# MICHIGAN DEPARTMENT OF EDUCATION (MDE) Office of Systems, Evaluation, and Technology Section 99h: Competitive Robotics Competition Grant

Request for Proposal (RFP)
GENERAL INSTRUCTIONS
September 8, 2023

## **DISCLAIMER:**

THE FOLLOWING COMPETITIVE GRANT IS ANNOUNCED, AND AWARD IS CONTINGENT ON THE AVAILABILITY OF FUNDS. GRANT APPLICATIONS WILL BE COLLECTED USING NEXSYS. FUNDS WILL BE MADE AVAILABLE THROUGH THE STATE AID MANAGEMENT SYSTEM (SAMS) FOR PUBLIC SCHOOLS AND SIGMA FOR NON-PUBLIC SCHOOLS.

#### **INTRODUCTION:**

The fiscal year (FY) 2024 State School Aid Act, Section 99h appropriated \$5,973,200 for the 2023-24 school year for competitive grants to districts that provide pupils in grades pre-K to 12 with expanded opportunities to improve mathematics, science, and technology skills by participating in events hosted by science and technology development programs, which include FIRST (For Inspiration and Recognition of Science and Technology), LTU Robofest, MATE, Quarkmine, REC Foundation, and Square One Education Network. Specific competition event information is listed by vendor in the award amount table on page four of this document.

## **PURPOSE OF THE GRANT:**

The intent of the grant is to increase the number of pupils demonstrating proficiency in science and mathematics on the state assessments and to increase the number of pupils who are college- and career-ready upon high school graduation. The competitive Robotics Competition Grant supports Michigan's Top 10 Strategic Education Plan Mission of supporting learning and learners by addressing all the guiding principles by offering districts the autonomy to choose the comprehensive robotics program that best meets the needs of their students, family, and community.

The 99h: Competitive Robotics Competition Grant programming engages students in well-rounded learning experiences in Science, Technology, Engineering, and Mathematics (STEM), language, business, culture, and creativity, as well as providing access to personalized learning technologies that support and enhance those learning experiences. The 99h: Competitive Robotics Competition Grant provides coaches and mentors with opportunities to receive additional professional development and access to State Continuing Education Clock-Hours (SCECH). The Grant Program provides funding to districts with high-risk factors to ensure access to equitable resources. Finally, the 99h: Competitive Robotics Competition Grant Program requires the establishment of partnerships between teams and job providers, community colleges, and higher education to assure a prepared and quality future workforce.

#### **ELIGIBLE APPLICANTS:**

All individual local education agencies (LEAs), public school academies (PSAs), and intermediate school districts (ISDs) that enroll students in grades pre-K to 12 that provide pupils with expanded opportunities to improve mathematics, science and technology skills by participating in robotics competition events are eligible.

Registered nonpublic schools are eligible applicants for current year's funding. To register with MDE, visit: <a href="https://www.michigan.gov/mde/0,4615,7-140-81351-81352-35175---,00.html">https://www.michigan.gov/mde/0,4615,7-140-81351-81352---,00.html</a>. Nonpublic schools must be registered with MDE prior to the application deadline.

# **GRANT REQUIREMENTS:**

The grant requirements upon which applicants will be selected and are required to meet are:

#### **Defined in Statue:**

2023-PA-0103.pdf (mi.gov) (pg. 114)

To be eligible for a grant, a district will demonstrate that it has:

- Established a partnership for the purpose of the Robotics competition program with at least one sponsor, business entity, higher education institution, individual, or technical school.
- Submitted a district accumulative budget via the NexSys application.
- Agreed to pay at least 25 percent of the cost of the Robotics competition program.

# **Proposed by Staff:**

Each applicant must:

- Be registered for the current season with the Robotics competition program provider of their choosing.
- Have a current Robotics competition program team number and coach in place for the current season.
- Participate in a minimum of one program provider registered Robotics competition event in Michigan during the current season or the qualifying number of events for advancement per the guidelines of the Robotics competition program.
- Be willing to offer elective high school credits for students who have successfully logged 60 hours, provided the team attends the minimum number of competitions.
- Be willing to participate in a digital badging program established by the Robotics competitive program.
- Submit a student roster, as directed by MDE, for each awarded team at the end of each season.

#### Note:

- Teams that do not meet the grant requirements, such as participating in the requisite number of competitions for their program, will be subject to defunding of grant by MDE.
- Teams that have carried over funding from the 2022-23 school year who did not meet the grant requirements last year, will NOT be eligible for funding in the 2023-24 school year.

Each nonpublic school applicant must:

- Be registered with MDE and meet all state reporting requirements for nonpublic schools.
- Must meet the same requirements as districts and intermediate school districts.

In support of legislative intent, the department shall prorate the total funding allocated under this section equally among all qualified applicants.

## **TOTAL FUNDS AVAILABLE: \$6,573,200**

\$5,973,200 for Public Schools

\$600,000 for Non-Public Schools

# **ROBOTICS COMPETITION PROGRAMMING GRANT STRUCTURE:**

The Section 99h: Competitive Robotics Competition Grant funds are designated dollars that must be used solely for the eligible and registered teams that apply and receive them for the purposes outlined below.

# a) Coaching Stipend Award

Districts, non-public schools, or intermediate districts with registered Robotics Competition teams in the State of Michigan will be eligible for an award of \$1,500 per building for coaching stipend(s). Coaching stipends to be distributed at the discretion of the district.

b) Support Awards (Event Registrations, Materials, Travel Costs, Other)

MDE will make support awards available to Robotics Competition Teams. The support awards will be paid out to eligible districts per team. Awards are limited and will be awarded based on a prorated amount per qualified applicant - represented areas as outlined above.

Actual award amounts may be adjusted based on availability of funding. A district can choose to submit a support award budget line item for less than the grant program structure outlined below. The payment structure is tentatively outlined as follows:

Program Provider	Team Type	Max Coaching Stipend	Max Support Award
FIRST			
	FIRST Robotics Competition - Rookie	\$1,500	\$9,000
	FIRST Robotics Competition - Veteran	\$1,500	\$6,000
	FIRST Tech Challenge - Rookie	\$1,500	\$2,200
	FIRST Tech Challenge - Veteran	\$1,500	\$1,500
	FIRST LEGO League-Challenge - Rookie	\$1,500	\$1,100
	FIRST LEGO League-Challenge - Veteran	\$1,500	\$500
	FIRST LEGO League-Explore - Rookie	\$1,500	\$500
	FIRST LEGO League-Explore - Veteran	\$1,500	\$300
	FIRST LEGO League-Discover - Rookie	\$1,500	\$500
	FIRST LEGO League-Discover - Veteran	\$1,500	\$300
MATE			
	MATE ROV SCOUT	\$1,500	\$1,000
	MATE ROV NAVIGATOR	\$1,500	\$2,300
	MATE ROV RANGER	\$1,500	\$4,500
	MATE ROV PIONEER/EXPLORER	\$1,500	\$6,500
Quarkmine			
		\$1,500	\$1,500
		\$1,500	\$1,750
		\$1,500	\$2,000
		\$1,500	\$1,000
	Quarkmine ORL	\$1,500	\$1,250
Robofest			
		\$1,500	\$1,000
		\$1,500	\$500
		\$1,500	\$1,200
		\$1,500	\$800
		\$1,500	\$1,200
		\$1,500	\$800
	Robofest RoboArts - Rookie	\$1,500	\$1,200
		\$1,500	\$800
		\$1,500	\$1,200
		\$1,500	\$800
		\$1,500	\$800
		\$1,500	\$200
	Robofest Unknown Mission Challenge - Rookie	\$1,500	\$800
	Robofest Unknown Mission Challenge - Veteran	\$1,500	\$200
<b>Square One</b>			
	-	\$1,500	\$6,000
	Square One Autonomous - HS Veteran	\$1,500	\$5,000

		1	1
	Square One Full Scale - HS Rookie	\$1,500	\$8,000
	Square One Full Scale - HS Veteran	\$1,500	\$6,000
	Square One Mini IVD Racing - HS Rookie	\$1,500	\$5,000
	Square One Mini IVD Racing - HS Veteran	\$1,500	\$4,000
	Square One Mini IVD Racing - MS Rookie	\$1,500	\$5,000
	Square One Mini IVD Racing - MS Veteran	\$1,500	\$4,000
	Square One V2X IVD - HS Rookie	\$1,500	\$750
	Square One V2X IVD - HS Veteran	\$1,500	\$500
	Square One V2X IVD - MS Rookie	\$1,500	\$750
	Square One V2X IVD - MS Veteran	\$1,500	\$500
	Square One V2X IVD - ES Rookie	\$1,500	\$750
	Square One V2X IVD - ES Veteran	\$1,500	\$500
	Square One Underwater IVD - HS Rookie	\$1,500	\$4,000
	Square One Underwater IVD - HS Veteran	\$1,500	\$2,500
	Square One Underwater IVD - MS Rookie	\$1,500	\$4,000
	Square One Underwater IVD - MS Veteran	\$1,500	\$2,500
	Square One Underwater IVD - ES Rookie	\$1,500	\$4,000
	Square One Underwater IVD - ES Veteran	\$1,500	\$2,500
REC Foundation			
	VEX IQ Robotics Competition - ES Rookie	\$1,500	\$1,100
	VEX IQ Robotics Competition - ES Veteran	\$1,500	\$400
	VEX IQ Robotics Competition - MS Rookie	\$1,500	\$1,100
	VEX IQ Robotics Competition - MS Veteran	\$1,500	\$400
	VEX Robotics Competition - MS Rookie	\$1,500	\$2,200
	VEX Robotics Competition - MS Veteran	\$1,500	\$1,000
	VEX Robotics Competition - HS Rookie	\$1,500	\$2,200
	VEX Robotics Competition - HS Veteran	\$1,500	\$1,000
	REC Aerial Drones Competition - MS	\$1,500	\$600
	REC Aerial Drones Competition - HS	\$1,500	\$600
	Bell Advanced Vertical Robotics - Drones Competition - HS Rookie	\$1,500	\$5,000
	Bell Advanced Vertical Robotics - Drones Competition - HS Veteran	\$1,500	\$3,000

# c) Advancement Awards

Advancement awards to teams that compete and advance to the next level of competition will be awarded in equal amounts per team. All advancement awards are contingent upon available funding.

Note: All grant recipients must provide a 25% local in-kind or cash match for the total cost of the robotics competition program award. Possible in-kind contributions include items such as: providing a room to build; transportation to and from events; donation of food, supplies, and materials; payment of coaches' FICA and

social security, if they are employed by the school district or additional cash payment to coach (see calculation below); etc.

\*\*\*MDE Stipend Award + 25% Match = Total Stipend Amount \*\*\*

# Example

\$1,500 stipend + \$375 match = \$1,875

## **GRANT APPLICATIONS:**

Grant applications will be made available via NexSys and monitored by the Educational Technology Unit staff within the Office of Systems, Evaluation, and Technology. Public (ISDs, LEAs, and PSAs) and nonpublic districts applying for more than one team in the district - whether for multiple FIRST (For Inspiration and Recognition of Science and Technology), LTU Robofest, MATE, Quarkmine, REC Foundation, Square One Education Network teams, or a combination of programming - shall submit a single district-wide application adding a separate page for each team.

Step-by-step instructions for completing the NexSys application can be found at: <u>Competitive 99h: Robotics Competition Grant - Grants - EdTech Initiatives - TechPlan.org</u>

# Application Requirements:

- Include team name and full permanent team number. Teams with a temporary team number at the time of application should enter the full temporary number.
- Include name and contact information (email address and phone number) of team coach.
- Agree to contribute a match of at least 25 percent of the total robotics program award. The required match may be in the form of cash or the fair market value of in-kind donations from any of the following sources, including but not limited to the school district, other grants, and donations from corporate partnerships or individuals.
- Include name and classification of one sponsor per robotics team. The same sponsor can be assigned to multiple teams.
  - Business/Nonprofit
  - Higher Education Institute
  - Technical School
  - Individual
- Include district-wide cumulative spending plan. The spending plan in NexSys will be a formal budget summary and budget detail.

## **ASSURANCE OF ACCURACY:**

An assurance must be submitted stating that all information provided within is true and accurate. If, during the implementation of any funded project, MDE establishes that inaccurate or false information was provided in the application, the grant may be rescinded.

## PROCESS FOR THE GRANT COMPETITION:

## **Key Dates\***

Friday, September 8, 2023	 Grant RFP is announced
Tuesday, September 26, 2023	 Technical Assistance Webinar**
Sunday, October 1, 2023	 Application goes live in NexSys
Friday, December 1, 2023	 Applications due at 12:00 p.m. in NexSys
Held for six weeks following the application close date	 Grant application review
Monday, February 1, 2024	 Grant Awards Announced
March 2024	 Awards made via SAMS and SIGMA

<sup>\*</sup>All dates subject to change at the discretion of MDE.

#### **REJECTION OF PROPOSALS:**

MDE reserves the right to reject any applications received as a result of this grant program announcement.

# **REVIEW PROCESS, CRITERIA, AND REVIEWERS:**

MDE utilizes a review panel when scoring its competitive grants. For this grant program, review teams will be composed of people from within and outside MDE as needed, with expertise in the multiple robotics competition programs. MDE staff will supervise the review process. An administrative review will be conducted by MDE prior to funding and at the end of the season to ensure all teamsmeet the grant requirements.

#### **LENGTH OF AWARD:**

All funds awarded as part of FY2024 of State School Aid, Section 99h, beginning October 1, 2023, must be used in full by September 30, 2024.

## **INDIRECT CHARGES:**

State law does not allow indirect charges on State School Aid funds.

#### **PAYMENT SCHEDULE:**

Payments for the Coaching Stipend Awards and Support Awards are anticipated to be scheduled to be awarded in full in March via SAMS for public schools and SIGMA for non-public schools. Funding for Advancement Awards will be scheduled for June 2024 at the discretion of the Office of Systems, Evaluation, and Technology in coordination with members of the robotics competition program providers contingent on available funding.

<sup>\*\*</sup> You must preregister for the Technical Assistance Webinar: https://us06web.zoom.us/meeting/register/tZltcOurpz4rHdBtV7BcXO sxgF2FAZVpkU8

## **ADDITIONAL RESOURCES:**

MDE and all registered program providers have worked together to provide supplementary resources for grant applicants. This includes, but are not limited to, a Frequently Asked Questions (FAQ) document, recording of the technical assistance webinar, step-by-step instructions, and State Continuing Education Clock Hours instructions and log. These resources can be found at <a href="Competitive 99h: Robotics Competition Grant - Grants - EdTech Initiatives - TechPlan.org">Competitive 99h: Robotics Competition Grant - Grants - EdTech Initiatives - TechPlan.org</a>.

## **Program Contacts:**

- <u>FIRST (for inspiration and recognition of science and technology) Robotics</u>, including FIRST LEGO League-Discover, FIRST LEGO League-Explore, FIRST LEGO League-Challenge, FIRST Tech Challenge, and FIRST Robotics Competition.
- LTU Robofest
- MATE
- Quarkmine, including SRL, ORL and ERL Robotics Competitions
- <u>Robotics Education and Competition</u> (REC) Foundation, including Vex Robotics Competition, VEX Robotics Competition (VRC), Aerial Drone Competition, and Bell Advanced Vertical Robotics (AVR)
- Square One