

IBA CICT's

# SUMMER SCHOOL 4.0



Ages 16 - 18

Get ready for the best summer yet!

BIGGER

BETTER

& Full of Tech



#### Categories

- STEM Mastery Bootcamp:
- Digital Marketing Bootcamp



For aspiring innovators and entrepreneurs aged 16-18, this summer camp offers advanced training designed to prepare you for college and realworld success. Choose between two focused bootcamps: the STEM Mastery Bootcamp equips you with skills in programming, engineering, and cybersecurity to prep for a CS degree, while the Digital Marketing Bootcamp helps you develop, launch, and grow your own business through practical marketing, freelancing, and product development experience.





Rs. 95,000/- (+5% SST) Starting 15<sup>th</sup> June 2025



| Monday - Friday | 10:00 AM - 2:00 PM

### **Program Categories**

#### STEM Mastery Bootcamp: Prep for CS Degree

For future tech leaders passionate about coding, innovation, and engineering, this category focuses on:

- Computer Science Foundations Master Python programming, data science, and AI basics.
- Engineering & IoT Build smart tech projects using sensors, automation, and robotics.
- Web & Game Development Create interactive web apps and 2D/3D games.
- Cybersecurity & Cloud Computing Learn ethical hacking and deploy real-world apps.

Hands-on projects, coding challenges, and a final innovation showcase to prep you for a CS degree and beyond!

#### **Digital Marketing Bootcamp**

For young minds who are ready to launch their first business, this category focuses on:

- Product Development & Branding Turn your ideas into real products or services.
- Digital Marketing & Content Creation Build websites, create social media strategies, and go viral!
- Sales, SEO & Advertising Sell online, master SEO, and collaborate with influencers.
- Business Growth & Freelancing Earn income through dropshipping, freelancing, and scaling your business.

Hands-on projects, real sales challenges, and a final showcase to celebrate your first earnings



# **STEM Mastery Bootcamp: Prep for CS Degree**

Week	Day	Activities
1	1	<ul> <li>Computer Science Essentials &amp; Problem-Solving</li> <li>Introduction to CS &amp; Career Pathways (Software Dev, AI, Data Science, Cybersecurity)</li> <li>Hands-on: Problem-solving with logical puzzles &amp; algorithms</li> <li>Project Kickoff: Teams select a tech-driven problem to solve by the end of camp</li> </ul>
	2	Python Programming for Future Developers  • Python Basics & Data Structures (Lists, Dictionaries, Loops, Functions)  • Hands-on: Write Python programs for real-world problem-solving  • Challenge: Build a calculator & mini automation scripts
	3	<ul> <li>Data Science &amp; Analytics - From Raw Data to Insights</li> <li>Introduction to Data Science, Pandas, and NumPy</li> <li>Hands-on: Analyze datasets &amp; visualize data using Matplotlib &amp; Seaborn</li> <li>Challenge: Extract insights from a real-world dataset</li> </ul>
	4	Software Engineering - Build & Deploy Web Apps • Full-Stack Development (HTML, CSS, JavaScript, Flask/Django) • Hands-on: Create a basic interactive web app • Challenge: Add a database (SQL) for user data storage
	5	<ul> <li>Engineering &amp; IoT - Smart Tech Innovations</li> <li>Introduction to IoT, Sensors &amp; Microcontrollers (Raspberry Pi/Arduino)</li> <li>Hands-on: Build a smart home automation system</li> <li>Challenge: Implement AI-powered automation (voice-controlled lights, sensors)</li> </ul>
	6	Machine Learning & AI Fundamentals  • Introduction to AI, ML & Deep Learning Concepts  • Hands-on: Train a machine learning model using Scikit-Learn  • Challenge: Create a basic AI image classifier
2	7	<ul> <li>Cybersecurity &amp; Ethical Hacking for Beginners</li> <li>Cyber Threats &amp; Ethical Hacking Principles</li> <li>Hands-on: Simulate hacking attacks in a controlled environment</li> <li>Challenge: Defend against a realistic cybersecurity attack</li> </ul>



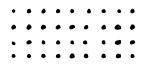






## **STEM Mastery Bootcamp: Prep for CS Degree**

Week	Day	Activities
2	8	Advanced Web Development - Full-Stack Apps  • Front-end frameworks (React.js) & back-end development (Node.js/Flask)  • Hands-on: Build an interactive To-Do List or Notes App  • Challenge: Add authentication & database integration
	9	Game Development with Unity & C#  • Basics of Game Development using Unity & C#  • Hands-on: Create a 2D or 3D interactive game  • Challenge: Implement physics & AI-driven NPC behavior
	10	
3	11	AI-Powered Automation & Robotics  • Integrate AI into robotics projects  • Hands-on: Build an AI-driven autonomous robot  • Challenge: Navigate a real-world obstacle course
	12	<ul> <li>Cloud Computing &amp; DevOps</li> <li>Introduction to AWS, Google Cloud &amp; Deployment Strategies</li> <li>Hands-on: Deploy a web app on a cloud server</li> <li>Challenge: Set up CI/CD pipelines &amp; automate app updates</li> </ul>
	13	Advanced Cybersecurity - Red Team vs Blue Team  • Simulated cybersecurity attacks & defense strategies  • Hands-on: Capture the Flag (CTF) hacking challenge  • Challenge: Defend a mock organization's server from threats
	14	<ul> <li>Hackathon - Build, Code &amp; Innovate</li> <li>Teams work on their final projects (AI, IoT, Cybersecurity, Game Dev)</li> <li>Mentorship from industry experts</li> <li>Prototype refinement &amp; final testing</li> </ul>
	15	<ul> <li>Innovation Showcase &amp; Graduation</li> <li>Final project presentations to a panel of industry professionals</li> <li>Live demo of AI models, web apps, robotics projects, and cybersecurity solutions</li> <li>Graduation Ceremony &amp; Certificates</li> </ul>











## **Digital Marketing Bootcamp**

Week	Day	Activities
1	1	<ul> <li>Introduction to Digital Marketing</li> <li>What is Digital Marketing &amp; E-Commerce?</li> <li>Case Study: How teens are making money online</li> <li>Hands-on: Identify market gaps &amp; brainstorm product ideas</li> <li>Challenge: Validate &amp; select a business idea for the camp</li> </ul>
	2	<ul> <li>Product Development &amp; Branding</li> <li>Types of Products: Physical (merch, crafts),     Digital (e-books, courses), Service-Based     (freelancing, coaching)</li> <li>Hands-on: Develop a unique value proposition (UVP)     &amp; brand identity</li> <li>Activity: Design a logo, brand colors, &amp; product     packaging</li> </ul>
	3	Website & E-Commerce Store Setup  • Platforms: Shopify, WooCommerce, Etsy, Fiverr, Gumroad  • Hands-on: Create a basic e-commerce website/landing page  • Challenge: Add product listings & optimize for conversions
	4	<ul> <li>Content Marketing &amp; Storytelling</li> <li>Creating engaging social media content (Instagram, YouTube)</li> <li>Hands-on: Write product descriptions &amp; craft compelling brand stories</li> <li>Challenge: Shoot &amp; edit a promotional video</li> </ul>
	5	<ul> <li>Social Media Marketing &amp; Growth Strategies</li> <li>Choosing the right platforms (Instagram, Facebook, LinkedIn)</li> <li>Hands-on: Create a content calendar &amp; social media strategy</li> <li>Challenge: Design &amp; post first product promo</li> </ul>
2	6	Search Engine Optimization (SEO) & Blog Monetization  • SEO Basics: Keyword research, ranking on Google  • Hands-on: Write an SEO-optimized blog post
	7	Challenge: Optimize a product page for search engines









# **Digital Marketing Bootcamp**

Week	Day	Activities
2	8	Affiliate Marketing & Influencer Collaborations  • How to earn money through affiliate programs
	9	Hands-on: Find & join affiliate networks     Challenge: Pitch a local influencer for product promotion
	10	<ul> <li>Live Selling &amp; Customer Engagement</li> <li>How to go viral with Live Selling (Instagram Live, TikTok Shop)</li> <li>Hands-on: Run a live sales event &amp; engage with customers</li> <li>Challenge: Make the first product sale</li> </ul>
3	11	Dropshipping & Passive Income Strategies  • How to start dropshipping with zero inventory  • Hands-on: Find winning products & set up a
	12	<ul><li>dropshipping store</li><li>Challenge: List at least 5 trending dropshipping items</li></ul>
	13	Freelancing & Digital Services for Extra Income  • How to sell skills online (Fiverr, Upwork, LinkedIn)  • Hands-on: Create a freelancer profile & list services  • Challenge: Get a real freelance gig before the end of the camp
	14	<ul> <li>Profit, Growth, &amp; Business Scaling Strategies</li> <li>Understanding profits, reinvesting, and scaling businesses</li> <li>Hands-on: Create a business plan for long-term growth</li> <li>Challenge: Pitch business ideas to a panel of investors</li> </ul>
	15	Graduation & Business Showcase  • Final revenue reports & showcase earnings  • Awards for top performers (highest sales, best marketing strategy, best branding)  • Graduation ceremony & certificates





























#### **Connect With Us:**











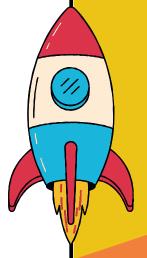












+92 326 2434642 021-38104701 (Ext. 1158)