

NIHERST iSTEM Club

Academic Year 2021/2022 – Term Two (2)

FREQUENTLY ASKED QUESTIONS

1. What iSTEM Club about? What are the members going to learn?

iSTEM Club helps to foster a positive attitude in students towards STEM. The club provides academic support to the students in problematic science topics they encounter in the classroom while engaging members in 21st century learning. **iSTEM Club** is the perfect environment to cultivate students' curiosity and creativity while teaching them to base their reasoning on evidence and solve problems via interactive and hands-on inquiry- and problem-based learning. Content is designed for students to gain critical-thinking abilities and other transferrable skills in areas such as information technology, research, design, analytics, teamwork/collaboration, and communication.

There are six (6) club meetings during each academic term and the club caters to students across three different age groupings (5-6 years, 7-9 years, and 10-13 years).

Term Two (2) of the 2021/2022 Academic Year is themed **AI Explorers**. For further details, please visit the [NIHERST website \(click\)](#).

Specific learning objectives for each age group are as follows:

5-6 years:

- List ways that technology, computers, and other digital tools can help us in everyday life
- Explain what AI is and identify it as a digital tool
- Give examples of existing AIs today
- Understand that computers have their own language
- Demonstrate basic coding
- Explain how AI works
- Explain what Machine Learning (ML) is
- Interact with different ML platforms
- Demonstrate different ways that an AI can be trained for different uses
- List ways that AI can be used
- List the pros and cons of AI
- Engage in challenges that test your human ability against that of AI

7-9 years:

- Explain what computer programming is
- Discuss what is Artificial Intelligence (AI)
- Discuss the need for the creation of AI
- List various applications of AI
- Discuss what is Machine Learning (ML)
- Explain how ML is used in gaming technologies
- List the benefits of AI in gaming
- Discuss the future of gaming with AI

- Explain what recognition software is and give examples
- Demonstrate and use facial recognition, optical character recognition and speech recognition applications
- Discuss the Pros and Cons of recognition software
- List the applications of recognition software
- State the evolution of AI
- Discuss world views and policies on AI
- Identify the challenges faced by AI
- Discuss the future of AI
- Experiment with AI

10-13 years:

- State what is Artificial Intelligence (AI)
- Discuss the importance of coding in AI development
- Differentiate between AI and machine learning
- Interact with software built using machine learning concepts
- Demonstrate AI and Machine Learning (ML) using scratch
- Discuss how AI is used in daily life
- Evaluate how smart assistants work and list examples used at home
- Explain what recognition software is and how it can be applied in the industry
- Explore how AI is used in autonomous vehicles and its applications
- Give examples of AI applications in online gaming
- Discuss the contributions of AI to the gaming industry
- Use AI-based gaming platforms that and identify the AI component in each game
- Discuss applications of AI in Robotics
- Identify the major challenges faced with AI technology
- Highlight the dangerous risk factors AI use poses to humanity
- Discuss issues of privacy violations, potential job loss and weapon automatization associated with AI
- Compare the benefits and disadvantages of AI to society
- Interact with platforms that test and compare the abilities of human intelligence and Artificial Intelligence
- Debate the value AI integration in everyday life and the ethical implications of AI progression in the human world
- Discuss laws regulating AI use

2. What are the club meeting dates and times?

During Term Two (2) of the 2021/2022 Academic Year, the club will meet virtually on the following dates:

Session #	Virtual Meeting Date	Meeting Time
1	Saturday 15 th January, 2022	9:00 a.m. – 11:30 a.m.
2	Saturday 29 th January, 2022	9:00 a.m. – 11:30 a.m.
3	Saturday 12 th February, 2022	9:00 a.m. – 11:30 a.m.

4	Saturday 26 th February, 2022	9:00 a.m. – 11:30 a.m.
5	Saturday 5 th March, 2022	9:00 a.m. – 11:30 a.m.
6	Saturday 19 th March, 2022	9:00 a.m. – 11:30 a.m.

3. How can I register?

The registration process is done entirely online.

You can register using the Registration Link [HERE \(click\)](#) or on our website and social media platforms ([Facebook](#), [Instagram](#) or [Twitter](#)). Once the registration form is submitted, you will receive instructions for payment. **Please note that your child's spot is not guaranteed until proof of payment is received.**

Once proof of payment is received, your registration is complete and you will receive a **Welcome Note** including the recurrent meeting link to join the sessions on **Zoom**, the materials required, and further relevant information. You will also receive, via email, the **Activity Booklet** your child will use during the term.

4. Is my spot confirmed once I submit my registration form?

No. Submission of the registration form creates a "Pending Registration" status for your child/children. Your spot is only confirmed upon verification of proof of payment. Because spaces are limited, we will contact you once you submit your registration form with instructions on how to pay. Once we confirm your payment on our end, you will be notified of your confirmed registration status.

5. What is the registration fee?

The iSTEM Club fee is \$300.00 for the term. **Materials and supplies are not included.** This term's topic is digital and will not require many hands-on materials. Details will be provided in the **Welcome Note**.

6. How do I pay?

Upon submission of your completed online registration form(s), you will receive an email with instructions on how to make payment. At present we will be accepting direct deposits (over the counter bank transactions, fast deposits, online banking transfers).

Please note it is required that you retain a proof of payment to submit to us via email (istemclub@niherst.gov.tt) as this is what will be used to confirm your spot in the club if space is available.

7. Can I register outside of the age range?

This will be at the discretion of the facilitator. You may be able to register your child for a higher age group if your child is academically on par with that age group.

8. Can I sign up multiple children?

Yes, you can sign up more than one child, but you will need to fill out a separate form for each child. Each child will require access to the Online Course Requirements as stated in Question #12.

9. Does my child need a separate email address?

Children are not required to have a separate email address. The email address inserted on the registration form in the **Member Email Address** section will be the address used to add him/her to the online sessions, as well as to forward additional resources. However, if you wish to setup an email address for your child, you can use the following link as a guide (Gmail): <https://support.google.com/families/answer/7103338?hl=en>

10. How do I prepare for iSTEM Club?

Upon confirmation of payment for the club, we will send you **Welcome Note** which outlines how to set up software needed for the course and a link to install Zoom. This email will be sent to both the parent's email addresses as well as the email address for the student that is registered.

11. What is required for iSTEM Club?

Your child should have access to an internet-connected device with camera and microphone, as well as the **Zoom** application as this is the platform we are using.

This term's topic is digital and will not require many hands-on materials. Details will be provided in the **Welcome Note**. Most of the items required will be traditionally found and readily available around the house. **In the event that you are not able to provide these hands-on materials, the member can still join and follow along during each session.**

For the term, a booklet detailing the activities with instructions and support content will be made available for members. This resource can be used to do or repeat activities independently at a later date. The booklet will be sent via email.

12. What are the basic Online Course requirements?

Online Course Requirements:

- Mac or Windows PC only
- Webcam (functional) **Zoom**
- Any additional software required for the club sessions will be sent in an email upon confirmation of payment where applicable
- Internet Browser (Chrome, Safari, Internet Explorer etc.)
- Headset or headphones with built in microphone are strongly recommended

13. Can I get assistance setting up the software?

Yes, we will provide you with an email address to access support if you need assistance to make sure your computer system is ready.

14. Can I use a virtual background?

Ideally, students should be seated in a distraction-free area of their home. Virtual backgrounds can be distracting to the facilitators and other members, so we do not encourage members to use these.

15. How do we join the session(s)?

Once registration is complete and payment is confirmed, a recurrent meeting link will be sent to the member email address listed for your child to join the session on **Zoom**. Additionally, this recurrent meeting link will also be included in the **Welcome Note**.

16. Are parents allowed to stay during the meeting sessions?

It is mandatory for an adult (or older sibling) is present with each member in the 5-6 and 7-9 age groups. This is to ensure proper supervision and to assist with activities. Parents may be allowed to view the 10-13 age group sessions, but this is at the discretion of the facilitator.

17. Can siblings attend sessions together?

Yes. We will allow a maximum of **one** additional sibling (**in the same age group**) **using the same PC** during the session at no extra cost. If more than one PC is to be used during the same session, this will count as an additional spot and each child will pay the full price. Siblings will be required to adhere to the **Member Code of Conduct** on the [NIHERST website \(click\)](#).

18. How many members do you take in for iSTEM Club?

The 5-6 and 7-9 age groups will accommodate up to 15 members, and the 10-13 age group will accommodate up to 20 members.

19. What is the ratio of facilitators to members?

This varies with the age group, however at least two (2) facilitators will be present for each meeting.

20. If I miss a session, what happens?

We will be willing to provide any missed handouts or assignments. Most sessions will begin with a quick recap of the previous session and members are encouraged to ask questions if confused and to fill any gaps in knowledge.

21. Are the sessions recorded?

Sessions may be recorded to ensure quality delivery of content and to evaluate for future programmes.

22. Can I get access to the recorded sessions?

We will provide students access to the digital materials used for each session (slides, project files etc.). View-Only Access to the sessions that may be recorded may be available upon request via link after the entire club course has ended.

23. Do I need to have my video on?

Yes.

24. Will I need to share my screen?

Yes.

25. Is there a dress code?

Yes. See **Member Code of Conduct** on the [NIHERST website \(click\)](#).

