

PREMIER ACCELERATOR PROGRAM FOR TECH INNOVATION

Learn 10+ Emerging Technologies by Building Projects and Solving Challenges

An experiential 12-month program to discover your incredible future

Class 6 to 12 | Age 11 to 17

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INTRODUCTION

In the rapidly evolving landscape of education, the significance of acquiring extracurricular skills has never been more pronounced. Amidst a plethora of options, our Emerging Technology program shines a spotlight on a transformative array of skills, Programming, Robotics, Al, Data Science, and more. Python offers versatile programming paths from software development to data science. Robotics and 3D printing innovate, making imaginations tangible.

Al and Data Science aren't just future prospects - they're here. Global giants use them for breakthroughs. Al subtly enhances daily experiences, from Alexa to Netflix to eCommerce and Google Maps.

Acknowledging the escalating prominence of emerging technologies, we've crafted a foundational course to provide students with an early foothold in understanding their intricacies. Our program serves as a launchpad, guiding tomorrow's leaders through the intricate landscape of technology, empowering them to confidently navigate its current applications and boundless future opportunities.



EXPERT SPEAK

Al is in a 'golden age' and solving problems that were once in the realm of Sci-Fi.

JEFF BEZOS, CEO, Amazon



The robots are coming, whether we like it or not, and will change our economy in dramatic ways.

BILL GATES, Co-founder, Microsoft



The jobs of the future are going to involve humans collaborating with other humans to design work for machines.

SUSAN WOJCICKI, CEO of YouTube



In the world of technology, change is constant. The most important quality you can develop is the ability to adapt to change.

SATYA NADELLA, CEO of Microsoft



In essence, this indicates that the present generation of students will enter a job market characterized by entirely different demands and outlooks. To equip these young learners for a remarkable career and enable them to make a meaningful impact, 10xTC presents an unique offering:

The Premier Accelerator Program for Tech Innovation

This comprehensive year long program spans four stages, facilitating the development of skills that will matter most in the students chosen careers and not just the ability to take standardized tests.



PROGRAM HIGHLIGHTS

This Premier Accelerator Program is designed to be flexible enough to work along with student's current schedule (up to 4 hours weekly commitment only). All sessions are in-person and run on weekends with small cohort of 10 to 12 students in 10xTC's STEM learning center. Complementing in-person sessions, 10xTC's Learning Platform ensures a seamless educational experience.



LEARNING HIGHLIGHTS



EXPERIENTIAL HANDS-ON PROJECT-BASED LEARNING



IN-PERSON INSTRUCTOR-LED SESSIONS



CURRICULUM DESIGNED TO PREPARE FOR PROFESSIONAL



LEARNING ENVIRONMENT THAT STUDENTS LOVE



CRITICAL THINKING, PROBLEM SOLVING & TEAMWORK



SPECIAL EVENTS TO BUILD REAL-LIFE SKILLS



GET THE 10X TECHCLUB ADVANTAGE

10xTechClub empowers students with a unique tech accelerator program for career success. We believe in holistic learning, combining diverse ideas, concepts, and practical skills. We provide mentor-guided in-person learning for practical, impactful outcomes using advanced tools and cutting-edge curriculum.

By seamlessly integrating industry, academia, and domain experts, our program fosters an environment where young minds are exposed to new horizons and are encouraged to unearth their latent talents.



Learn Coding, AI, Robotics, IoT, 3D Printing, Data Science and more



Online Learning Platform - All your Learners' needs, in One Place



Build an e-Portfolio of Projects Showcase Skills Gained



Tech Hackathons Hack Real Solutions in a Short Time



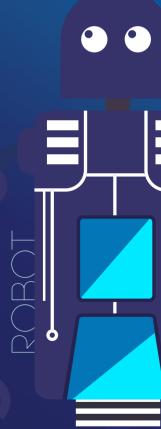
Big Tech Office Visit Gain exposure to real-world



Pitch a Business Plan at 10xSharkClub Get funding for Prototype Development



Nurture the muscles of Curiosity, Imagination & Creativity



21ST CENTURY SKILLS



Key Focus: Student's ability to adapt to change. Prioritize not just "results" but also cherish the transformative "learning experiences" fostered by our unique "10xTC learning process."

LEARNING SKILLS



Critical thinking



Creativity



Collaboration



Communication

Learn while Doing Project-Based Learning Innovative Challenges & Hackathons Mentorship

LITERACY SKILLS



Information

Media



Technology

Digital & Emerging Tech Podcast & Demos
Tech Pedagogy Industry Expert Interactions

LIFE SKILLS



Flexibility



Leadership



Initiative



Productivity



Social Skills

Entrepreneurship Experiential Learning Process Success Frameworks 10xSharkClub Business Plan Pitch



CURRICULUM

The curriculum is designed to fosters tech skills, from basics to advanced, through hands-on learning. It aligns with industry needs, encourages problem-solving, and promotes creativity while addressing real-world challenges. It embraces Learn while Doing theme for Enjoyable Applied Learning.



Design and Build Tech Projects



Participate in Challenges & Hackathons

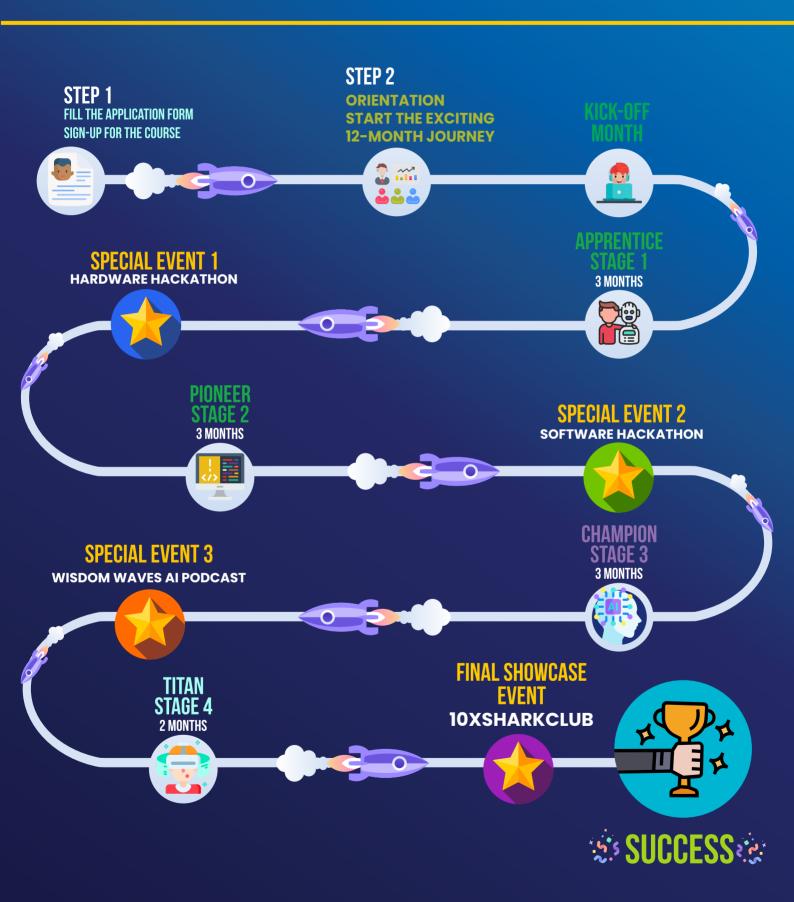


Apply Design Thinking Framework

As a result, students will emerge from the program with well-rounded skills: Programming, 3D Printing, Robotics, AI, Success Frameworks and more. With 20+ projects, 4 special events, and 12 months of learning, imagine creating next-gen tech.



12 MONTH PROGRAM JOURNEY





KICK-OFF 1 Month

SETTING THE FOUNDATION



CONCEPTS

- ➤ Structure & Planning
- ► Tech Essentials
- ► Programming Basics
- Presentation Skills
- Success Frameworks

PROJECTS: ► Create Algorithms and Presentations

▶ Design Thinking Framework based activities

STAGE 1 Apprentice 3 Months

MODULE 1 4 Weeks

3D DESIGN AND PRINTING



CONCEPTS

- ► 3D modelling Basics
- ► Understanding File Formats
- ▶ Printing & Calibrating
- ▶ Applications & Opportunities

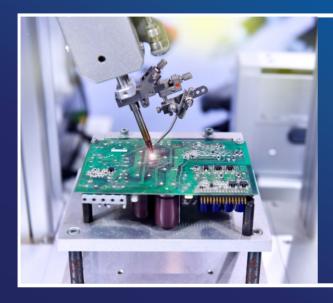
PROJECTS: ► Create 3D Models using Modelling Software

▶ Design and Print your own models



MODULE 2 4 Weeks

EMBEDDED SYSTEMS AND INTERNET OF THINGS (IOT)



CONCEPTS

- ► Programming Microcontrollers
- ► Learning Sensors & Actuators
- ▶ Wireless Communication
- ▶ What is IoT & Cloud
- ► Future of IoT

PROJECTS: ► Arduino Based Tony Stark's Arc Reactor Monitor

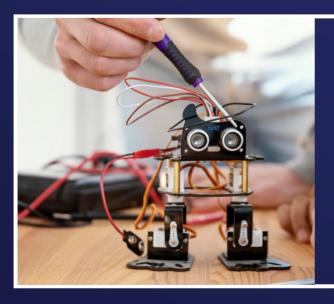
▶ Build and Program a Bluetooth controlled Car

STAGE 1

MODULE 3

4 Weeks

ROBOTICS & AUTOMATION



CONCEPTS

- ► Robotics Fundamentals
- ► Robot HW & SW
- ▶ Controlling Robots
- ► Applications & Opportunities

PROJECTS: ▶ Build and Program a Robotic Arm

▶ Design, Assemble and Program a Robot Car

CURRICULUM CONCEPTS & PROJECT HIGHLIGHTS

STAGE 2 Pioneer 3 Months



MODULE 1

8 Weeks

PYTHON PROGRAMMING



CONCEPTS

- ► Programming Fundamentals
- ► Python
- ➤ Software Development
- ▶ Tools & Applications

PROJECTS: ▶ Develop Jarvis - Tony Stark's Personal Assistant

▶ Use Python to build a 3D Printing Cost Calculator and more.

STAGE 2

MODULE 2

4 Weeks

DATA SCIENCE (DS)



CONCEPTS

- ▶ What is Data
- ► Introduction to DS
- ► Exploratory Data Analysis
- ▶ DS in Everyday Life

PROJECTS: ► Explore Visual Tools like PowerBI

▶ Visualize Real-world scenarios like Personal Finance, Sales Analysis

CURRICULUM CONCEPTS & PROJECT HIGHLIGHTS

STAGE 3 Champion 3 Months



MODULE 1

2 Weeks

ARTIFICIAL INTELLIGENCE (AI)



CONCEPTS

- ▶ Different types of Al
- ► Applications of Al
- ► Comparing AI & non-AI

PROJECTS: ➤ Simulate a Self-Driving Car like Tesla

► Detect handwritten text using Al

STAGE 3

MODULE 2

3 Weeks

MACHINE LEARNING (ML)



CONCEPTS

- Different types of ML
- ► How ML works
- ► Applications of ML

PROJECTS: ▶ Building a Music Recommendation System

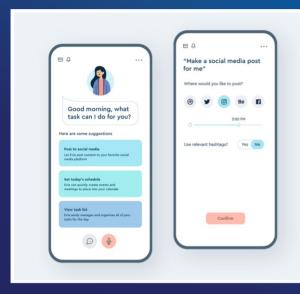
► Anime character classification



MODULE 3

2 Weeks

NATURAL LANGUAGE PROCESSING (NLP)



CONCEPTS

- ▶ Different types of NLP
- ► How NLP works
- ► Applications of NLP

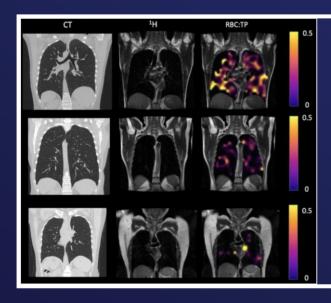
- **PROJECTS:** ► Design a virtual Al Voice Assistant
 - ► Sentiment Analysis of Iron Man dialogues

STAGE 3

MODULE 4

2 Weeks

COMPUTER VISION (CV)



CONCEPTS

- ► How CV works
- ► Types of CV algorithms
- ► Applications of CV

PROJECTS: ► Face and Gender Detection, Cricket Umpire Pose Detection

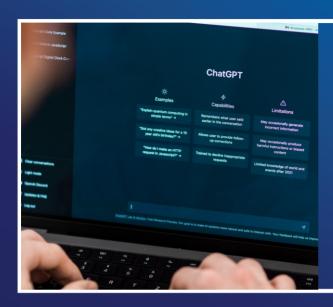
▶ Automatic Number Plate Recognition (ANPR)



MODULE 5

3 Weeks

GENERATIVE AI



CONCEPTS

- ► Different types of Gen Al
- ► Introduction to ChatGPT, Bard, Midjourney, etc
- ► Applications of Gen Al

PROJECTS: ► Create a custom Chatbot

► Design an Anime Face Generator

10 X TECH

STAGE 4

Titan

2 Months

MODULE 1

4 Weeks

DRONES (UAVS - UNMANNED AERIAL VEHICLES)



CONCEPTS

- ► Basics of UAVs
- ▶ Components & Flight Controls
- ▶ Programming & Semi-Autonomous Flight
- ▶ Drone Applications and Future

PROJECT: ▶ Build a Mini Quadcopter Drone

▶ Use a Simulator to practice Flying a Drone

STAGE 4

MODULE 2 4 Weeks

AUGMENTED REALITY VIRTUAL REALITY (AR/VR)



CONCEPTS

- ► Basics of AR/ VR/ MR/ XR
- ► Hardware & Software
- ► Making AR/VR Experiences
- ► Applications & Opportunities

PROJECT: ► Create a simple AR/VR experience

Create your own Metaverse



MODULE 3

4 Weeks

SPACE TECH



CONCEPTS

- ► Rockets and Spacecrafts
- ► Satellites and Rover
- ▶ Managing Space Information
- ► Astronaut Training and Suits

PROJECT: ► Satellite Location Display and Connectivity using GPS module and Arduino

► Mission Mars: Data-Driven Decision Making

STAGE 4

MODULE 4

4 Weeks

ELECTRIC MOBILITY AND EVs



CONCEPTS

- ► How EVs work: Components
- Powering EVs: Batteries & Charging
- ► Future of Electric Mobility
- ► Data Science and Evs

PROJECT: ► Make your own Solar Powered Electric Car

▶ Data Analysis and Visualization to understand Charging Behaviour



MODULE 5

4 Weeks

CYBER SECURITY



CONCEPTS

- ► Cyber Security Basics
- ► Tools & Software
- Threats & Vulnerabilities
- ► Internet Safety & Privacy

PROJECTS: ▶ Digital Forensics with Kali Linux

► Vulnerability analysis of computer systems

STAGE 4

MODULE 6

4 Weeks

BLOCKCHAIN & CRYTOCURRENCY



CONCEPTS

- Understanding Blockchain Technology
- ► Physical and Digital Money
- ► Cryptocurrency Basics
- ▶ Bitcoin: The Pioneer Cryptocurrency

PROJECTS: ▶ Develop a verified blockchain with actual attributes

► Blockchain Simulation Game



FINAL MONTH

4 Weeks

FINAL SHOWCASE EVENT



CONCEPTS

- ► Entrepreneurship Skills
- ► Funding and Financials
- ► Business Strategy and Planning
- ► Technology Integration
- ► Pitching Idea

PROJECTS: ▶ Develop a Business Plan to solve a real-world challenge

► Experience the excitement and challenges of real-world innovation and entrepreneurship



FACULTY & PROGRAM COACHES



RAJESH SHAH

Founder & Mentor, 10xTechClub

Ex - Avaya, TCS, Cisco Systems

MTech (IIT Chennai), MBA (IT & Systems)



PRATIMA THAKUR

Curriculum Development Lead, 10xTechClub

Ex - Curioed, Swiflearn

STEM (Master Trainer), **MSc** (Marine Science)



POOJA GURNANI

Educator, Curriculum Developer, 10xTechClub

Visiting faculty - SPPU, Symbiosis

MSc (Computer Science)



ADITYA EKUNKAR

Tech Trainer & Curriculum Developer, 10xTechClub

BE (Computer Engineering)

OUR MENTORS



DR. PRATAP SANAP

Head - Research & Innovation @Neilsoft
Member of Executive
Committee, Smart India
Hackathon
Expertise: AI, DS,
AR/VR, Robotics



PRASHANT KULKARNI

Principal Director-Product Engineering, LTIMindtree Expertise: Product Development, Software Engineering, Blogger & Writer



PRIYANKA NADIG

Senior Technical Lead, Additive Manufacturing, Cyient

Expertise: Additive Manufacturing, Industry 4.0, Digitization



CERTIFICATION STAGES





STAGE CERTIFICATE

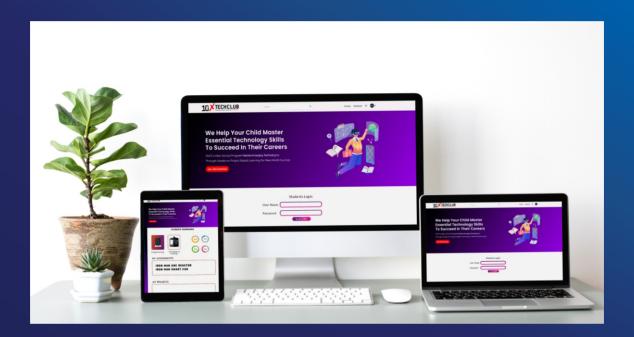
FINAL CERTIFICATE





10xTC Online Learning Platform Highlights

- Seamlessly accessible via both web and mobile app
- Empower learners with personalized dashboards & Real-time progress tracking
- Unlock a wealth of course materials, resources, and guides
- Engage with a vibrant community and enriching webinars



All your Learners' Needs, in One Place!

e-PORTFOLIO

The e-Portfolio is a curated compilation of student work, showcasing progress, accomplishments, and growth. It serves as a powerful testament of achievements, enhancing college applications and enabling seamless sharing across social platforms.



*Actual e-Portfolio may vary in appearance and content.



STILL CURIOUS ... WHY JOIN THIS PROGRAM?

Premier Accelerator Program for Tech Innovation helps students Grow 10x in a short span of 12 months.

In this program students,



Boost innovation, creativity, problemsolving & analytical skills with cool projects

Build a strong STEM portfolio for career success and stand out amongst competition

Develop the right mindset to reach ones potential and make a difference

Explore technical passions and delve into frameworks that foster exponential growth

Take on challenges and create with new tech for 12 months

"If we can groom future sports champions from a young age, why can't we nurture students during school years to discover their potential and foster innovation?"

Rajesh Shah, Founder & Mentor, 10xTechClub



ELIGIBILITY

- Students aged 11 17 or Grades 6 to 12
- Tech enthusiasts and Science believers!!
- Basic laptop operations and Windows familiarity
- No prior coding experience required
- Curiosity for embracing novel ideas and exploring concepts

HOW TO APPLY

- Call Us or WhatsApp us for program details: 9766010910
- Visit our Learning Center to check the facilities
- Understand the outcomes of topics covered
- Join the program
- Begin the journey to Accelerate your Growth





www.10xTechClub.com



CONTACT US

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