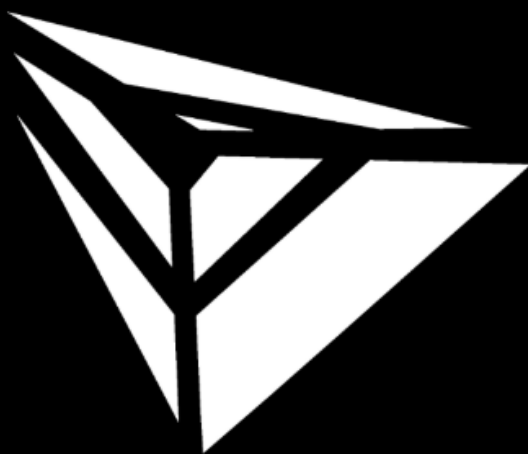
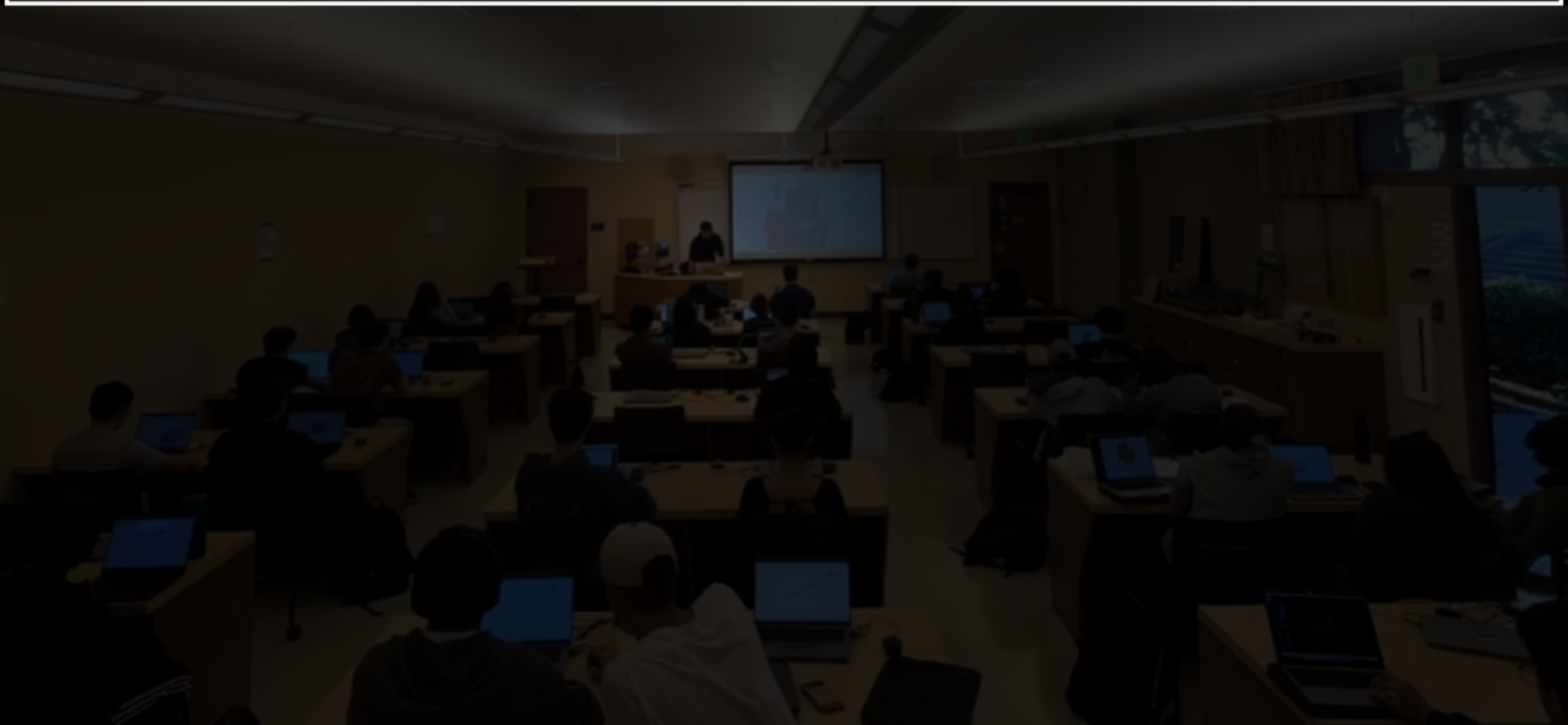
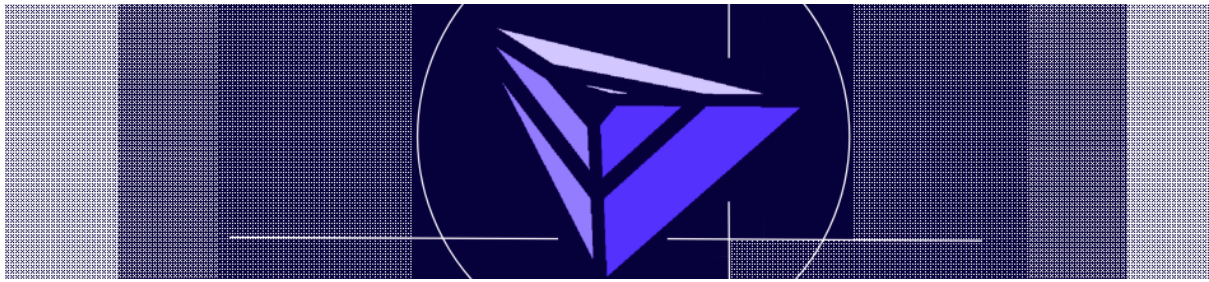




EMAMI ROBOTICS ALLIANCE





ERA

Intercollegiate Robotics Competition & Collaboration Network

Overview

The **Emami Robotics Alliance (ERA)** is a robotics network designed to connect engineering and robotics clubs across institutions into a shared ecosystem for **building, competing, and scaling real hardware projects**.

ERA provides shared infrastructure, standardized competitions, and a cross-campus collaboration network—allowing clubs to achieve significantly more together than independently. This event is **execution-focused, hands-on, and built to scale beyond a single campus or year**.

Focus for This Year — Lightweight Combat Robotics

For the current chapter, ERA is centered on **Lightweight Combat Robotics (1-lb class)**.

This class was selected specifically because it:

- Is **accessible to beginners** while remaining technically deep
- Has a **low cost barrier** compared to larger competition classes
- Scales well across schools with different resource levels
- Encourages CAD, electronics, fabrication, and iterative engineering

Future ERA chapters may expand into additional robotics domains, but **this year's invitation is specifically focused on lightweight combat robotics** to ensure clarity and strong execution.

Competition Timeline

Build & Preparation Period: Winter → Early Spring

Competition (current target date): May 15, 2026

Location: South Bay Area (final venue shared with participating schools)

This timeline allows teams to onboard members, complete builds, and iterate on their work before competition day. Updates will be in the Discord referenced below.

What ERA Provides

1. Competition Infrastructure

- Standardized lightweight combat robotics ruleset
- Match structure, safety standards, and judging
- Centralized event planning and coordination

2. Technical Enablement

- Shared build documentation
- CAD, electronics, and system design guidance
- Proven design references and best practices
- Onboarding support for new teams

3. Intercollegiate Collaboration

- Cross-school communication and coordination
- Knowledge sharing between clubs
- Joint workshops and collaborative build opportunities

4. Sustainability & Scale

- Repeatable framework for future years
- Documentation and structured handoff
- Designed to grow across institutions



Estimated Cost Per System / Robot (1-lb Class)

Component	Estimated Cost (USD)
Controller (FlySky FS-i6X — shared across robots)	\$60
Batteries (2S LiPo) (Pack of 4)	\$30
Chargers	\$8
Weapon Motor (Brushless)	\$16
Drive Motors + Hubs (Battle Hardened + BotKits hubs)	\$42
Weapon ESC	\$13
Drive ESC	\$15
Receiver	\$15
(Misc) Wheels, bearings, switches, hardware	~\$40
Frame (PLA / basic material)	~\$5

Raw Total: ~\$300 for the full initial system & first robot (including FlySky Remote/batteries), and then less than ~\$100 per new robot (only requires wheels/chips/motors).

NOTE: Some items are sold in larger packs that can accommodate multiple robots. We are currently designing a KIT to lower unnecessary costs and provide a standardized system for all participating teams.



Why Join ERA

Participating clubs gain:

- Access to an **intercollegiate robotics competition**
- A structured, achievable robotics project for members
- Hands-on engineering experience (CAD, electronics, fabrication, systems)
- Cross-campus collaboration and visibility
- A scalable robotics framework beyond a single semester

ERA supports **both beginner teams and advanced builders**, creating a clear pathway from first build to competitive performance.

Media & Prior Events

Last quarter, our FHDA Teams participated in **Berkeley Combat Robotics (CRB)**.

Media albums & videos:

<https://photos.app.goo.gl/2X6zikZ12L5pqGYi7>

<https://photos.app.goo.gl/A47itNbXdzdG1R4n6> (Berkeley CRB Property)

<https://youtube.com/shorts/IVEV2xeBMQo?feature=share>



Current Participation Target

ERA is actively building a multi-school robotics network and is currently coordinating with or reaching out to:

- UC Berkeley
- San Jose State University
- West Valley College
- UC Santa Cruz
- Chabot College
- San Francisco State University
- De Anza College
- UC Merced
- Foothill College
- Evergreen Valley College
- Ohlone College
- Mission College
- College of San Mateo
- Santa Clara University
- CSU East Bay
- San Mateo Community College
- Gavilan College
- Skyline College
- Monterey Bay (CSU Monterey Bay)
- San Jose City College
- Canada College
- Las Positas College
- Diablo Valley College
- Laney College
- UC Davis
- Cupertino High School
- Irvington High School
- Independence High School
- Palo Alto High School
- Santa Clara High School
- Mission San Jose High School
- Willow Glen High School
- Mountain View High School
- Homestead High School
- Milpitas High School
- Evergreen Valley High School
- Gunn High School
- Lynbrook High School
- American High School
- Branham High School
- Los Altos High School
- Fremont High School
- Piedmont Hills High School
- Menlo-Atherton High School
- Monta Vista High School
- Westmont High School
- Washington High School (Fremont)
- Overfelt High School
- Leland High School
- Wilcox High School
- Yerba Buena High School
- Gunderson High School
- St. Francis High School
- Andrew Hill High School
- Oak Grove High School
- James Lick High School
- Pioneer High School
- Sacred Heart Preparatory
- Lincoln High School (San Jose)
- Silver Creek High School
- Mt. Pleasant High School
- John F. Kennedy High School (Fremont)
- Los Gatos High School
- Saratoga High School
- Prospect High School
- Leigh High School

If your club is interested, **we would greatly appreciate it if you could help spread the word** by sharing this document with other robotics or engineering clubs at your institution or partner schools.



Getting Involved

ERA is currently onboarding partner schools for this year's competition cycle.

Primary Coordination

- Discord (Main Hub): (<https://discord.gg/ggF8fMwpuu>)
- Instagram: [@_era_central](#)
- Contact Emails:
erallianceinfo@gmail.com
General Inquiry

Clubs joining ERA receive:

- Full competition ruleset
- Build documentation
- Timeline and deadlines
- Technical onboarding and support

May the best robot win!

