

# 2022-2023 Arizona MESA Program Description

Mathematics, Engineering, Science Achievement (MESA) is a low-cost program designed to increase access to Science Technology Engineering and Mathematics (STEM) pathways and encourage college readiness for low-income, minority or first-generation college-bound students in grades 6-12 in order to support greater Equity in STEM. Arizona MESA's approach is based on four pillars:

- Active Learning students learn and implement the MESA Engineering Design Process through numerous highly-engaging, relevant, hands-on activities in which their experience of project-based learning, while supported by the teacher, is driven mainly by student teams. Such learning reinforces Common Core and NGSS practices.
- Exposure to STEM through college and career mentors and university campus events.
- College Readiness through activities, resources and events developed by the UA Office of Early Academic Outreach as part of its *Start Now* college knowledge campaign (<u>http://startnow.arizona.edu</u>)
- **Peer Support** by supporting the development of college-minded peer groups that support and encourage each other throughout the K-16 pipeline.

Successful implementation of MESA requires a strong partnership between Arizona MESA, the school administration, and the MESA coach. Within this relationship each party plays a key role in the success of MESA.

- Arizona MESA as the program provider offers STEM design competitions, connections with state colleges and universities, links to STEM industries, Professional Development for Teachers, STEM learning resources and materials, and college readiness resources.
- The MESA Coach as the facilitator will engage in student recruitment, weekly activity planning and facilitation, distribute programmatic information including enrollment forms and event details, coordinate student attendance at MESA events, and support student learning through the implementation of the Engineering Design Process to engage with MESA Design Challenges.
- The School Administrator as the on-site support system identifies the MESA coach, secures funding for MESA fees and coach stipends, maximizes opportunities to access any funds that can be used to support the teacher in program implementation, support and encourage teacher participation in professional development, assist as needed in completing administrative processes for participation in MESA events.

#### **MESA Program Level of Service Description and Fee Options:**

In order to further develop the necessary resources to properly support the administration of MESA, professional development of MESA coaches, and skill development of MESA students, we are instituting the following levels of service with an associated fee structure for school participation.

#### 1. Full Program Option - \$600

Includes:

- a. MESA Coach Professional Development, including the MESA Annual Training Institute (MATI) Guaranteed spots for 2 MESA Coaches per school for all PD offerings. MATI is traditionally a two-day event that provides coaches with 14 hours of professional development centered around implementing the Engineering Design Process and supporting students in the MESA Design Challenges.
- b. MESA STEM Resource Budget in order to support teachers' facilitation of MESA activities and guidance of student engagement in MESA Design Challenges, a materials and equipment budget of \$200 will be provided for each school. MESA staff will work with teachers to acquire these materials. For schools that participate in the National Engineering Design Competition an additional \$100 budget will be provided.
- c. Regional and MESA Day Registration allows school to send up to 3 teams per challenge, if space allows, to the Regional Design day and 1 team per engineering design challenge to MESA Day.
- **d.** Additional Events and Opportunities allows school full access to all additional events and opportunities that may be offered over the course of the academic year.

At \$600, Arizona MESA provides schools, teachers, and students the most affordable, comprehensive and rigorous long-term STEM initiative in the state.

#### 2. A La Carte Options

a. MESA Coach Professional Development, including MESA Annual Training Institute (MATI) Registration - \$100 per coach (max of two per school). MATI is traditionally a two-day event that provides coaches with 14 hours of professional development centered around implementing the Engineering Design Process and supporting students in the MESA Design Challenges. This option does not include the STEM Resource Budget.

#### b. \$75/team - Regional and MESA Day Registration only (Max \$525)

- \$75 per each of the engineering design challenges. Includes registration for up to three teams per design challenge at Regional Design Day and one team per design challenge at MESA Day. Registration and payment will occur during the spring semester and is due by **Friday**, **February 2**, 2023.

-Does not include a resource budget or access to any professional development or additional events or offerings from MESA.

#### c. \$50/team - MESA Day Registration only (Max \$350)

- \$50 per each of the engineering design challenges at MESA Day. Includes registration for 1 team per design challenge at MESA Day. Registration and payment will occur during the spring semester and is due by **Friday**, April 7, 2023.

-Does not include a resource budget or access to any professional development or additional events or offerings from MESA.

-Schools choosing this option will be allowed to bring one team per design challenge to the Regional Design Day at no additional cost.

Dates and Deadlines (visit website calendar at <u>azmesa.arizona.edu/calendar</u> for more details):

- August 20- MESA Kick-off Program Updates and Information for the 2022-2023 school year. Open to all current MESA schools and new schools. No cost.
- September 2 Program Enrollment Form Due Enrollment Form is attached below
- September 2 MATI Registration and Payment Due Enrollment Form is attached below
- September 9-10 MESA Annual Training Institute (MATI)
- December Mid-Year MESA USA Convening
- December 19 Full Program Registration and Payment Due Payment must be received or post-marked by this date for full program option.
- February 2 Regional Registration and Payment Due A registration of \$75/challenge must be received or post-marked by this date to fully participate in Regional Design Day and MESA Day.
- April 7 MESA Day Registration and Payment Due A registration of \$50/challenge must be received or post-marked by this date to participate in MESA Day.

#### MESA Events (dates to be determined):

- Southern Region Design Day events for students in Tucson and Southern Arizona to test MESA Day projects and receive feedback from higher education and industry volunteers to assist in preparing projects for MESA Day.
- Central Region Design Day events for students in Phoenix and Central Arizona to test MESA Day projects and receive feedback from higher education and industry volunteers to assist in preparing projects for MESA Day.
- **MESA Day** annual statewide competition where teams present their designs in response to the engineering design challenges provided by Arizona MESA. Individual awards are presented to teams that place first through sixth place in each of the design challenges and trophies are presented to the schools that place first through third overall.



## 2022-2023

### **MESA Program Enrollment Form**

To complete this form on-line go to https://slate.admissions.arizona.edu/register/MESA-MC
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School:	
	trator:
Administrator Phone:	Administrator Email:
Name of Teacher(s) assigned to be MESA	Coach(es):
Coach Name:	Co-Coach Name:
Coach Phone:	Co-Coach Phone:
Coach Email:	Co-Coach Email:
District Name:	Grades Serving:
Size of Student Body:	Is your school designated a Title 1 school? UYES INO
Percentage of students that qualify for fre	e or reduced lunch?
Percentage of student that are part of an e	ethnic minority?
Percentage of students that would be first	generation college-bound students?
Program Options* (please select a level of	service):

- □ Full Program (\$600), includes Professional Development and a STEM Resource Budget, full Regional Design Day, full MESA Day registration, and full access to other events and opportunities (payment must be received no later than December 19, 2022),
- OR (select all that apply)
- □ **Professional Development Registration (\$100 or \$200)**, for 1 or 2 coaches for access to all Professional Development Opportunities, including MATI (payment must be received no later than **September 2, 2022**),
- Regional and MESA Day Registration (\$75/design challenge), Up to 3 teams per registered challenge at MESA Regional Event and one team per registered challenge at MESA Day. No access to other MESA events and opportunities. Registration and payment will be due Friday, February 2, 2023.
- MESA Day Registration Only (\$50/design challenge), limited access to MESA Regional Event and one team per registered challenge at MESA Day. No access to other MESA events and opportunities. Registration and payment will be due Friday, April 7, 2023.

We the undersigned have read and understand the program description provided. We understand that MESA is dedicated to expanding access and inclusion to college and STEM to the target populations listed in the description and commit to have at least 50% of our students involved with MESA be from these target populations. We agree to support the successful implementation of MESA at the above listed school to the best of our abilities.

#### **AGREED TO AND SIGNED:**

Rody & Mc Comid II	Rudy McCormick, Director, Arizona MESA	8/1/2023
Arizona MESA, Director	(please print name clearly and sign)	Date
School Principal or Designated Administra	tor (please print name clearly and sign)	Date
School I Interpar of Designated Administra	(please print name clearly and sign)	Date

MESA Coach(s)

(please print name clearly and sign)

Date

Please return this document to <u>azmesa@email.arizona.edu</u> by September 2, 2022. For questions please email us or call 520.626.2300.



School:		
	Ship to:	Arizona MESA
Contact:		Office of Early Academic Outreach
		The University of Arizona
Phone:		USB 501
		P.O. Box 210158
Email:		Tucson, AZ 85721-0158
DO No. 1		
PO Number:		

Quantity	Description	Unit Price	Amount
	Full Program Option (Payment due 12/19/22)- \$600 includes:	\$600.00	
	• MESA STEM Resource Budget – in order to support teacher's facilitation of MESA activities and guidance of student engagement in MESA Design Challenges, a materials and equipment budget of \$200 will be provided for each school. MESA staff will work with teachers to acquire these materials. For schools that participate in the National Engineering Design Competition an additional \$100 budget will be provided.		
	• <b>Regional and MESA Day Registration</b> – allows school to send up to 3 teams per challenge, if space allows, to the Regional Design day and 1 team per engineering design challenge to MESA Day.		
	OR		
MESA Coach Professional Development* 1 <sup>st</sup> staff member (Payment due 9/2/22)		\$100.00	
	*Does not include a STEM Resource budget or registration to Regional Day or MESA Day.		
	*Access to other MESA student focused events and opportunities may be limited.		
	MESA Coach Professional Development* 2nd staff member	\$100.00	
	(Payment due 9/2/22)		
		Total Due	
		Amount Paid	
		Remaining Due	

- Separate Regional Design Day and MESA Day registration and payment will be available in late fall 2022.

Make checks payable to: UA Foundation

Mail all checks to the address above to avoid delays in processing.

If you have any questions concerning this invoice, call (520) 626-2300 or email <u>azmesa@email.arizona.edu</u>.

These fees are not Tax Deductible.