

What is Montana Aerospace Scholars (MAS)? MAS is a two-part course on Earth and Space Science and the history and future of NASA space exploration for Montana high school juniors. Phase One is an online course offered in partnership with NASA, University of Washington (UW) and the Museum of Flight (MoF); Phase Two is a six-day residency based at the Montana Learning Center in Helena, Montana.

Who is eligible? Applicants must be Montana residents in their junior year of high school. Acceptance is based on student interest and a completed application. We value diverse voices and ideas and know the importance of having multiple perspectives when discussing topics related to human exploration of space. There are no math or science requirements, but experience in pre-algebra and essay writing is helpful.

What's the difference between Phase One and Phase Two?

Phase One is a five-month, online course designed by NASA, UW, and MoF, and consists of seven online lessons and a final project. The curriculum is focused on NASA history, and Earth and Space Sciences, including impacts of solar activity and potential opportunities for human exploration of the solar system. Students can apply to receive five UW credits upon completion of Phase One.

Phase Two Completing Phase One qualifies students for the six-day Summer Residency program at the Montana Learning Center. There, students have the opportunity to discover Montana's aerospace industry through behind-the-scenes aerospace company tours and presentations from STEM experts. Participants can also informally network with STEM professionals and connect with like-minded peers during engineering challenges and team building activities.

When can I apply? Applications are open until **October 17, 2021**.

When does Phase One begin? Enrolled students have access to the course website starting Tuesday, Oct. 19, 2021. After an introductory activity, the first lesson is due Tuesday, Nov. 9, and the final is due Mar. 1, 2022.

Will I get a grade on my high school transcript? Can I earn college credit? Your performance in MAS will not be shared with anyone, and it will not be reported to your high school or appear on your transcript. Upon successful completion of the online course, students can apply to earn five UW credits.

Are credits transferrable? Yes. The course meets the natural world graduation requirement at UW, but we recommend that students contact potential universities to confirm whether credits will transfer. Students can decide to apply for credit after several lessons. Course content is the same regardless of credit status. Students who do not wish to receive a UW transcript and grade are able to withdraw from the course.

What does the course entail? There are seven online lessons, due every two weeks, and a final project.

What is the schedule? Students can complete the online lessons at their own pace. When a lesson opens, all activities for that lesson are available and students can set their own schedule. The key to success is finding a schedule that works to complete all activities by the biweekly Tuesday, 11:55 pm deadlines. At the start of the course, students will receive a detailed schedule of deadlines and activity requirements. Lessons are made available every two weeks from October to March.

Who evaluates my online work? Where can I find help? Certified STEM teachers evaluate all Phase One work, and each student is assigned to an Online Academic Evaluator (OAE) to provide detailed feedback and help for the duration of the course. Grading rubrics outline how students will be evaluated.

Students can seek help from their OAE, their high school teachers, and MAS program leads. Our virtual reference librarian offers help with online research and essay writing.

What kind of work is required? Each lesson consists of:

- Reading chapters and quiz (about 20-25 pages of online material);
- A 500-word essay (based on a topic related to the reading material);
- Space-related math problems (word problems with some algebraic thinking).
- Lessons may also contain:
 - online forums,
 - virtual lab activities, and
 - graphic design.

How long will each Phase One activity take? Phase One is the equivalent of taking a five-credit college course, therefore, students will need to commit **15-20 hours** every two weeks for each lesson. Creating a weekly schedule can help with time management.

What if I miss a deadline? MAS understands many things can prevent students from meeting deadlines, so we allow students to turn in activities late, and students always receive some credit for work submitted.

How many students apply each year? How many make it to the Summer Residency? We average 40 Montana students in Phase One, and have room for up to 20 students in the Summer Residency.

How are students selected for the Summer Residency? Students who qualify for Phase Two have completed all of their online activities, consistently submitted quality work, and earn a high final score. Students are notified in mid-March if they are selected for the Summer Residency.

When is Summer Residency? It starts the afternoon of June 26 through the afternoon of July 1, 2022.

What are the benefits of being a MAS alumni? In addition to being eligible for select scholarships, joining our exclusive Western Aerospace Scholars alumni network can provide vast networking and professional opportunities. MAS alumni attend top-tier colleges and universities nationwide, and many of our Western Aerospace Scholars student alumni are currently working at leading aerospace and STEM companies around the world.

What is the cost to participate? There is no cost to participate in Phase One of Montana Aerospace Scholars! If a student opts to receive UW credits, they can register for a UW transcript after several lessons. The cost to receive credit is approximately \$235, **but students can apply for tuition assistance for up to 100% of this cost.** More information will be available after the course begins. Should a student qualify for Phase Two, tuition is \$750, which is not due until April 2022, and **tuition assistance is also available to cover between 50-100% of the cost.** Students must make their own travel arrangements to and from Helena for the residency, but help is available if needed.

Who can apply for tuition assistance? Phase One is free, but tuition assistance is available to any student for whom the Phase One UW Credit or Phase Two Tuition would be a financial burden. On average, 40% of students receive some tuition assistance. Tuition assistance forms will be available after the program begins. Students who currently qualify for free and reduced lunch automatically qualify for 100% tuition assistance for both Phase One and Phase Two.

Still have questions? Contact Program Director Ryan Hannahoe at MontanaLearningCenter@gmail.com.