CODECRAFT EDU × CODERZAPP

SUMMER 2026 MASTERY PROGRAM

Where Advanced Code Meets Physical Innovation

🎁 **FREE HARDWARE & ROBOTICS KIT — HOME DELIVERY INCLUDED**

DURATION	TERM	DELIVERY
40 Intensive Sessions	Summer 2026	Hybrid / Interactive Live

Welcome to the premium Summer 2026 STEM incubation experience. Over forty highly targeted modules, students transition seamlessly from abstract logical architectures into deep-tier machine learning models, autonomous engineering, and tech venture pitching.

PHASE 01

STEM Fundamentals (Sessions 01–10)

Building the architectural bedrock of computational execution, structural math, and algorithmic speed runs.

S01 – S04 Logic, Loops & Dance Routines

CORE FOCUS: Algorithmic sequencing, conditional flow charts, and nested loops.

Students master operational control structures by transforming complex mathematical sequences into physical patterns. By translating logic blocks into interactive automated "dance routines," individuals discover how programmatic loops govern repeated real-world workflows.

S05 – S08 Physics Bridges & Digital Art

CORE FOCUS: Coordinate mathematics, vector physics, and procedural assets.

Exploring the overlap between structural integrity and design. Students develop interactive physics simulations to compute stress points on virtual truss bridges while leveraging foundational programming loops to construct generative vector digital artwork.

S09 – S10 Jeopardy & 10-Min Speed Runs

CORE FOCUS: Rapid refactoring, structural debugging, and technical fluency.

A high-intensity milestone benchmark. Combining a gamified competitive arena with rigid 10-minute sprint environments, students are pushed to analyze code patterns, isolate algorithmic choke points, and optimize syntax variants on the clock.

PHASE 02

Applied Engineering (Sessions 11–20)

Connecting state management, responsive UI layout paradigms, autonomous hardware emulation, and commercialization mechanics.

S11 – S13 Python Web Dev & Dark Mode

CORE FOCUS: Server routing, DOM state transitions, and responsive web systems.

An introduction to writing dynamic, scalable web backends using Python. Students construct data pathways, wire live request pipelines, and design stateful frontend switches to manage interface themes such as system-wide high-contrast Dark Mode toggles.

S14 – S18 Robot Virtual Sensor Coding

CORE FOCUS: Spatial feedback loops, telemetry analysis, and automated paths.

Utilizing the custom robotics kit in concert with detailed physics simulation engines. Students script computational models instructing virtual autonomous vehicles to analyze telemetry data feeds from ultrasound, infra-red, and distance arrays to safely chart obstacle-laden test fields.

S19 – S20 Innovation Pitch & Investment

CORE FOCUS: Product packaging, capital modeling, and market-ready strategy.

Engineering excellence must be matched by structural articulation. Students reframe their technical developments as Minimum Viable Products (MVPs), formulate mock capital allocation schedules, and pitch their hardware architectures to virtual venture groups.

PHASE 03

Advanced AI & Robotics (Sessions 21–30)

Engaging with complex modern technologies: computer vision training, multi-axis aerodynamic kinematics, and interconnected programmatic security.

S21 – S26 Training ML & Robot Mechanics

CORE FOCUS: Data collection matrices, model training, and inverse kinematics.

A comprehensive, multi-part curriculum pillar. Students systematically gather vision datasets, tune weight biases, train custom image-classification machine learning models, and deploy their trained models directly into physical microcontrollers to govern physical mechanics.

S27 – S28 Drone Technology

CORE FOCUS: Three-axis attitude stabilization, programmatic flight scripts.

Dissecting the physics and math behind unmanned aerial vehicles (UAVs). This unit covers algorithmic configurations of pitch, roll, and yaw vectors, automated flight telemetry execution, and aerodynamic resistance compensation loops.

S29 – S30 The Digital Escape Room

CORE FOCUS: Asynchronous event parsing, encryption math, full-stack systems.

The phase finale. Students synthesize their understanding of machine logic, hardware sensor telemetry, and cryptographic algorithms to construct or navigate an engineered, multi-layered digital escape room ecosystem.

PHASE 04

Mastery & Finale (Sessions 31–40)

Macro-infrastructure coordination, external professional peer critique, and an elite engineering presentation stage.

S31 – S36 Smart Cities & Physics Engines

CORE FOCUS: Internet of Things (IoT) loops, mesh routing, environment scales.

Students scale their vision outwards by designing mock smart city infrastructure networks. Utilizing high-fidelity industrial physics engines, they manage concurrent data arrays modeling grid optimization, traffic patterns, and smart utility distribution.

S37 – S39 Final Capstone Jury Presentation

CORE FOCUS: Technical architecture validation, open defense, code peer-reviews.

Students finalize an end-to-end engineered system, detailing their source choices, hardware schematics, and predictive model pipelines. This capstone is presented directly to a jury panel comprised of seasoned technical architects and senior software developers.

S40 STEM Titans Challenge

CORE FOCUS: Synchronized elite hackathon and professional certification.

The program's formal endpoint. Students engage in a final rapid, synchronized engineering challenge to resolve optimized optimization loops under real-time constraints, concluding with the official program graduation ceremony.

Program Inclusions & Architecture

PREMIUM PROGRAM FEATURE	OPERATIONAL EXCELLENCE & DELIVERY DELIVERABLES
Elite Robotics Kit	100% complimentary hardware box dispatched directly to your physical address upon enrollment confirmation. Contains microcontrollers, multi-sensor clusters, and physical kinematic chassis components.
Platform Integration	Backed by CodeCraft Edu's targeted instructional approach and powered by CoderZApp's collaborative, secure, multi-tier remote compilation ecosystem.
Dual Verification	Graduates obtain a formal secure credential reflecting forty targeted development and technical execution milestones.

REGISTRATION FOR SUMMER 2026 IS OPEN

In order to preserve optimal instructor-to-student dynamics, registration parameters are strictly capped.