STEM.ORG ACCREDITED™ EDUCATIONAL PROGRAM

MASTERY — ESPORTS —

Academic Esports™

CAMPS & CLUBS CATALOG

- Extended Learning
- After-School
- Summer, Winter & Spring Break

STEMfinity
Science, Technology, Engineering, Math and Beyond

AWARD-WINNING
EXTENDED LEARNING PROGRAMS

All of our Camps and Clubs:

- Integrate Game-and-Learn™ philosophy: Uses gaming as a tool for engagement and deep learning
- Focus on interdisciplinary STEM concepts while developing SEL skills
- Are facilitated by trusted Mastery Coding™ instructors
- Have a balanced schedule with critical-thinking workshops and strategic gameplay
- Emphasize social-emotional learning to shape healthy students and gamers

All camps & clubs are facilitated by Mastery Coding certified instructors (virtual).

Powered by Mastery Coding

Mastery Coding™ empowers students to meet the challenges of tomorrow through intelligent technology education.

WINNER EdTech Trendsetter Awards 2021

TOP STEM SOLUTION PROVIDERS Education Technology Insights 2022

STEM.org ACCREDITED

TOP DISTANCE AND REMOTE LEARNING SOLUTION PROVIDERS Education Technology Insights 2021

FINALIST EdTech Cool Tool Awards 2021

TABLE OF CONTENTS

SocietyCraft Minecraft Camps and Clubs 3-4

EngineeringCraft Minecraft Camps and Clubs 5-6

Academic Esports™ Rocket League Camps and Clubs 7-8

Academic Esports™ Fortnite Camps and Clubs 9-10

Academic Esports™ Super Smash Bros. Camps and Clubs 11-12

Academic Esports™ FIFA Camps and Clubs 13-14

Academic Esports™ Among Us Camps and Clubs 15-16

Academic Esports™ Overwatch Camps and Clubs 17-18

Digital Adventures in Computer Science Camps and Clubs 19-20

Academic Esports™ Clubs

- 1 hour sessions
- Multi-week implementation

Game-and-Learn™ Camps

- 3 hour sessions
- Single week implementation

SOCIETYCRAFT

MINECRAFT CIVILIZATION CLUB

Participate in the creation of a collaborative, functioning Minecraft society in order to develop computer literacy, problem-solving, and teamwork skills.

Skill Level: Beginner-Intermediate

Grades: 3-8

CROSS-DISCIPLINARY CONNECTIONS

1. Students study the history of human societies and implement them into their gameplay to better understand cooperation and organization.
2. Students learn new methods of overcoming challenges and displaying social awareness to become a better member of their in-game societies.
3. Students discover the core fundamentals of science, technology, engineering, and mathematics to create awesome builds and contraptions for their game.

STEAM CONNECTIONS

S Students gain insight into ideas of empirical testing that they apply to the sociological game and real life

T Students learn the history of technology and how it affected societies in their times to better understand the potentials impacts of modern and future technologies on our current society

E Students find out about the great feats of human engineering as well as the wonders of the world so that they can design & construct amazing structures within their own societies

A Students understand forms of communication, creative expression, and cooperation so that they can create strong ties and a stable society

M Students constantly perform simple arithmetic and calculations as they build, travel, and organize throughout the world

SEL COMPETENCIES

SELF-AWARENESS

Students gradually recognize their own strengths, preferences, and values through their roles in SocietyCraft and translate this to the real world to develop themselves and later serve as an effective participant in a community.

SELF-MANAGEMENT

Students improve their ability to recognize the emotions of others and themselves through in-game interactions, and thus form strategies for the real world to handle such emotions in a positive & constructive manner.

SOCIAL AWARENESS

Students place themselves in the shoes of others who come from a myriad of backgrounds different from their society, and are able to act with empathy for others

RESPONSIBLE DECISION MAKING

Students understand there being consequences for immoral actions, such as harming other player characters, and learn how to act accordingly based on ideas such as ethics, safety, and well-being of others

RELATIONSHIP SKILLS

Students build and maintain healthy relationships with other players through community, cooperation, trade, and peacefully resolving conflict

TECHNICAL REQUIREMENTS

- Own Minecraft: Education Edition (not included)
- Supported Devices: Windows, Chromebook, Mac, iPad
- Zoom Video Conferencing
- Reliable Internet connection

IMPLEMENTATION

All camps & clubs are facilitated by Mastery Coding certified instructors (virtual).

ACADEMIC ESPORTS™ CLUB

- 1 hour sessions
- Multi-week implementation

GAME & LEARN™ CAMP

- 3 hour sessions
- Single week implementation

ENGINEERINGCRAFT

MINECRAFT CAMP AND CLUB

The popular block-building game known as Minecraft has been thriving since its inception in 2011; bringing in and creating millions of designers, inventors, and programmers. In EngineeringCraft, members use advanced architectural and electrical engineering methods while learning about different building styles and how to utilize their awesome creative power.

SKILL LEVEL: INTERMEDIATE - ADVANCED
GRADES: 4 - 12

CROSS-DISCIPLINARY CONNECTIONS

1. Students begin by identifying the usefulness of design and engineering within their builds to make them more aesthetic and/or functional.

2. Students illustrate their understanding of these new ideas by either mimicking designs or creating their own original content.

3. Students recognize the core foundations of design and engineering, as well as mathematics, logic, and physics to improve their understanding of how to build, invent, and program outside the classroom and within Minecraft.

STEAM CONNECTIONS

S Students learn how electricity functions through presentations on electrons, resistors, and circuits. They will use this knowledge to gain a more concrete understanding of Redstone contraptions in Minecraft.

T Students look at machines in their basest forms such as levers, screws, and pulleys. Students then transcribe these simple machines into complex ones for use in Minecraft.

E Students create and read blueprints to design and/or build their buildings, civil constructions, and contraptions for use in Minecraft.

A Students develop their own artistic style of designing and building all the way from simple zen gardens to complex homes, castles, and whatever else they imagine.

M Students regularly perform arithmetic and learn about logic gates to better understand Boolean algebra for use in their complex Redstone builds.

SEL COMPETENCIES

AWARENESS OF SELF & OTHERS

Students through trial and error begin to realize their strengths and employ them to the best of their ability. This understanding of focusing on your strengths will help students excel in topics they enjoy and leave them more confident, happy, and aware of who they are.

SELF MANAGEMENT

Students build upon themselves by learning new skills and teaching others what they've learned. Through these interactions, students become more confident in topics they have studied and are eager to learn more.

SOCIAL AWARENESS

Students are shown varying styles and cultures through the use of foreign structures such as pagodas and werkhauses. Learning about different societies through their designs shows the beauty and reason behind such structures, thus giving them reverence and respect for other cultures.

RESPONSIBLE DECISION MAKING

Students learn the importance of preservation and personal property by not causing harm to the hard work of others within the game.

RELATIONSHIP SKILLS

Students form healthy and constructive relationships with other EngineeringCraft members by compromising and working together on designs, builds, and complex contraptions.

TECHNICAL REQUIREMENTS

- Own Minecraft: Bedrock Edition (not included)
- Supported Devices: PC, Xbox One, Xbox Series X, Xbox Series S, PS4, PS5, Nintendo Switch, Android, iOS, Mobile
- Zoom Video Conferencing
- Reliable Internet connection
- Headset or ear pods with a mic

IMPLEMENTATION

All camps & clubs are facilitated by Mastery Coding certified instructors (virtual).

ACADEMIC ESPORTS™ CLUB

- 1 hour sessions
- Multi-week implementation

GAME & LEARN™ CAMP

- 3 hour sessions
- Single week implementation

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ACADEMIC ESPORTS™

ROCKET LEAGUE

Camps and Clubs

Combining engaging gameplay with critical thinking educational modules, this program teaches students how to improve their game mechanics and strategy, discover how STEAM careers power the gaming industry, and learn about workforce opportunities in emerging technology.

CROSS-DISCIPLINARY CONNECTIONS

1. Students will be taught the step-by-step processes to compete at continually higher ranks within the game as an exemplar of learning how expertise is formed across the study of all disciplines.
2. Students will learn how the impact of owning positive communication skills applies to college and career readiness.
3. Students will critically review their own in-game performance as a means of understanding how earnest self-reflection is critical to successful achievement.

STEAM CONNECTIONS

S Students will learn the principles of foundational physics and, through engaging gameplay, discover how to manipulate physics to their own advantage.

T Students will be taught a break-down of of how search-engines operate and how the skill of seeking out online information can be effectively streamlined.

E Students will learn about the basic hardware and software makeup of computers and how each component has an impact on Rocket-League (or any other esport they choose to play).

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A Students will understand the concept of 'cyberbullying' to not only protect themselves from being victimized, but to also help positively impact the gaming environments around them.

M The program will teach students about core geometry concepts and how in-game knowledge of geometry makes them more effective players.

SEL CONNECTIONS

Self-Awareness

Students will be given the chance to recognize where they can begin setting goals in order to successfully organize and reach objectives.

Self-Management

Students will develop problem-solving tools in order to react properly to missteps and learn from previous errors.

Social Awareness

Students will identify and recognize their personal strengths while finding ways to elevate areas where they encounter personal challenges, in-game and in life.

Responsible Decision Making

Students will learn about making decisions and understanding that actions have consequences in real life and inside of the game when you're trying to win.

Relationship Skills

An essential skill set for anyone aiming to develop in a team-based environment, students will develop their interpersonal interactions.

TECHNICAL REQUIREMENTS

- Rocket League (On any platform)
- Supported Devices/Consoles: PC, Nintendo Switch, Xbox, Playstation
- USB Gamepad strongly suggested
- Zoom Video Conferencing
- Reliable Internet connection

IMPLEMENTATION

All camps & clubs are facilitated by Mastery Coding certified instructors (virtual).

Academic Esports™ Club

- 1 hour sessions
- Multi-week implementation

Game-and-Learn™ Camp

- 3 hour sessions
- Single week implementation

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Academic Esports™ Fortnite Camps & Clubs

Combining engaging gameplay with critical thinking workshops, this program teaches students how to improve their game mechanics, discover how STEAM careers power the gaming industry, and learn about workforce opportunities in emerging technology.

CROSS-DISCIPLINARY CONNECTIONS

1. Students will understand, study, and analyze the map used in the game in order to better understand the value of maps across the spectrum of history.
2. Students will learn new mechanics in the game, how they function, and when to use them in order to see the connection of how we now live in a world where one is always learning (and there is no "end point" no matter what discipline you are studying.)
3. Students will analyze gameplay to better understand how the art of reflection improves performance across all pursuits.

STEAM CONNECTIONS

S Students will understand the connection between Hz and FPS and what settings in their devices can help them optimize their gameplay experience.

T Students will learn about computer hardware and console peripherals as it relates to in-game performance and careers in IT.

E Students will be able to understand how physics and geometry are used to build in Fortnite (as well as principles such as momentum and acceleration).

A Students will develop their teamwork and communication skills by forming and maintaining teams that must work together to succeed.

M Students will understand how to analyze and calculate damage totals by finding ratios through numerical compare and contrast methodology.

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SEL CONNECTIONS

AWARENESS OF SELF & OTHERS

Students will develop their ability to advocate for themselves by being able to identify and express their emotions to each other in a positive manner.

SELF MANAGEMENT

Students will develop their time management skills by having a mixture of "game time" and "practice time" where they will be required to learn and practice along with the instructor as they are taught new mechanics.

SOCIAL AWARENESS

Students will develop their social skills by working together with their teammates as they learn the core principles of teamwork and effective communication.

RESPONSIBLE DECISION MAKING

Students will learn how each situation they are presented with has multiple, viable options and see the relationship between choosing wisely and choosing quickly.

RELATIONSHIP SKILLS

Students will understand the value of good sportsmanship and how to be kind and considerate in both victory and defeat.

TECHNICAL REQUIREMENTS

- Download Fortnite (not included)
- Supported Devices: Windows 7+, PlayStation, Xbox, Switch, and Android (Mac and iOS not supported)
- Zoom Video Conferencing
- Reliable Internet connection
- Headset or ear pods with a mic

IMPLEMENTATION

All camps & clubs are facilitated by Mastery Coding certified instructors (virtual).

ACADEMIC ESPORTS™ CLUB

- 1 hour sessions
- Multi-week implementation

GAME & LEARN™ CAMPS

- 3 hour sessions
- Single week implementation

SUPER SMASH BROS CAMPS AND CLUBS

Super Smash Bros. was introduced in 1999 and has consistently been one of the most popular and exciting games in esports for over a decade. Participants will learn in-game strategy and skills while also discovering how the game was made and what potential careers are available to avid esports players.

SKILL LEVEL: BEGINNER - INTERMEDIATE
GRADES: 4 - 12

CROSS-DISCIPLINARY CONNECTIONS

- Students will learn to understand the game from a coding perspective and use that knowledge to improve their gameplay.
- Students learn new methods and skills to improve their gameplay. Even skilled and experienced players will learn something new!
- Students discover the core fundamentals of science, technology, engineering, art and mathematics to increase their understanding outside of the classroom as well as in game.

STEAM CONNECTIONS

- **S** Students gain insight into how gravity is calculated, how it works in the game, how it affects different characters, and how to use that knowledge to gain a competitive advantage over other players.
- **T** Students learn the history of the game and how it has advanced technologically throughout the new consoles and game engines.
- **E** Students gather data, learn to build strategies, and use different characters in game to engineer different ways to defeat an opponent.
- **A** Students gain insight into the art of fighting games to understand animation keyframes, meshes, hitboxes, and other underlying aspects of the game.
- **M** Students constantly perform simple arithmetic and calculations as they play the game to develop strategies and gain an advantage over their opponent.

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SEL COMPETENCIES

AWARENESS OF SELF & OTHERS

Students gradually recognize their own strengths, character preferences, and values in their playstyles when participating in this club. They can later translate the same mentality into the real world and serve as an effective participant in a community.

SELF MANAGEMENT

Students improve their ability to recognize the emotions of others and themselves through the interactions outside of the game but knowing that those actions are a direct result of in-game actions. Thus, when in the real world, they're able to analyze a difficult situation and act accordingly.

SOCIAL AWARENESS

Students place themselves in the shoes of others who come from a myriad of backgrounds different from their society, and are able to act with empathy for others.

RESPONSIBLE DECISION MAKING

Students understand that there are consequences for immoral actions such as being not sportsmanlike and learn how to act accordingly based on ideals such as ethics, safety, and the well-being of others.

RELATIONSHIP SKILLS

Students build and maintain healthy relationships with other players through community, cooperation, and a healthy competitive atmosphere.

TECHNICAL REQUIREMENTS

- Own Super Smash Bros Ultimate (not included)
- Supported Devices: Nintendo Switch
- Zoom Video Conferencing
- Reliable Internet connection

IMPLEMENTATION

All camps & clubs are facilitated by Mastery Coding certified instructors (virtual).

ACADEMIC ESPORTS™ CLUB

- 1 hour sessions
- Multi-week implementation

GAME & LEARN™ CAMP

- 3 hour sessions
- Single week implementation

FIFA CAMPS AND CLUBS

Combining engaging gameplay with critical thinking workshops, this program teaches students how to improve their game mechanics, discover how STEAM careers power the gaming industry, and learn about workforce opportunities in emerging technology.

SKILL LEVEL: BEGINNER – INTERMEDIATE
GRADES: 6 – 12

CROSS-DISCIPLINARY CONNECTIONS

- Students will understand, study, and analyze the field of soccer and it's digital counterpart - they will aim to understand how play has evolved over time.
- Students will analyze gameplay to better understand how the art of reflection improves performance across all pursuits.
- Students will learn new mechanics in the game, how they function, and when to use them in order to see the connection of how we now live in a world where one is always learning.

STEAM CONNECTIONS

- **S** Students will understand the connection between the in game player stats and their abilities in the real world.
- **T** Students will learn about how computers simulate physics using game engines to improve the "game juice".
- **E** Students will be able to understand how variable outcome's are calculated using a random number generator.
- **A** Students will compare and contrast different player builds by a collection of their in-game stats & abilities to identify which ones give an advantage.
- **M** Students will learn how to optimize their collection of the in-game currency to assemble and maintain club value.

SEL COMPETENCIES

AWARENESS OF SELF & OTHERS

Students will develop their ability to advocate for themselves by being able to identify and express their emotions to each other in a positive manner.

SELF MANAGEMENT

Students will develop their time management skills by having a mixture of “game time” and “practice time” where they will be required to learn and practice along with the instructor as they are taught new mechanics.

SOCIAL AWARENESS

Students will develop their social skills by working together with their teammates as they learn the core principles of teamwork and effective communication by forming and maintaining relationships where they must work together to succeed.

RESPONSIBLE DECISION MAKING

Students will learn how each situation they are presented with has multiple, viable options and see the relationship between choosing wisely and choosing quickly.

RELATIONSHIP SKILLS

Students will understand the value of good sportsmanship and how to be kind and considerate in both victory and defeat.

TECHNICAL REQUIREMENTS

- Own FIFA (not included)
- Supported Devices: Windows 7+, PlayStation, Xbox, Switch, and Google Stadia (Mac and mobile not supported)
- Zoom Video Conferencing
- Reliable Internet connection
- Headset or ear pods with a mic

IMPLEMENTATION

All camps & clubs are facilitated by Mastery Coding certified instructors (virtual).

ACADEMIC ESPORTS™ CLUB

- 1 hour sessions
- Multi-week implementation

GAME & LEARN™ CAMP

- 3 hour sessions
- Single week implementation

Tactics, Tips & Tricks:
Among Us Camps & Clubs

Combining engaging gameplay with critical thinking workshops, these Academic Esports experiences teach students how to be better impostors and crewmates while learning about healthy gaming habits, opportunities in emerging technology, and deductive reasoning.

GAMEPLAY

- Students will understand, study, and analyze the map used in the game in order to better understand shortcuts and strategies.
- Students will learn new strategies and how to have positive sportsmanship to build positive relationships in safe spaces.
- Students will learn to grow their social and emotional learning to be a better person overall.

STEAM CONNECTIONS

S Students will learn about the scientific method and how to apply it in real life and into the strategy decision making for Among Us.

T Students will learn about simple coding algorithms and logic.

E Students will discover what a game engine is and how code works to move the game forward.

A Students will learn about the history of coding and computer science, noting its evolution and impact on society.

M Students will apply math computations in order to calculate percentages of success and estimate odds.

SEL CONNECTIONS

Awareness of Self & Others

Students will understand and embody a growth mindset for them to exercise and feel better about themselves to share with others.

Self Management

Students will see that being well organized is key to being a more successful person, taking positive initiative also moves tasks forward and also is a good trait of being a leader. Students will understand that and apply it.

Social Awareness

Students will learn and take in the "Being Cooperative" and "Showing Empathy & Compassion" lessons and understand that being cooperative and having team skills will move a project forward and develop life skills.

Responsible Decision Making

Students will learn about making decisions and understanding that actions have consequences in real life and inside of the game when you're trying to win.

Relationship Skills

Students will understand how to be a team player and show that sportsmanship is important and making sure that people have fun no matter what the situation is. They will also understand what healthy and unhealthy relationships are like and how to identify each one.

TECHNICAL REQUIREMENTS

- Own Among Us (not included)
- Supported Devices: Windows 7+, iOS and Android only
- Zoom Video Conferencing
- Reliable Internet connection

IMPLEMENTATION

All camps & clubs are facilitated by Mastery Coding certified instructors (virtual).

Academic Esports™ Club

- 1 hour sessions
- Multi-week implementation

Game-and-Learn™ Camp

- 3 hour sessions
- Single week implementation

OVERWATCH
CAMPS AND CLUBS

Combining engaging gameplay with critical thinking workshops, this program teaches students how to improve their game mechanics, discover how STEAM careers power the gaming industry, and learn about workforce opportunities in emerging technology.

GRADES: 6 - 12

CROSS-DISCIPLINARY CONNECTIONS

- Students will learn new mechanics in the game, how they function, and when to use them in order to see the connection of how we now live in a world where one is always learning (and there is no “end point” no matter what discipline you are studying.)
- Students will analyze gameplay to better understand how the art of reflection improves performance across all pursuits.

STEAM CONNECTIONS

- **S** Students will begin to understand the rules of the game and how things function on a deeper level within the code.
- **T** Students will explore software development concepts like level design and how that impacts the gameplay and players.
- **E** Students will begin to understand how to manage their computer hardware and software and optimize it for their play.
- **A** Students will develop their teamwork and communication skills by forming and maintaining teams that must work together to succeed.
- **M** Students will understand how to analyze and calculate damage totals by finding ratios through numerical compare and contrast methodology.

SEL COMPETENCIES

Awareness of Self & Others:
Students will develop their ability to advocate for themselves by being able to identify and express their emotions to each other in a positive manner.

Self Management:
Students will develop their time management skills by having a mixture of "game time" and "practice time" where they will be required to learn and practice along with the instructor as they are taught new mechanics.

Social Awareness:
Students will develop their social skills by working together with their teammates as they learn the core principles of teamwork, effective communication, and competitive etiquette.

Responsible Decision Making:
Students will learn how each situation they are presented with has multiple, viable options and see the relationship between choosing wisely and choosing quickly.

Relationship Skills
Students will understand the value of good sportsmanship and how to be kind and considerate in both victory and defeat.

TECHNICAL REQUIREMENTS

- Purchase & Download Overwatch (not included)
- Supported Devices: Windows 7+, PlayStation, Xbox, Switch
- Zoom Video Conferencing
- Reliable Internet connection
- Headset or ear pods with a mic

IMPLEMENTATION
All camps & clubs are facilitated by Mastery Coding certified instructors (virtual).

Academic Esports™ Club
- 1 hour sessions
- Multi-week implementation

Game & Learn™ Camp
- 3 hour sessions
- Single week implementation

Extended Learning: Camps and Clubs

DIGITAL ADVENTURES IN COMPUTER SCIENCE

Now with KUBO

From learning what code is and how it works to learning how to keep their information and online activity protected, private and secure, this program teaches the essential introductory computer science knowledge students need to be successful and safe in today's technological world.

CROSS-DISCIPLINARY CONNECTIONS

1. Students will be taught the academic vocabulary of the discipline so that they own the core literacy tools needed to understand the interdisciplinary concepts.
2. Students will learn how the process of trial and error applies to science, mathematics, and entrepreneurship.
3. Students will learn how the history of coding, computer science and technological innovation coincides with the evolution of societies across the globe.

STEAM CONNECTIONS

S Students will learn about the functions and foundational principles of sequencing, algorithms, loops, and if- statements.

T Students will be taught the rules of digital interaction, how to make a password and the core principles of cybersecurity, online safety and digital citizenship.

E Students will learn about the basic hardware and software makeup of computers and the impact of each component on the larger system.

A Students will understand the concept of 'cyberbullying' to not only protect themselves from being victimized, but to also help positively impact the online environments in which they participate.

M The program will have students apply core math concepts including pattern recognition, estimation and calculating percentages.

SEL CONNECTIONS

SELF-AWARENESS

Students will be given the chance to recognize where they can begin setting goals in order to successfully organize and reach objectives.

SELF-MANAGEMENT

Students will develop their time management skills by having a mixture of "explore time" and "assignment time" where they will be required to learn and practice along with the instructor.

SOCIAL AWARENESS

Students will develop their social skills by working together with their teammates as they learn the core principles of teamwork and effective communication.

RESPONSIBLE DECISION MAKING

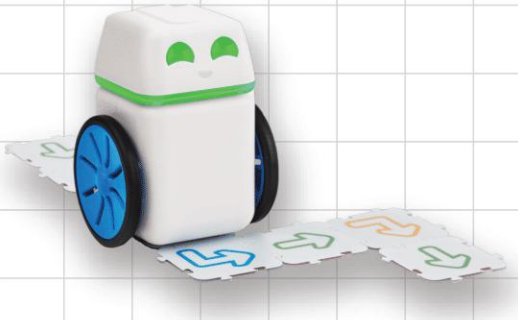
An exceptionally important skill in school, the workplace, and home students will see and learn the value teamwork brings to their lives.

RELATIONSHIP SKILLS

Students build and maintain healthy relationships with other players through community, cooperation, trade, and peacefully resolving conflict.

ABOUT KUBO

KUBO is an award-winning and fun educational coding solution that is designed specifically to help students as young as four learn coding and computational thinking in order to encourage a whole new generation of learners to develop 21st-century skills.



TECHNICAL REQUIREMENTS

- Supported Devices: Chromebooks, PC
- Zoom Video Conferencing
- Reliable Internet connection

IMPLEMENTATION

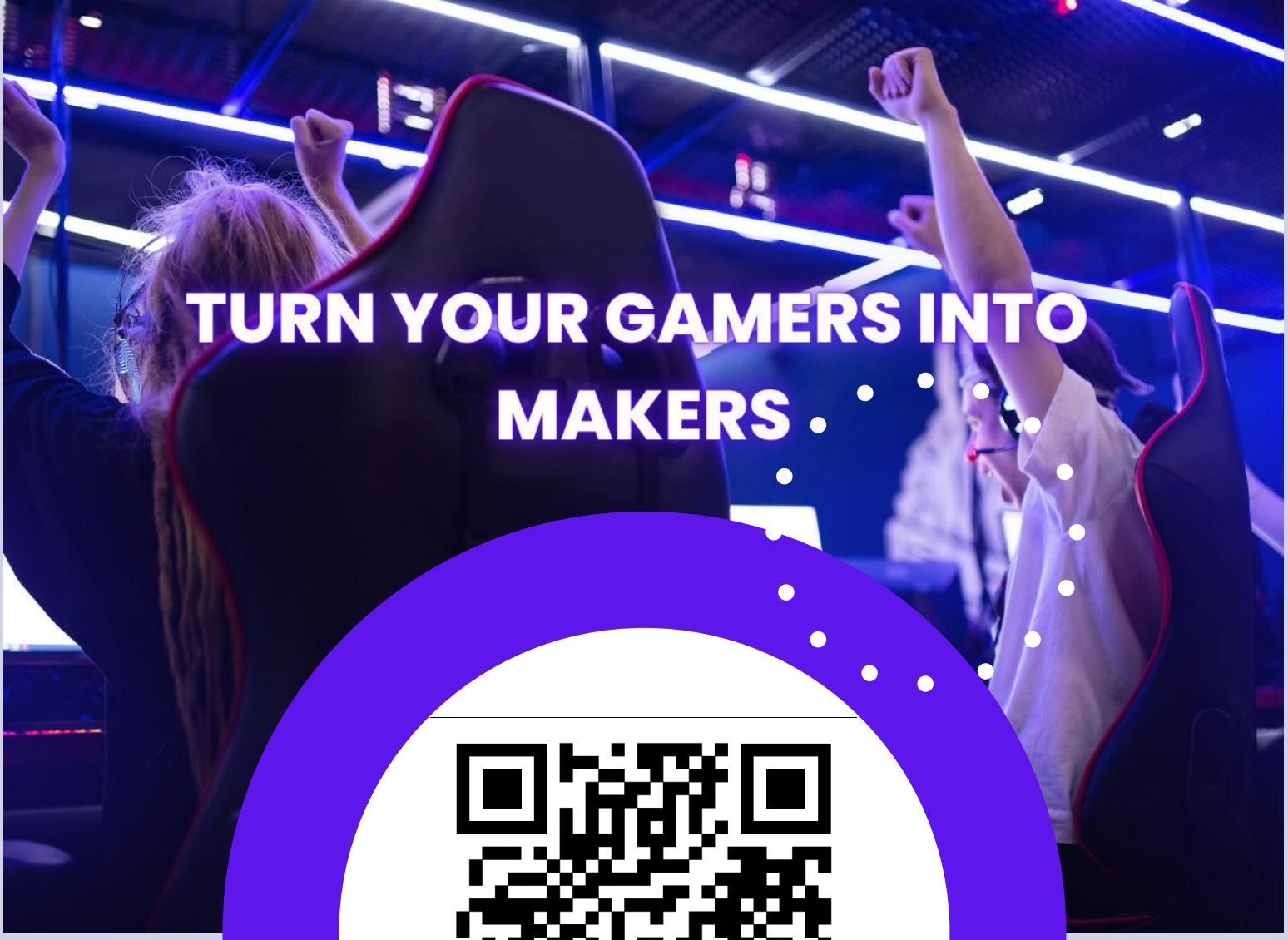
All camps & clubs are facilitated by Mastery Coding certified instructors (virtual).

CLUB

- 1 hour sessions
- Multi-week implementation

CAMP

- 3 hour sessions
- Single week implementation



TURN YOUR GAMERS INTO MAKERS

FIND OUT MORE

Where critical thinking meets project-based fun

MASTERY ESPORTS

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