical mobile app, specifically a To-Do application.

Internet of things

Chapter 5

This module is an engaging exploration into the Internet of Things, initiating with an introduction to Arduino. The module extends to delve into IoT home automation, offering practical insights into connecting and controlling devices within a home environment.

MATH + CODING

EMPOWER THEIR FUTURE TODAY!

What Makes Our Program Unique?

Dual Focus: Weekly sessions split between rigorous Mathematics as per the curriculum and practical application through Coding.

Coding with Python & Scratch: Watch your child bring math concepts to life using popular and kid-friendly programming languages.

Real-World Skills: Our program bridges the gap between theoretical math and practical tech skills, preparing your child for the future.

Why Choose Us?

Expert Tutors: Our tutors are not just math enthusiasts; they are coding pros, ready to inspire and guide your child.

Personalized Learning: We ensure each child's unique learning needs and pace are respected and nurtured.

Community of Learners: Your child will join a vibrant community of young learners, fostering teamwork, creativity, and problem-solving.

LIMITED SLOTS AVAILABLE

Grade 1-3

Course Content

- Solve problems and create computational representations of mathematical situations by writing and executing code, including code that involves conditional statements and other control structures
- Solve problems and create computational representations of mathematical situations by writing and executing code, including code that involves conditional statements and other control structures



SKILLS YOU WILL GAIN

Introduction to Scratch

Module 1

This strand includes an introduction to Scratch, exploring its tools, understanding inheritance and conditional statements, mastering loops, manipulating coordinates, direction, and distance, and creating geometric shapes and tessellations using the Pen Extension for a comprehensive foundation in visual programming.

Advance Scratch and Extensions

Module 2

This strand covers angle classification, utilizes Scratch to calculate surface area and perimeter of shapes, and explores Scratch-based solutions for mathematical equations and inequalities, providing a practical integration of geometry and programming skills.

Practical Problem Solving

- Integration of learned concepts in practical problem-solving scenarios
- Assignments and projects on mathematical problem-solving using Scratch

LIMITED SLOTS AVAILABLE

Grade 4

Course Content

- Solve problems and create computational representations of mathematical situations by writing and executing code, including code that involves conditional statements and other control structures
- Solve problems and create computational representations of mathematical situations by writing and executing code, including code that involves conditional statements and other control structures



SKILLS YOU WILL GAIN

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Practical Problem Solving

- Integration of learned concepts in practical problem-solving scenarios
- Assignments and projects on mathematical problem-solving using Scratch

LIMITED SLOTS AVAILABLE

Grade 5

Course Content

- Solve problems and create computational representations of mathematical situations by writing and executing code, including code that involves conditional statements and other control structures
- Solve problems and create computational representations of mathematical situations by writing and executing code, including code that involves conditional statements and other control structures



SKILLS YOU WILL GAIN

Introduction to Scratch

Module 1

This strand includes an introduction to Scratch, exploring its tools, understanding inheritance and conditional statements, mastering loops, manipulating coordinates, direction, and distance, and creating geometric shapes and tessellations using the Pen Extension for a comprehensive foundation in visual programming.

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Module 2

This strand covers angle classification, utilizes Scratch to calculate surface area and perimeter of shapes, and explores Scratch-based solutions for mathematical equations and inequalities, providing a practical integration of geometry and programming skills.

Practical Problem Solving

- Integration of learned concepts in practical problem-solving scenarios
- Assignments and projects on mathematical problem-solving using Scratch

LIMITED SLOTS AVAILABLE

Grade 6

Course Content

- Solve problems and create computational representations of mathematical situations by writing and executing efficient code, including code that involves conditional statements and other control structures
- Read and alter existing code, including code that involves conditional statements and other control structures, and describe how changes to the code affect the outcomes and the efficiency of the code



SKILLS YOU WILL GAIN

Module 1

Flowcharts

This strand introduces flowcharts and basic flowchart symbols, demonstrates the creation of flowcharts with the draw.io tool, focusing on mathematical operations, and explores the application of flowcharts for probabilistic discoveries, providing a comprehensive understanding of visual representations in problem-solving and decision-making processes.

Module 2

Introduction to Python

This strand begins with an introduction to Python, guiding participants through setting up the Python environment, comprehending basic syntax, and exploring variables and data types. The curriculum further delves into advanced aspects of data types and covers basic operations, offering a foundational understanding of Python programming.

Module 3

This strand focuses on understanding the basics of Turtle graphics, guiding learners through the creation of simple shapes and patterns using Turtle. The curriculum includes hands-on exercises aimed at honing skills in designing basic graphics with Turtle, fostering practical application of programming concepts in a visual context.

Practical Problem Solving

- Integration of learned concepts in practical problem-solving scenarios
- Assignments and projects on mathematical problem-solving using Python



LIMITED SLOTS AVAILABLE

Grade 7

Course Content

- Solve problems and create computational representations of mathematical situations by writing and executing efficient code, including code that involves events influenced by a defined count and/or subprogram and other control structures
- Read and alter existing code, including code that involves events influenced by a defined count and/or subprogram and other control structures, and describe how changes to the code affect the outcomes and the efficiency of the code



SKILLS YOU WILL GAIN

Introduction to Python

Chapter 1

Provides an introduction to Python and its features, covering the setup of the Python environment. Kids learn about basic syntax and essential data types. This strand also includes insights into using comments in code, understanding control structures with if-else statements, and an introduction to loops, encompassing both for and while loops. Kids will also explore advanced topics such as nested loops and loop control statements, offering a well-rounded understanding of Python programming fundamentals.

Functions

Chapter 2

This strand focuses on comprehending the concept of functions in Python. Participants will learn how to create and utilize functions, delving into the significance of parameters and return values, providing essential skills for effective modular and reusable code development.

LIMITED SLOTS AVAILABLE



Python Library - Turtle

Chapter 3

This strand introduces Turtle Graphics, exploring the Turtle module in Python. Participants learn to draw basic shapes and patterns using Turtle, providing a hands-on experience in creating visuals through programming.



Advance turtle graphics

Chapter 4

Building upon the foundational knowledge of Turtle Graphics, this strand advances participants to utilize Turtle for more complex drawings, guiding them in creating intricate patterns and designs. Learners will explore the expanded capabilities of Turtle, enhancing their skills in visual programming and artistic expression.



Practical Problem Solving

Chapter 8

- Integration of learned concepts in practical problem-solving scenarios
- Assignments and projects on mathematical problem-solving using Python



Grade 8

Course Content

- Solve problems and create computational representations of mathematical situations by writing and executing code, including code that involves the analysis of data in order to inform and communicate decisions
- Read and alter existing code involving the analysis of data in order to inform and communicate decisions, and describe how changes to the code affect the outcomes and the efficiency of the code



SKILLS YOU WILL GAIN

Introduction to Python

Chapter 1

This course begins with an introduction to Python, including setting up the Python environment. It covers fundamental aspects such as basic syntax, key data types, and the effective use of comments in code. The curriculum then progresses to cover control structures, including if-else statements, followed by an introduction to loops (for and while loops). Participants will further explore advanced topics, including nested loops and loop control statements, providing a comprehensive foundation in Python programming.

Functions

Chapter 2

In this strand, participants delve into understanding the concept of functions in Python. The curriculum guides them through the creation and utilization of functions, emphasizing the exploration of parameters and return values. This knowledge equips learners with the essential skills needed for developing modular and reusable code, enhancing their proficiency in Python programming.

LIMITED SLOTS AVAILABLE



Data Structure

Chapter 3

This module covers the fundamentals of Python data structures, including lists with operations like slicing and appending, tuples with emphasis on immutability, and dictionaries for efficient key-value pair management. Students gain practical problem-solving skills by applying these structures to diverse computational challenges, enhancing their proficiency in Python data manipulation.



Overview of libraries

Chapter 4

This module introduces fundamental Python libraries such as random and math, guiding participants in programming with library functions and leveraging them to create small projects. Additionally, the module covers the introduction of the eval() function, enhancing participants' understanding of dynamic code execution in Python.



File Handling

Chapter 8

This course module delves into Python File Handling, covering the basics of reading, writing, and deleting files. Participants gain practical experience through examples illustrating various file operations, enhancing their proficiency in handling files programmatically with Python.



Grade 9 & 10

Course Content

- Use coding to demonstrate an understanding of algebraic concepts including variables, parameters, equations, and inequalities
- Create code by decomposing situations into computational steps in order to represent mathematical concepts and relationships, and to solve problems



SKILLS YOU WILL GAIN

Chapter 1

Introduction to Python

This course begins with an introduction to Python, guiding kids through setting up the Python environment. It covers fundamental aspects such as basic syntax, key data types, and the effective use of comments in code. The curriculum then progresses to cover control structures, including if-else statements, followed by an introduction to loops (for and while loops). Participants will further explore advanced topics, including nested loops and loop control statements, providing a comprehensive foundation in Python programming.

Chapter 2

Functions & Modules

In this strand, kids are introduced to creating and using functions, exploring concepts of scope and arguments. The curriculum introduces modules and their usage, highlighting the role of these modular components in code organization. Additionally, participants gain insights into the Python standard library, broadening their understanding of pre-built functionalities available for various programming tasks.

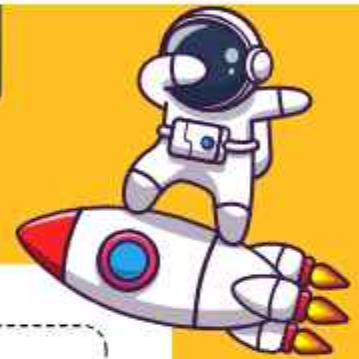
LIMITED SLOTS AVAILABLE



Introduction to Numpy

Chapter 3

This module introduces Numpy arrays and their manipulation, guiding participants through performing mathematical operations and handling multidimensional arrays. The curriculum extends to cover basic linear algebra operations, providing a comprehensive understanding of leveraging Numpy for efficient numerical computing in Python.



Introduction to SymPy

Chapter 4

This module provides an introduction to symbolic mathematics using SymPy, focusing on simplifying algebraic expressions, solving equations symbolically, and manipulating mathematical expressions programmatically. Participants gain foundational skills in leveraging SymPy for symbolic computation and algebraic manipulation in Python.



Python in Algebraic Problem Solving

- Applying Python for solving algebraic problems
- Working with complex mathematical expressions

Practical Problem Solving

- Integration of learned concepts in practical problem-solving scenarios
- Assignments and projects on mathematical problem-solving using Python



What Our Users Say

" The teachers are very caring and my children really enjoy the sessions "

-Aysha N C



" We are very happy with the coding lessons. The teacher was very good and our child enjoyed himself will learning new skills which he will surely need. Now he wants to teach the whole family what he learned."

-Stephanie Graebenitz



" I had a great experience learning Coding with Cyber Square. Teachers can communicate with the learner and clear their complex doubts in an understandable way.

-Sourav S



" I started a few months ago knowing nothing whatsoever about computer programming, my instructor has helped learn Python in a very fun but educational way. I will definitely recommend it to anyone interested in computer science. Great environment overall! "

-Fawas Halazon

THANK YOU

Thank you for exploring our Cyber Square coding courses brochure. We look forward to accompanying you on your path to success. If you have any questions, want to enroll in our courses, or need further information, please don't hesitate to reach out. Together, we can shape a brighter future through the power of code and let's create a world where technology is not just a part of our lives but a tool we master.

Unlock the Power of Code

We're proud to be your partners in this exciting journey. Whether you're a school looking to enrich your curriculum with coding or a student seeking to expand your knowledge, Cyber Square is here to help you take the first step into the world of coding.

A World of Possibilities Awaits

The future of work is changing rapidly. Many traditional jobs will be automated in the next 5-10 years, and 50% of the jobs that will emerge don't even exist today. In this dynamic landscape, one skill stands out as essential: coding. It's as vital as being literate in your native tongue or English.

Unleash Your Potential with Cyber Square

Cyber Square is not just a coding platform; it's a gateway to limitless opportunities. We're dedicated to equipping students and teachers with the latest technologies, including Artificial Intelligence, Robotics, IoT, and more. With our curriculum and platform, you can create your own projects, enhancing your practical skills while having fun along the way.

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