



Upper School CEE Block

Career Exploration Elective

Program of Studies 2025-2026

Students in the MACS Upper School will be assigned to two CEE blocks each trimester, for a total of six electives they will complete throughout the school year. These blocks will replace the traditional “Specials” class rotation we have offered in the past.

Graduation Requirements:

- All Upper School students must complete the following courses **by the end of their 8th grade year.***
 - Finance 101
 - 2 Fine Arts Electives
 - 1 Physical Education Elective

**Current 7th and 8th graders only need to complete the Finance 101 requirement because they have already taken ample fine arts and physical education courses in previous years.*

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Trimester I CEE Blocks

Finance 101

Trimester 1 **Facilitator: Alison Wright**

(This course may also be offered in Trimester 3 depending on interest.)

***Graduation requirement for ALL students - Finance**

Finance is all about understanding how money works—how we earn it, save it, spend it, and grow it over time. In our Finance 101 class, students will explore topics including: budgeting, saving and banking, spending wisely, investing, and financial responsibility. This course is designed to help students become more confident and responsible with money as they grow and develop skills to help them in the future. *This is a required course that all Upper School students must complete before completing their 8th grade year.*

2-D Design

Trimester 1 **Facilitator: Aleah Tarquini**

***Graduation requirement *option* for current 5th/6th grade students - Fine Arts**

This introductory course in two-dimensional (2-D) design invites middle school students to explore the fundamental principles of visual art and design through hands-on projects and creative problem-solving. Students will learn key elements such as line, shape, color, texture, space, and composition while experimenting with a variety of materials including pencil, ink, paint, collage, and introductory printmaking. Throughout the course, students will develop their ability to think critically about art, make purposeful design choices, and express ideas visually. We will examine art from historical and contemporary artists to inspire creativity and deepen understanding of the role of design in the world around them. No prior experience is required—just a willingness to explore and create!

Sports Management

Trimester 1 **Facilitator: Mike Mandeville**

Step into the exciting world behind the scenes of sports! In this course, students will explore the business, culture, and leadership that drives the sports industry. From learning about major careers in sports to tackling topics like teamwork, marketing, ethics, and event planning, students will gain real-world insight into how sports work off the field. Each week dives into a key area of sports management, culminating in a fun and creative capstone project where students design their own sports event or organization. Whether you're an athlete, a fan, or a future leader, this class is your playbook for success in the sports world!

Video Game Design

Trimester 1

Facilitator: Dan Walker

This technology elective invites students to step into the world of 2-D game design using GameMaker Studio 2. As students design characters, build levels, and code gameplay mechanics, they gain hands-on experience in digital design and programming—skills that connect to real-world careers in game development, software engineering, and interactive media. Aligned with MACS's mission to prepare students for future success, this course encourages innovation, collaboration, and critical thinking in a dynamic, project-based setting.

Basic Engineering

Trimester 1

Facilitator: Owen Ploss

In this introductory course, students will explore the fundamentals of engineering through hands-on building projects that bring ideas to life. Using the engineering design process, they will brainstorm creative solutions, construct prototypes, test their designs, and refine their work for improved results. Students will develop problem-solving, creativity, and teamwork skills while gaining an understanding of how engineering shapes the world around us. With an emphasis on designing, building, and experimenting, this course offers a dynamic and engaging foundation for future STEM learning.

Outdoor Recreation & Lifetime Fitness

Trimester 1

Facilitator: Amy Plante

***Graduation requirement *option* for current 5th/6th grade students - Physical Education**

In this engaging elective, students will explore a variety of outdoor activities and fitness practices designed to promote lifelong health, wellness, and enjoyment of the outdoors. The course focuses on skill development and application, with a strong emphasis on teamwork and social skills through team-building challenges and cooperative games. Activities include lawn games (such as Spikeball and cornhole), team and partner sports (like ultimate frisbee, pickleball, and doubles volleyball), and a variety of non-traditional lifetime activities (including disc golf, yoga, hiking, and dance). Through these experiences, students will build physical literacy, set personal wellness goals, and gain confidence—all while discovering fun, sustainable ways to stay active for life.

Theater 101: History, Performance, and Practice

Trimester 1 **Facilitator: Taylor Koban**

***Graduation requirement *option* for current 5th/6th grade students - Fine Arts**

This course offers a comprehensive overview of the art of theater, exploring its history, elements, and cultural significance. Students will examine dramatic literature, performance practices, and theatrical production from ancient to modern times. Through readings, viewings, discussions, and creative activities, the course fosters an appreciation for theater as a live, collaborative art form. Topics include play structure, acting, directing, design, and the roles of various theater professionals. No prior experience is required—just a curiosity about the world of performance and storytelling.

Shakespeare Works

Trimester 1 **Facilitator: Sue Connelly**

Come play with classics! Meet Romeo & Juliet, Macbeth or other characters via Shakespeare's plays to explore the careers associated with playing with literature and performance. Public speaking, communication, creative writing, and acting will be part of this class to create a performance at the end of the trimester. Careers that will be explored to share and celebrate the works of Shakespeare are those of actors, writers, set and costume designers, budget and advertising, and more.

Introduction to Community Outreach

Trimester 1 **Facilitator: Ben Danielson**

This hands-on, engaging course introduces students to the world of community outreach: the process of identifying needs in our neighborhoods and taking meaningful action to help others. Through interactive lessons, teamwork, and a student-led outreach project, learners will explore what it means to be active, caring members of a community. Students will build skills in empathy, leadership, research, problem-solving, and communication, while learning about real-world issues and how even small actions can make a big impact. The course culminates in a class-designed outreach project that students will plan and implement themselves. Whether writing thank-you notes to local workers, organizing a donation drive, creating educational materials, or leading a kindness campaign, students will leave this course with a stronger sense of purpose and practical experience in making a difference.

Conduction

Trimester 1 **Facilitator: Lauryn VonAhnen**

***Graduation requirement *option* for current 5th/6th grade students - Fine Arts**

We are excited to offer this program we used last year for one more trimester! This is an instrumental composition class through the use of technology. Students will have access to a special Conduction Education license in which they will be able to create original musical arrangements using a variety of beats and instrumental sounds from familiar songs. Each week, one student's piece will then be sent off to professionally trained musicians who produce and play the music on video for the students to see their creation come to life!

Music Production

Trimester 1 **Facilitator: Lauryn VonAhnen**

***Graduation requirement *option* for current 5th/6th grade students - Fine Arts**

This elective will teach students how to create and produce music using digital recording software such as Soundtrap. Students will work with real and electronic (MIDI) instruments to turn a musical idea into a fully produced song, applying mixing and recording techniques used by real-world producers and audio engineers. In tandem, students will learn how to develop arrangements, starting with the rhythm section (drums, bass, and guitar) and building up to lead instruments and vocals. By the end of the trimester, each student will have a track that is ready to release! This is a great class for future music producers, audio engineers, and composers.

Exploring Forensic Science and The Criminal Justice System

Trimester 1, 2 **Facilitator: Jillian Walulik**

Step into the shoes of a crime scene investigator and uncover the exciting world of forensic science and criminal justice! In this hands-on, mystery-solving course, students will learn how science helps solve crimes, catch suspects, and protect our communities. From analyzing evidence to exploring how detectives, forensic scientists, lawyers and judges work together to solve cases, students will dive into real-world problem solving and critical thinking activities. Each class will tackle engaging challenges, mini-investigations, and age appropriate crime scene scenarios that encourage teamwork, observation, logic, and career exploration.

Trimester II CEE Blocks

Business 101

Trimester 2 **Facilitator: Alison Wright**

(This course may also be offered in Trimester 3 depending on interest.)

This course introduces students to the exciting world of entrepreneurship, economics, and financial literacy in a hands-on, age-appropriate way. This class will guide students through a "Shark Tank" experience where they generate a product or service that they believe in. The product may be completely original or it may be an improvement to an existing product or service. Their task is to design a prototype for their product/service, write a proposal to receive funding for the business, and pitch their idea to a panel of judges.

3-D Design

Trimester 2 **Facilitator: Aleah Tarquini**

***Graduation requirement *option* for current 5th/6th grade students - Fine Arts**

This creative, hands-on course introduces students to the fundamentals of three-dimensional (3-D) design. Students will explore how to think and work in 3-D by sketching, constructing, and modeling physical objects using materials such as paper, cardboard, clay, wire, and found objects. Throughout the course, students will design and build a wide variety of sculptures, architectural models, product prototypes, and more. Emphasis will be placed on developing spatial awareness, problem-solving skills, and the ability to communicate ideas visually through models and sketches. Students will also learn about design elements such as balance, proportion, structure, and texture.

Sports Media

Trimester 2 **Facilitator: Mike Mandeville**

Ever wonder how sports stories make it to your screen? In this engaging course, students will dive into the exciting world of **sports media**—covering everything from broadcasting and journalism to social media and digital reporting.

Explore the roles of sports commentators, analysts, and journalists as you learn how to report on games, write engaging sports stories, and create compelling content for today's audiences. Whether you're passionate about sports, storytelling, or sharing big moments, this class is your front-row seat to the power of sports communication!

Microcontrollers

Trimester 2

Facilitator: Dan Walker

This elective teaches students the foundations of electronics and programming through hands-on work with microcontrollers, single-board computers, and circuit design. Using tools like Arduino and Raspberry Pi, students learn how to build and program real-world systems – from blinking LEDs to interactive sensors – while developing skills relevant to careers in engineering, robotics, and computer science. This course supports MACS’s mission of preparing students for future success by fostering innovation, technical literacy, and problem-solving in a collaborative, project-based environment.

Exploring Forensic Science and The Criminal Justice System

Trimester 1, 2

Facilitator: Samantha Paolucci

Step into the shoes of a crime scene investigator and uncover the exciting world of forensic science and criminal justice! In this hands-on, mystery-solving course, students will learn how science helps solve crimes, catch suspects, and protect our communities. From analyzing evidence to exploring how detectives, forensic scientists, lawyers and judges work together to solve cases, students will dive into real-world problem solving and critical thinking activities. Each class will tackle engaging challenges, mini-investigations, and age appropriate crime scene scenarios that encourage teamwork, observation, logic, and career exploration.

Intro to Fitness & Nutrition

Trimester 2

Facilitator: Amy Plante

***Graduation requirement *option* for current 5th/6th grade students - Physical Education**

In this active and informative elective, students will explore the foundations of personal health and wellness through hands-on learning and movement. Students will dive into SMART goal setting, the FITT principle, and the components of fitness while also learning the basics of nutrition and how it fuels the body. Through fitness journaling, baseline testing, circuit training, and yoga, students will track their progress and reflect on their growth. By the end of the trimester, students will create their own personal or athlete-inspired fitness and nutrition plan to support lifelong healthy habits.

Mastering the Art of Public Speaking

Trimester 2

Facilitator: Taylor Koban

This fun and interactive course helps students build confidence in speaking and learn how to express their ideas clearly and respectfully. Students will practice giving speeches, sharing stories, and participating in debates on age-appropriate topics. They'll learn how to organize their thoughts, speak with confidence, and listen actively to others. Through games, group activities, and friendly debates, students will improve their public speaking skills while learning how to build strong arguments and respond thoughtfully to different points of view.

Become a Historical Detective

Trimester 2

Facilitator: Sue Connelly

His story or her story is all about change, revolutions, reactions and reforming people, cultures and society. Many interesting people, events, and places have been part of these concepts. By exploring 'Revolution, Reaction, Reform in History' you will create a business, service, or museum exhibit that brings history to life and solves a problem or inspires people today. There are 5 options for the historical exhibit and pitch that you may work toward. Working as a research team or independently developing a paper, a tri-fold, a documentary, performance or website for your final capstone and showcase.

Introduction to Journalism

Trimesters 2 & 3

Facilitator: Ben Danielson

This introductory course explores the core principles of journalism, including how to write news articles, editorials, headlines, and more. Students will discover how to identify credible sources, conduct interviews, revise their own work, and write with clarity, purpose, and audience in mind. Through reading mentor texts, analyzing current student-friendly news, and producing their own writing, students will gain a solid foundation in both reporting and opinion-based writing.

Songwriting

Trimester 2

Facilitator: Lauryn VonAhnen

***Graduation requirement *option* for current 5th/6th grade students - Fine Arts**

In this elective, students will explore the art of popular songwriting through styles like rock, pop, and folk. They'll learn about song structure, melody writing, lyric development, and chord progressions. Students will also learn the difference between writing for other artists and finding

their own unique voice. The skills built in this class will be useful in careers that center around creative writing, performance, and music production.

Early Childhood Education

Trimester 2 **Facilitator: Morgan Bridge**

In this second trimester course, upper school students will explore the essentials of working with young children in an educational setting. Students will learn about child development, classroom routines, and strategies for engaging young learners in meaningful ways. They will also gain hands-on experience by designing and preparing age-appropriate crafts, lessons, and activities tailored to the needs and interests of preschool-aged children.

Trimester III CEE Blocks

Animation

Trimester 3 **Facilitator: Aleah Tarquini**

***Graduation requirement *option* for current 5th/6th grade students - Fine Arts**

Bring your imagination to life — one frame at a time! In this hands-on course, students will explore the exciting world of stop motion animation. Using everyday materials like clay, paper, and toys, students will learn the fundamental techniques of animation including storyboarding, character design, scene building, and frame-by-frame filming. Students will work both independently and in small teams to create original short films, gaining experience with digital tools and video editing software to polish their final projects. Throughout the course, students will develop storytelling skills, creative problem-solving, and patience—all while having fun turning still images into moving masterpieces. By the end of the course, students will have a portfolio of short animated projects and a deeper appreciation for the art of animation.

Sports Analytics

Trimester 3 **Facilitator: Mike Mandeville**

(Math Prerequisite: student must earn a Math grade of B or higher on their trimesters 1 and 2 report cards, as well as a math teacher recommendation.)

Love sports *and* numbers? In this course, students will explore how data and statistics are changing the way we understand and play the game. From analyzing player performance to predicting outcomes, students will learn how to think like a sports analyst! Using tools like Google Sheets, students will collect, organize, and interpret real sports data, create graphs, and

draw smart conclusions. Along the way, we'll also tackle the big questions—like the role of fairness, bias, and ethics in analytics. Perfect for future coaches, GMs, or sports fans who want to level up their game with data!

Robotics

Trimester 3

Facilitator: Dan Walker

In this elective, students will work together to design, build, and program robots using the VEX IQ platform. Through collaborative problem-solving and hands-on engineering challenges, students develop key skills in coding, mechanical design, and autonomous control while learning the value of teamwork, communication, and innovation. Reflecting MACS's mission to prepare students for real-world success, this course connects robotics to career pathways in engineering and technology, all within a dynamic, project-based learning environment that celebrates cooperation and creativity.

Foundations of Coaching

Trimester 3

Facilitator: Amy Plante

***Graduation requirement *option* for current 5th/6th grade students - Physical Education**

This elective provides students with a foundational understanding of coaching principles through an emphasis on teamwork, effective communication, leadership strategies, and basic sport-specific instruction. Sports that may be covered include, but are not limited to, PE invasion games, volleyball, basketball, soccer, and flag football. Students will develop the ability to design and implement practice drills, deliver constructive feedback, manage group dynamics, and inspire and motivate others. Whether aspiring to coach in the future or seeking to strengthen confidence and leadership abilities, this course offers students the opportunity to develop as mentors and positively impact those around them.

Podcasting: Strategy, Production, and Distribution

Trimester 3

Facilitator: Taylor Koban

Do you love telling stories, asking questions, or exploring new ideas? In this hands-on class, students will learn how to create their very own podcasts from start to finish! We'll dive into the basics of podcast planning, scriptwriting, interviewing, and recording. Students will also explore sound editing and how to add music and effects to bring their stories to life. Along the way, we'll listen to popular youth-friendly podcasts for inspiration and learn how to use our voices to share what matters to us.

Inventor's Lab: DaVinci's Workshop

Trimester 3 **Facilitator: Sue Connelly**

In this course, students will step into the world of invention, entrepreneurship, and creativity, blending art, architecture, and engineering to design their own innovative projects. Inspired by the genius of Leonardo da Vinci, they'll explore the process of turning ideas into tangible creations—whether through sketches, sculptures, or prototypes. By combining hands-on invention with entrepreneurial thinking, students will learn how to solve real-world problems, express their artistic vision, and pitch their creations. This course encourages exploration, experimentation, and critical thinking, all while having fun bringing their wildest ideas to life.

Introduction to Journalism

Trimesters 2 & 3 **Facilitator: Ben Danielson**

This introductory course explores the core principles of journalism, including how to write news articles, editorials, headlines, and more. Students will discover how to identify credible sources, conduct interviews, revise their own work, and write with clarity, purpose, and audience in mind. Through reading mentor texts, analyzing current student-friendly news, and producing their own writing, students will gain a solid foundation in both reporting and opinion-based writing.

Choir & Music Directing

Trimester 3 **Facilitator: Lauryn VonAhnen**

***Graduation requirement *option* for current 5th/6th grade students - Fine Arts**

In this elective, students will have the opportunity to sing in a choir while learning healthy vocal technique, reading sheet music, and singing in two-to-four part harmony. Students will perform a variety of repertoire, deepening their understanding of key musical concepts and skills. In addition, students will get hands-on experience as conductors. They'll learn about the responsibilities of a music director, including how to lead a group, give clear conducting cues, and shape a musical performance. This is a great class for students interested in singing, music directing, composing, or pursuing careers in music education and performance.

Creative Writing

Trimester 3 **Facilitator: Morgan Bridge**

In this third trimester course, upper school students will dive into the world of storytelling and self-expression through writing. They will learn how to strengthen their writing skills through regular practice, explore techniques for developing engaging plots and characters, and

experiment with different styles and genres. Students will have the opportunity to brainstorm, draft, revise, and polish their work, ultimately creating a piece of writing they are proud to share.