



**EXPLORING NEW HORIZONS THROUGH 4-H**  
MICHIGAN 4-H EXPLORATION DAYS

# **SESSION DESCRIPTIONS**

JUNE 18 TO 20, 2025  
MICHIGAN STATE UNIVERSITY



# 2025 4-H Exploration Days

June 18 to 20, 2025  
Michigan State University

## General Information

4-H Exploration Days is an annual Michigan State University pre-college program that will take place June 18 to 20, 2025, on the MSU campus in East Lansing. The event draws about 1,000 participants aged 12 to 19 from across Michigan who can choose from a multitude of hands-on learning sessions, field trips, and recreation opportunities. During 4-H Exploration Days you'll have a chance to develop valuable skills, make new friends, get involved in lots of fun activities, and much more. You can choose from more than 100 action-packed sessions on topics that interest you! We hope you can come!

Please review the 4-H Exploration Days Handbook (<https://bit.ly/4Hexporeg>) for the event rules, policies, and procedures that all youth and adult participants must follow.

Look for more event information in the *4-H Exploration Days Activity Guide* that you'll receive when you arrive on campus. If you have questions in the meantime, please contact your county 4-H program staff or email [4h.expodays@msu.edu](mailto:4h.expodays@msu.edu).

## NEW FOR 2025: Campus Career Connect Tracks

4-H Exploration Days has always been about helping you learn new things, meet new people, build skills in areas that interest you, have fun, and get a taste of life on MSU's campus. This year we've added Campus Career Connect (C3) tracks to help you start making connections and choices related to your future world of work. On Wednesday afternoon you'll attend a C3 track session that explores job and career options in fields like animal science, forestry, language arts, and public safety. You'll connect with MSU experts and find out about jobs in their fields, the education and training you'll need for those jobs, and MSU's programs in that area.

## Fees

The registration fee for young people and adults to participate in 4-H Exploration Days covers meals from Wednesday lunch to Friday lunch, two nights of lodging, all event activities, and a T-shirt.

- **\$250 for youth participants.**
- **\$150 for adult participants**—Adults attend to support this event as instructors and chaperones and will be assigned a variety of volunteer tasks.
- **\$45 Tuesday Early Arrival Fee**—This fee covers Tuesday lodging and Wednesday breakfast for long-distance participants (primarily from the Upper Peninsula).

## How to Register

The sky's the limit when you're considering which sessions to take!

Registration will open at 7 p.m. on March 20, 2025, and will close at 5 p.m. on April 25, 2025.

Sessions fill up quickly, so register early! It's also a good idea to have some backup sessions in mind. You can use the planning grid that follows to make your session plan!





## 2025 4-H Exploration Days Session Planning Grid

Please select either of these session combinations for each row labeled “My Choice”:

- C3 Track + A Session AND B Session + D Session
- C3 Track + C Session + D Session

Remember, sessions fill up fast! After you fill in your first choices, it’s a good idea to list a few more possibilities in case your first choice is full when you start the online registration process.

Put the session codes (for example, A-12, B-31, and D-4) into the blanks, because that’s what you’ll enter, not the session titles, when you register online for the event.

### Sample Grid

Session choice	C3 Session Wednesday afternoon	Session A Thursday morning	Session B Thursday afternoon	Session C Thursday full day	Session D Friday morning
My 1st choice	T-6	A-2	B-38		D-23
My 2nd choice	T-2	A-27	B-13		D-33
My 3rd choice	T-5			C-8	D-7
My 4th choice	T-19			C-6	D-28
My 5th choice	T-17	A-36	B-2		D-14

### My Session Choices

Session choice	C3 Session Wednesday afternoon	Session A Thursday morning	Session B Thursday afternoon	Session C Thursday full day	Session D Friday morning
My 1st choice					
My 2nd choice					
My 3rd choice					
My 4th choice					
My 5th choice					





# 2025 4-H Exploration Days Sessions

## Campus Career Connect Track Sessions

Wednesday, June 18

2:30 to 4:30 p.m.

All C3 Track sessions are open to 12- to 19-year-old participants.

C3 track code	C3 track title	C3 track description
T-1	<b>Agriculture + Business + Management = Opportunities</b>	Join undergraduate students and faculty from the MSU Department of Agricultural, Food, and Resource Economics to test your skills in a fun, exciting, and team-building marshmallow tower challenge! Learn about agribusiness management and what strengths and skills you will need for a successful career in the field. Hear from current undergraduate students about the internship and study abroad opportunities that have helped them prepare to become effective leaders who make lasting impacts in the bioeconomy and beyond.
T-2	<b>Broad Art Museum: Explore a Future With Culture, Community &amp; the Arts</b>	In which Batman movie does MSU's Broad Art Museum appear? (Hint: Another superhero gets equal billing in the title.) Inside the unique architecture of the building awaits community, culture, heritage, and the arts. You'll learn about the skills you'll need to work in such an organization, explore interactive exhibits, and learn about the types of jobs and careers that are available in working to preserve and share the past, present, and future.
T-3	<b>Elements of Science</b>	Get an inside look at the FRIB—MSU's Facility for Rare Isotope Beams. Learn about jobs and careers related to nuclear science and chemistry. Explore the facilities on campus that are doing state-of-the-art science research!
T-4	<b>Explore Biosystems Engineering</b>	Biosystems engineers draw on biology, engineering, math, and other scientific disciplines to solve problems related to health, food, energy, and the environment. They analyze agricultural, ecological, and human systems to create ideas and solutions to address global problems. Learn from faculty and staff about the tools, techniques, and related jobs and career opportunities.
T-5	<b>Finding Your Field: Careers in Animal Science</b>	Are you interested in a job or career with animals but not sure how to get there? Join 4-H educators and MSU Department of Animal Science faculty, staff, and students to explore species, fields of study, and the exciting world of animal science.
T-6	<b>A Food-Focused Future</b>	Explore MSU's food science and human nutrition majors and learn about exciting job and career options. Be ready to engage your tastebuds and join us for a variety of hands-on experiences related to nutrition and food science!
T-7	<b>Fun With Forestry</b>	What draws people to trees, the outdoors, and our natural resources? Learn about jobs and careers related to sustaining forests and the ecosystem services forests provide, like conservation of biodiversity, wood, and clean water, and global climate stabilization. Participate in hands-on activities while connecting with MSU Department of Forestry faculty, staff, and students.





C3 track code	C3 track title	C3 track description
T-8	<b>Got a Green Thumb? Explore Horticulture &amp; the Michigan 4-H Children's Gardens</b>	Do you enjoy fresh fruits and vegetables, beautiful landscapes, Christmas trees, house plants or public gardens? Are you inspired to help feed the world? Are you intrigued by modern agricultural production methods or the possibility of owning and operating your own company? If you answered "yes" to any of these questions, join faculty and staff members who work with the Michigan 4-H Children's Gardens to explore the types of jobs or careers your interests might grow into!
T-9	<b>Grow Your Future: Plant Science &amp; Genetics</b>	Join an alum of the World Food Prize Global Youth Institute to hear about maize and sorghum research at MSU. Visit the MSU Plant and Soil Sciences Dry Lab for a tour and a variety of hands-on activities focused on plant phenomics, image acquisition systems (drones and robots), and other plant-related topics. Jobs and careers in research will also be shared.
T-10	<b>Journey With Michigan Sea Grant: Fish, Birds, Plants &amp; Wildlife</b>	Michigan's coasts and the Great Lakes are a dynamic ecosystem with fluctuating water levels, many species of fish, birds, plants and other wildlife, and a variety of habitat types. Join Michigan Sea Grant staff to learn about their careers and research and discover similar career paths that will have you fostering economic growth and protecting Michigan's freshwater and coastal assets.
T-11	<b>Legal Eagles: Law &amp; Politics</b>	Do you want to fight for justice? Do you want to lead others in changing the world? Do you like debating important issues? Do you want to change the laws in your community? Join us to explore the many forms of political leadership in which you can get involved and the educational options available at MSU.
T-12	<b>Mental Health, Counseling &amp; Social Work</b>	In this track we'll explore the careers and MSU departments associated with mental health, including social work, counseling, and psychology. Professionals in these fields focus on individual-, family-, and community-level mental health development and wellness.
T-13	<b>Preserving Information, Records &amp; History</b>	Join us for a behind-the-scenes look at the MSU Libraries. We'll explore the unique collections, spaces, resources, and hidden treasures of one of the biggest research libraries in the U.S. We'll also learn about the work of an academic librarian and about other library-related careers.
T-14	<b>Quit Bugging Me: Journey to the MSU Bug House</b>	The MSU Bug House is where science and fun come together. Explore jobs and careers in entomology while getting to know the intriguing creatures in the Bug House collection. Observe and interact with live insects and arachnids and see other unique specimens.
T-15	<b>Say What? The World of Work in Communications</b>	Every business and organization needs to communicate to attract customers. MSU is supported by more than 100 communicators. Do you like to talk, write, or create videos and graphics? Are you a storyteller who is willing to learn new things? Join a group of MSU communicators and marketers to explore the work of graphic design, video production, social media, and written communications. This team will also share the skills needed, jobs and careers available, and the educational opportunities MSU offers.





C3 track code	C3 track title	C3 track description
T-16	<b>Serve &amp; Protect: Public Safety</b>	Explore jobs and careers in the public safety and law enforcement arena. You'll meet with representatives from the MSU Department of Police and Public Safety to learn about their jobs and careers and what it takes to become a member of the force.
T-17	<b>Speak Your Future: The Impact of Learning New Languages</b>	Learn the benefits of knowing more than one language, such as being prepared for careers in many fields in many parts of the world. Join us for hands-on activities, role plays, and snacks from many cultures as we explore job and career opportunities in the global future.
T-18	<b>Sustainability: Recycle, Reuse, Compost</b>	Get a crash course in managing waste as a resource and learn about the work that makes it happen. Go behind the scenes at the MSU Surplus Store and Recycling Center. We'll tour the vermicompost hoophouse and electronics processing area to see the variety of items discarded and how they can be repurposed to keep them out of a landfill. Along the way, you'll hear from staff about their roles and motivations for working in the field.
T-19	<b>Veterinary Medicine: Not Just for Puppies &amp; Piggies!</b>	Veterinary medicine benefits individual animals and the environment, food safety, public health, and private industry. It focuses on the prevention, control, diagnosis, and treatment of diseases affecting the health of domestic, wild, and food animals. Participate in hands-on activities while learning about the career paths open to veterinary medical professionals worldwide. Opportunities exist in private practice, academia, corporations, government, public health organizations, and the military. The MSU College of Veterinary Medicine offers doctor of veterinary medicine, doctorate, master's, and bachelor's degrees.





# A Sessions

Thursday, June 19  
8:30 to 11:30 a.m.

\*Indicates a session that is also offered in another time slot.

**Note:** You'll receive an email before the event if a session you're enrolled in has a footwear or clothing requirement, or if there are supplies or equipment you'll need to bring.

Session code	Session title	Session description	Age range
A-1*	<b>Acting Improv</b>	Improvisational theatre is all about learning how to act a scene without a script. In this session you'll learn the basics of improv and acting and have a whole lot of fun with only a scene prompt, your castmates, and a box of props.	12 to 19
A-2	<b>All About Swine</b>	Investigate the emerging issues facing the U.S. swine industry. We'll focus on the effects of foreign animal diseases, breeding practices, safe travel with pigs, and other management practices.	15 to 19
A-3	<b>American Sign Language for Beginners</b>	Have you ever wanted to learn American Sign Language? Join us in this most hands-on of sessions to learn the basics of signing etiquette and how to sign the ASL alphabet, numbers 1 to 20, colors, sports and recreational activities, animals, and more.	12 to 19
A-4	<b>Artistic Wooden Blossoms</b>	Become an artistic floral arranger for a day. Learn how to dye, preserve, and arrange your very own wooden flower arrangement that you can display anywhere. The best part is you can enjoy the beautiful flowers year-round because they never die or even fade.	12 to 19
A-5	<b>Beat the Clock: 4-H Escape Room</b>	Discover and develop your leadership skills by trying to beat the clock in two themed escape rooms. In Room 1, help Farmer Fred and his dog, Flicka, search for a wayward mare who is due to foal at any moment. During a welcome to MSU event in Room 2, you'll hear about playful spirits who like to tease new students. Play their ghostly games and solve a puzzle to show your own MSU spirit. Work with a team to solve each puzzle while learning about your leadership strengths and building teamwork skills.	12 to 19
A-6	<b>Chill Out With Tech: Mindfulness for the Modern Teen</b>	Join us to learn how to blend digital tools with personal mindfulness techniques. We'll show you how to use your favorite digital tools to practice mindfulness—on your terms. Using tablets and digital pencils (provided), you'll learn fun techniques like mindful journaling, wellness bingo, and guided breathing, all designed to help you relax and recharge. Whether you're looking to reduce stress, improve focus, or just find a moment of peace, this workshop will help you make mindfulness work for you—anytime and anywhere.	12 to 19





Session code	Session title	Session description	Age range
A-7*	<b>Clicking for Success</b>	Whether you're looking to up your dog training game or you're interested in training your chickens, it's clicker training and positive reinforcement for the win! Learn all about the power of positive reinforcement and clicker training in this clickers-on session. We'll have fun clicker training each other and learning valuable animal training skills.	12 to 19
A-8*	<b>Coding &amp; Raspberry Pi</b>	Learn block coding on a Raspberry Pi. You'll tackle engineering challenges with temperature, motion, and light sensors. Block coding makes programming easier, helping you connect code blocks and understand how sensors work together. Gain hands-on engineering and sensor technology experience as you solve problems. You'll build creativity and problem-solving skills and learn how sensors collect data and make things happen in a system.	12 to 19
A-9	<b>Consumer Conversations &amp; Media Training: Talking With Fair &amp; Event Visitors</b>	Learn how to communicate with visitors at fairs and events. Whether you are representing a 4-H project, promoting an agricultural program, or simply talking with visitors, communicating clearly and confidently is crucial. Learn how to represent yourself and your 4-H program with poise and professionalism in media training for interviews with sound, video, and print reporters and with influencers.	15 to 19
A-10*	<b>Create Your Own TV Show</b>	Be part of a production crew and create a television program in a studio. You'll take on several on- and off-camera roles in this hands-on session.	12 to 19
A-11	<b>Creativity Through Self-Expression</b>	Explore fashion design, styling, and photography in this hands-on session. You'll discover creative ways to express your individuality, culture, and personal identity through fashion. Style mannequins, create themed outfits, and photograph your work in a studio setting. By working together and reflecting on your creations, you'll discover how fashion can tell a story and express who you are.	12 to 19
A-12*	<b>A Drone's Eye View of Michigan Agriculture</b>	Photographers and videographers capture images from drones for all sorts of media uses. Farmers use drones to detect changes in their fields at critical points in the growing season. Learn how drones are used and what an asset they've become in Michigan's diverse agricultural landscape.	15 to 19
A-13*	<b>Ecological Engineering &amp; Rain Gardens</b>	Visit the MSU Bioretention Research Facility and learn how rain gardens can treat polluted runoff and prevent flooding. Rain gardens are small, human-built ecosystems that capture and treat stormwater using soils, microbes, and plants. Investigate how plants affect how fast water soaks into soils using infiltrometers and soil moisture meters. Build and test a mini-rain garden for removing sediment from water. Explore other ecosystems services provided by rain gardens through a Bioretention EcoServices scavenger hunt.	12 to 15







Session code	Session title	Session description	Age range
A-14*	<b>The Egg to Chick Journey: Incubation Science</b>	Explore the process of egg incubation and chick hatching. You'll learn how an incubator works, handle and learn about fertilized eggs, observe embryo development by candling eggs, and track the progress of the embryos in real time.	12 to 19
A-15	<b>Exploring Horticulture at MSU</b>	Get a behind-the-scenes look at the amazing world of horticulture at MSU. We will explore the MSU Horticulture Gardens, Michigan 4-H Children's Gardens, and more.	12 to 19
A-16	<b>Hunger Fighters Unite</b>	Calling all hunger fighters! Travel the globe with us to improve food security. Cultivate your passions for food and leadership as we take on hunger—one of the world's greatest challenges. We'll use simulations to explore careers, cultures, and connections. Fill your suitcase with the ideas and resources you'll need to become a hunger fighter!	12 to 19
A-17*	<b>Jelly Roll Drag Race</b>	You'll design and sew a personalized lap quilt using jelly rolls (bundles of pre-cut fabric strips) in this hands-on session. This is an advanced session; straight-line sewing experience is required. Sewing machines, jelly rolls, and other supplies will be provided.	12 to 19
A-18	<b>Juneteenth: Freedom &amp; Legacy</b>	Learn the history of Juneteenth and why it was and is so important to African American freedom and the broader struggle for equality. We'll discuss the ongoing journey toward equality and social justice and celebrate African American culture, heritage, and the pursuit of freedom.	12 to 19
A-19*	<b>Meat Evaluation for Beginners</b>	You be the judge . . . of meats. Learn the basics of meat evaluation and grading and the priorities for placing classes of pork, beef, and lamb. You'll also learn to use the tools of the trade, like probes, grids, and marbling cards. Finally, you'll test yourself by predicting yield grades and placing pork classes.	12 to 19
A-20	<b>Mindful Painting</b>	Get ready to relax, create, and have fun! In this session, you'll paint awesome artwork, make cool crafts, and vibe to great music. Plus, you'll pick up fun mental health tips and affirmations to help you feel your best. Let your creativity shine while learning ways to stay positive.	15 to 19
A-21	<b>Mindfulness With the Majestics</b>	Horses are often called majestic creatures, but their positives go far beyond physical beauty. Explore the mental health and mindfulness benefits of working with horses in this hands-on session. You'll learn tools for managing stress, improving focus, and building positive relationships while you pick up tips on horsemanship and equine care.	15 to 19





Session code	Session title	Session description	Age range
A-22*	<b>Mixing Magic: Crafting Natural Plant Syrups for Mixology &amp; Cultivating a Garden of Flavor</b>	Unleash your inner mixologist as you learn to create simple syrups with Michigan-grown plants and use them in a variety of beverages. You'll work on basic mixology skills and develop your creativity in making flavored juices and lemonades.	12 to 19
A-23	<b>Outdoor Environmental Education</b>	Learn to appreciate Michigan's great outdoors and the protections our natural resources need while you work on orienteering and map reading skills.	12 to 19
A-24	<b>Packaging Science</b>	Do you enjoy snacks on the go? Do you like having water available when you forget your water bottle at home? Do you trust that your food will stay safe from farm to table? Learn about the packaging science that makes it possible for your favorite products to arrive in perfect condition. Design a packaging label and choose the materials to safely and conveniently package your favorite snack.	12 to 19
A-25*	<b>Poultry in an Eggshell</b>	Play a game that tests what you know about poultry breeds, classes, diseases, and more. You'll also learn basic poultry showmanship and about judging following American Poultry Association rules.	12 to 19
A-26	<b>Preserving With Jams &amp; Salsa</b>	Join us to make delicious jams and salsa in this hands-on session. We'll talk about safe food canning techniques and the differences between boiling water (water bath) canning and pressure canning.	12 to 19
A-27	<b>Rabbit Showmanship for Beginners</b>	Find out what it takes to succeed in rabbit showmanship classes at your county fair. Discover how to use the <i>Michigan 4-H Rabbit Fitting and Showing Member Guide</i> to evaluate your rabbits. For beginning rabbit exhibitors.	12 to 19
A-28*	<b>Rugby for Rookies</b>	Get off the sidelines and join us on the rugby pitch! You'll learn the rules, terms, and strategies of the game in this active session. Come ready to learn, play, and enjoy the camaraderie of rugby! No experience needed.	12 to 19
A-29*	<b>Savvy Animal Science</b>	Learn to evaluate animal health and practice giving injections in this hands-on session. We'll explore why and how we identify and track livestock and discover the range of animal products we use in everyday life (meat, milk, leather, and much more). We'll also try different animal milks and make a leather craft to take home.	12 to 19
A-30	<b>Sewing for Beginners</b>	Learn how to use a sewing machine or get better acquainted with one. Learn the parts, presser feet, and stitches your machine may have. You'll learn basic sewing skills by making a simple tote bag. Sewing machines, fabric, and other supplies will be provided.	12 to 19





Session code	Session title	Session description	Age range
A-31*	<b>Slam Dunk Your Way to Better Basketball Skills</b>	Whether you've never played basketball before or grew up on the court, join us to work on your hoops skills and have an awesome time! You'll run drills, scrimmage, and learn great communication and teamwork skills along the way.	12 to 19
A-32*	<b>Spartan Dollars &amp; Sense: A Budgeting Challenge</b>	Ever wonder how hard it really is to live on your own, make tough life decisions, and pay your bills? In this exciting budgeting simulation, you'll take on the challenge of creating a budget based on decisions you make about common monthly expenses. You'll also find an apartment, buy a car, and save for retirement. Can you develop a budget that aligns with the lifestyle you envision for yourself?	12 to 19
A-33*	<b>Target Archery</b>	Join us on the firing line for this introduction to the basics of target archery. Learn what it takes to knock, draw, aim, and fire an arrow downrange. Find out about basic equipment, range rules, and competitions you can take part in while having fun shooting bows and arrows.	12 to 19
A-34*	<b>Tour de MSU— Biking Around MSU</b>	Join our casual peloton as we explore the bike friendly campus facilities and features that have earned MSU a gold-level Bike Friendly University designation. We'll cover 7 to 8 miles, with frequent stops to talk about safe biking and how to make some parts of campus bike friendlier, and to answer questions about bikes and biking. Bring your own bike, bike lock, and helmet, or rent a bike from MSU Bikes (locks are included and loaner helmets are available).	12 to 19
A-35*	<b>Veterinary Nurse for a Day</b>	Come learn about the amazing world of veterinary nursing. Hands-on activities will give you an idea of what veterinary nurses do to take care of animals every day. Come with an open and curious mind!	12 to 19
A-36	<b>Vinyl Creations</b>	Learn different ways to cut vinyl for a variety of decorative T-shirt designs. Bring your creative ideas, big and small, to life in this session!	12 to 19





## B Sessions

Thursday, June 19

1:30 to 4:30 p.m.

\*Indicates a session that is also offered in another time slot.

**Note:** You'll receive an email before the event if a session you're enrolled in has a footwear or clothing requirement, or if there are supplies or equipment you'll need to bring.

Session code	Session title	Session description	Age range
B-1*	<b>Acting Improv</b>	Improvisational theatre is all about learning how to act a scene without a script. In this session you'll learn the basics of improv and acting and have a whole lot of fun with only a scene prompt, your castmates, and a box of props.	12 to 19
B-2*	<b>Amazing Racing</b>	Teamwork is the name of the game for this fast-paced, fun, and challenging session. You and your team will race to follow clues and complete a variety of checkpoint challenges using skills you learn on the fly before your competitors do.	12 to 19
B-3	<b>American Sign Language: The Next Level</b>	Do you love ASL? Do you want to build on what you already know about it? If you know the basics—how to sign the alphabet, the numbers 1 through 20, some words, and about signing etiquette—join us to learn more words and about sentence structure. We'll also explore how to use this skill in leadership roles to encourage inclusion and belonging.	12 to 19
B-4	<b>Beat the Competition</b>	Selling a livestock market animal? Want a leg up on your competition? In this session, we'll cover a variety of marketing and communication strategies that will help you make your best even better. Experience cow/calf and feedlot operations and take away tips to improve your market animal project.	12 to 19
B-5	<b>Breaking the Ice—Inclusive Activities for Everyone</b>	Do you love jumping in and getting involved in activities while meeting new people or does the mention of an icebreaker make you want to run and hide? Either way, this session is for you. You'll have fun while you learn fun, inexpensive, and easy activities that will help you get your group involved—whatever their comfort level.	12 to 19
B-6	<b>Cheese Making: Mozzarella Science</b>	Ever wonder how string cheese is made? In this session, you'll learn the string cheese-making and -enjoying process from how the cow makes milk all the way through snacking on mozzarella.	12 to 19
B-7*	<b>Coding &amp; Raspberry Pi</b>	Learn block coding on a Raspberry Pi. You'll tackle engineering challenges with temperature, motion, and light sensors. Block coding makes programming easier, helping you connect code blocks and understand how sensors work together. Gain hands-on engineering and sensor technology experience as you solve problems. You'll build creativity and problem-solving skills and learn how sensors collect data and make things happen in a system.	12 to 19





Session code	Session title	Session description	Age range
B-8	<b>Corsage &amp; Boutonniere Making</b>	Make a wrist corsage and a pin-on boutonniere in this hands-on session. Flowers and other materials will be supplied.	12 to 19
B-9*	<b>Create Your Own TV Show</b>	Be part of a production crew and create a television program in a studio. You'll take on several on- and off-camera roles in this hands-on session.	12 to 19
B-10*	<b>A Drone's Eye View of Michigan Agriculture</b>	Photographers and videographers capture images from drones for all sorts of media uses. Farmers use drones to detect changes in their fields at critical points in the growing season. Learn how drones are used and what an asset they've become in Michigan's diverse agricultural landscape.	15 to 19
B-11*	<b>The Egg to Chick Journey: Incubation Science</b>	Explore the process of egg incubation and chick hatching. You'll learn how an incubator works, handle and learn about fertilized eggs, observe embryo development by candling eggs, and track the progress of the embryos in real time.	12 to 19
B-12*	<b>Fabric Boxes</b>	Sewing skills come in handy in everyday life. Lose a button off your favorite shirt? Sew it back on! Move into an apartment with ugly curtains? Sew new ones that match your vibe! Need a classy gift wrap or storage option? Sew yourself a fabric box! In this session you'll create, sew, and decorate a fabric box. Sewing machines, fabric, and other supplies will be provided. Some sewing experience is needed.	12 to 19
B-13	<b>Food for Thought</b>	Join the ultimate STEM adventure and discover how food availability affects lives locally and globally. Learn what makes food accessible and how you can be a hero in building a stronger, more food-secure community. Get ready to explore, engage, and make a real difference.	12 to 15
B-14	<b>Fostering Healthy &amp; Happy Relationships</b>	Relationships and dating can be challenging. In this session, you'll learn the signs of healthy, positive relationships and the warning signs of unhealthy relationships. Explore how setting boundaries can lead to healthy relationships, then practice communicating your boundaries and respecting other people's boundaries. You'll also learn how to navigate a breakup and support others in their relationship journeys.	15 to 18
B-15	<b>I Am Awesome</b>	Join us to learn more about positive affirmations and being your own bucket filler. You'll explore creative mindfulness activities and create an interactive tool you can use to continue spreading positivity in yourself and in other people.	12 to 19





Session code	Session title	Session description	Age range
B-16*	<b>Jelly Roll Drag Race</b>	You'll design and sew a personalized lap quilt using jelly rolls (bundles of pre-cut fabric strips) in this hands-on session. This is an advanced session; straight-line sewing experience is required. Sewing machines, jelly rolls, and other supplies will be provided.	12 to 19
B-17	<b>Kindness: Making Positive Change Locally &amp; Globally</b>	Learn to invent a positive future for your community and world by exploring the essential leadership traits of kindness, empathy, and respect. In this session, you'll meet people who are making a difference in their lives and careers with positive character as their guiding light. You'll leave with inspiration and ideas about how you can make a positive difference in your world.	12 to 19
B18-	<b>Laser Cutting</b>	Learn how to use a laser cutter to make a design on wood and plastic in this hands-on session. We'll also cover safety procedures for using a laser cutter.	12 to 19
B19-*	<b>Meat Evaluation for Beginners</b>	You be the judge . . . of meats. Learn the basics of meat evaluation and grading and the priorities for placing classes of pork, beef, and lamb. You'll also learn to use the tools of the trade, like probes, grids, and marbling cards. Finally, you'll test yourself by predicting yield grades and placing pork classes.	12 to 19
B-20	<b>Mindful Moshing: Dance, Discover &amp; Reflect</b>	Get ready to rock, roll, and reflect with mindful moshing, where movement meets mindfulness! We'll combine energetic dancing and movement to explore how music affects our emotions and learn mindful practices for channeling energy and emotions in fun and intentional ways.	12 to 19
B-21*	<b>Mixing Magic: Crafting Natural Plant Syrups for Mixology &amp; Cultivating a Garden of Flavor</b>	Unleash your inner mixologist as you learn to create simple syrups with Michigan-grown plants and use them in a variety of beverages. You'll work on basic mixology skills and develop your creativity in making flavored juices and lemonades.	12 to 19
B-22	<b>Nothing Up My Sleeve! Magic &amp; Illusions</b>	Amaze and impress your friends and family with your skillful perspective on magic and illusions. You'll learn how to make your own simple bag of magic tricks on a shoestring budget, explore the science and psychology behind these tricks, and take a historical look at optical illusions.	12 to 19
B-23	<b>Orange, Blue, Green, Gold— Which Are You?</b>	What type of cereal are you? How do you define "doing a good job"? Where do you want to be in five years? Practice answering these questions and others as you take a deeper look at your personality in this session. Using the Real Colors personality assessment, you'll learn tips and tricks to help you prepare for your next interview.	15 to 19





Session code	Session title	Session description	Age range
B-24	<b>Play Like an Athlete, Eat Like an Athlete</b>	How do you think Detroit Lions running back and NFL Hall of Famer Barry Sanders won Most Valuable Player multiple times in his career? It wasn't just talent. He was a team player with consistent diet and exercise habits that prepared him to be the best on the field every day. In this session, you'll learn ways to keep your body strong and healthy and practice being a team player in flag football. Wear clothes you can move in and bring a filled water bottle.	12 to 15
B-25*	<b>Poultry in an Eggshell</b>	Play a game that tests what you know about poultry breeds, classes, diseases, and more. You'll also learn basic poultry showmanship and about judging following American Poultry Association rules.	12 to 19
B-26	<b>Quilled Wall Hangings</b>	Quilling, also known as paper filigree, is the art of rolling and twisting narrow strips of paper and then shaping them to craft exquisite creations. In this session you will design and make a quilled wall hanging.	12 to 19
B-27	<b>Rabbit Showmanship for Advanced Exhibitors</b>	Rabbit showmanship classes may look complicated, but the step-by-step breakdown of the class—from handling to examination—in this session will prepare you for a winning effort! For experienced rabbit exhibitors. We'll supply rabbits you can use for hands-on practice.	12 to 19
B-28*	<b>Rabbits: A 4-H Project &amp; Beyond</b>	Learn the basics of raising a rabbit for a 4-H project through fun hands-on activities, games, and videos. Expand what you know about rabbit breeds, market classes, grooming, and health, and making the best choices for your herd. Explore options for showing your project animals and have fun learning about the 4-H rabbit project. No experience needed.	12 to 19
B-29	<b>Raising Your 4-H Beef Project</b>	Start with a tour of the MSU feedlot, then learn about beef cattle nutrition, carcass yield and quality, the importance of record keeping, animal behavior, and calf selection.	15 to 19
B-30*	<b>Savvy Animal Science</b>	Learn to evaluate animal health and practice giving injections in this hands-on session. We'll explore why and how we identify and track livestock and discover the range of animal products we use in everyday life (meat, milk, leather, and much more). We'll also try different animal milks and make a leather craft to take home.	12 to 19
B-31*	<b>Slam Dunk Your Way to Better Basketball Skills</b>	Whether you've never played basketball before or grew up on the court, join us to work on your hoops skills and have an awesome time! You'll run drills, scrimmage, and learn great communication and teamwork skills along the way.	12 to 19





Session code	Session title	Session description	Age range
B-32*	<b>Spartan Dollars &amp; Sense: A Budgeting Challenge</b>	Ever wonder how hard it really is to live on your own, make tough life decisions, and pay your bills? In this exciting budgeting simulation, you'll take on the challenge of creating a budget based on decisions you make about common monthly expenses. You'll also find an apartment, buy a car, and save for retirement. Can you develop a budget that aligns with the lifestyle you envision for yourself?	12 to 19
B-33*	<b>Target Archery</b>	Join us on the firing line for this introduction to the basics of target archery. Learn what it takes to knock, draw, aim, and fire an arrow downrange. Find out about basic equipment, range rules, and competitions you can take part in while having fun shooting bows and arrows.	12 to 19
B-34*	<b>Tour de MSU— Biking Around MSU</b>	Join our casual peloton as we explore the bike friendly campus facilities and features that have earned MSU a gold-level Bike Friendly University designation. We'll cover 7 to 8 miles, with frequent stops to talk about safe biking and how to make some parts of campus bike friendlier, and to answer questions about bikes and biking. Bring your own bike, bike lock, and helmet, or rent a bike from MSU Bikes (locks are included and loaner helmets are available).	12 to 19
B-35	<b>Turning Vegetables Into Power</b>	Did you know that you can produce energy from vegetable waste, like carrot peels? In this session, you'll explore how different vegetables and their byproducts can be converted into energy. You'll gain hands-on experience at MSU's Anaerobic Digestion Research and Education Center, where you'll learn about the process of anaerobic digestion. You'll also discover how vegetable production in Michigan contributes to sustainable energy solutions.	12 to 19
B-36	<b>Unlock the Power of Languages</b>	Want to improve your career prospects? Boost your brain power? Connect with people from other cultures? Learn another language—or two or three! The interactive activities and practical resources in this session will kickstart your journey toward fluency in new languages that can unlock a world of possibilities.	12 to 19
B-37	<b>Vibrant Vibes</b>	Take a plain object to the next level by mixing powdered dyes and then tie-dyeing it using the tips and tricks you'll learn in this session. Your finished creations will be a step above basic tie-dyeing. Bring two or three prewashed 100% cotton items to dye, such as a T-shirt, tank top, pair of socks, or bandana. All dyes and materials will be provided.	12 to 19
B-38	<b>Youth Take the Stage: An Introduction to Interactive Theater</b>	Have fun taking theater to a whole new level by using it to help address community issues. As an interactive theater troupe, we will research a topic and develop educational skits about it that can be shared with or performed for others. No theater experience needed—just a desire to make a difference in your community.	12 to 19







# C Sessions

Thursday, June 19

8:30 to 11:30 a.m. & 1:30 to 4:30 p.m.

**Note:** You'll receive an email before the event if a session you're enrolled in has a footwear or clothing requirement, or if there are supplies or equipment you'll need to bring.

Session code	Session title	Session description	Age range
C-1	<b>Build Your Own Fishing Rod</b>	Love to fish? In this session, you'll build a fishing rod that you'll be able to use for years to come. Amaze your friends as you fish with a rod you made by hand, from start to finish.	12 to 19
C-2	<b>Dig In: Agriculture at the MSU Student Organic Farm &amp; Edible Food Forest</b>	Are you interested in a career in agriculture? Want to know more about growing vegetables organically? Join us to explore the MSU Student Organic Farm and learn about the farm's impact on the local community. We'll explore the edible food forest, plant and harvest crops, and learn more about what it's like to work in the industry.	12 to 19
C-3	<b>Early Childhood Education: Keeping Kids Engaged &amp; Having Fun</b>	Explore what it takes to work with young children. You'll learn the business of babysitting, find out about career possibilities, and leave with developmentally appropriate activities for young children in your care.	12 to 19
C-4	<b>Everything Equine</b>	Immerse yourself in the world of horses in this hands-on session. You'll learn about horse nutrition, show grooming, mindfulness, first aid, judging, and more.	15 to 19
C-5	<b>Finding Fun in Your Family Tree</b>	Learn to use library resources to discover your ancestors and learn about your family's role in history. You'll develop a family tree you can share with your relatives.	12 to 19
C-6	<b>Pellet Rifle &amp; Air Pistol Target Shooting Fundamentals</b>	Learn about the shooting styles that are used by target shooters from 4-H members to Olympians. This hands-on session will cover three-position target shooting with pellet rifles and air pistols. We will cover firearms safety, equipment, and ways to improve your shooting skills.	12 to 19
C-7	<b>Pig Eye Dissection</b>	Biology buffs unite! Join us to learn about the anatomy of the eye by dissecting a cadaver pig eye. No dissection experience is needed, but willingness to handle a pig eye is.	12 to 15
C-8	<b>Ready! Set! Pull!</b>	During this hands-on session you'll learn the parts of a gun, shooting techniques, and gun safety. You'll also try your hand at trap shooting.	12 to 19
C-9	<b>The World of Fashion Design: An Introduction</b>	Explore the fashion industry of today and discover how you can make fashion your career. You'll hear from guest speakers on college and career opportunities in fashion, learn to draw simple fashion illustrations, and participate in a fast-paced work session where teams will make garments from recycled materials.	15 to 19





## D Sessions

Friday, June 20  
8:30 to 11 a.m.

\*Indicates a session that is also offered in another time slot.

**Note:** You'll receive an email before the event if a session you're enrolled in has a footwear or clothing requirement, or if there are supplies or equipment you'll need to bring.

Session code	Session title	Session description	Age range
D-1*	<b>Amazing Racing</b>	Teamwork is the name of the game for this fast-paced, fun, and challenging session. You and your team will race to follow clues and complete a variety of checkpoint challenges using skills you learn on the fly before your competitors do.	12 to 19
D-2*	<b>Clicking for Success</b>	Whether you're looking to up your dog training game or you're interested in training your chickens, it's clicker training and positive reinforcement for the win! Learn all about the power of positive reinforcement and clicker training in this clickers-on session. We'll have fun clicker training each other and learning valuable animal training skills.	12 to 19
D-3*	<b>Create Your Own TV Show</b>	Be part of a production crew and create a television program in a studio. You'll take on several on- and off-camera roles in this hands-on session.	12 to 19
D-4	<b>Cultivating Confidence</b>	Use words, symbols, designs, drawings, colors, and other mixed media to create a mood board or collage symbolizing your essence or vibe. You'll learn about and use techniques designed to help create a sense of safety for people who may have fears related to being seen, heard, felt, misunderstood, and more. At the end of the session you'll have a chance to share your completed project with the other participants.	12 to 19
D-5	<b>Dairy Cattle 201: Management Practices for the Modern Farmer</b>	Visit the MSU dairy facilities to learn about critically important dairy cattle management practices like disbudding or dehorning calves, giving injections safely, and the passive transfer of immunity in calves.	12 to 19
D-6*	<b>A Drone's Eye View of Michigan Agriculture</b>	Photographers and videographers capture images from drones for all sorts of media uses. Farmers use drones to detect changes in their fields at critical points in the growing season. Learn how drones are used and what an asset they've become in Michigan's diverse agricultural landscape.	15 to 19





Session code	Session title	Session description	Age range
D-7*	<b>Ecological Engineering &amp; Rain Gardens</b>	Visit the MSU Bioretention Research Facility and learn how rain gardens can treat polluted runoff and prevent flooding. Rain gardens are small, human-built ecosystems that capture and treat stormwater using soils, microbes, and plants. Investigate how plants affect how fast water soaks into soils using infiltrometers and soil moisture meters. Build and test a mini-rain garden for removing sediment from water. Explore other ecosystems services provided by rain gardens through a Bioretention EcoServices scavenger hunt.	12 to 15
D-8*	<b>Fabric Boxes</b>	Sewing skills come in handy in everyday life. Lose a button off your favorite shirt? Sew it back on! Move into an apartment with ugly curtains? Sew new ones that match your vibe! Need a classy gift wrap or storage option? Sew yourself a fabric box! In this session you'll create, sew, and decorate a fabric box. Sewing machines, fabric, and other supplies will be provided. Some sewing experience is needed.	12 to 19
D-9	<b>Fantasy Writing: Characters, Monsters &amp; More!</b>	Use your imagination and unleash your creativity as you learn the art of fantasy worldbuilding and character creation. You'll discuss and practice writing prompts, giving and receiving feedback on your work, and creating collaborative worlds.	12 to 19
D-10	<b>Farm Livin' Is the Life for Me!</b>	Experience a day in the life of a dairy farmer! Explore some of the many opportunities to work in agriculture- and natural resources-related fields. You'll also play interactive games and work through real-life scenarios to help you prepare for your future.	12 to 19
D-11	<b>Five P's of Marketing Your Livestock Project</b>	Addressing the "five P's of Marketing" can help boost the final sale price of your market animal. We'll play a game that will show you how product, place, people, price, and promotion affect your final price per pound.	15 to 19
D-12	<b>Forestry 101</b>	Join the MSU Department of Forestry for an experience that will connect you with trees as building blocks of natural ecosystems and of our communities. You'll learn to measure trees using a range of classical and cutting tools and to dissect wood to explore wood anatomy from ecological and construction perspectives.	12 to 19
D-13	<b>Getting Hands-On- With Invasive- Species</b>	<b>CANCELLED</b>	15 to 19
D-14	<b>Go Green @ MSU Recycling Center</b>	Join us for a crash course in managing waste as a resource and its environmental, economic, and social benefits. Take a peek into the vermicompost pile and observe the soil food web. See how MSU sorts recyclables and find out what happens to those recyclables when they leave campus. You'll also practice creative reuse with a hands-on upcycled craft.	12 to 19





Session code	Session title	Session description	Age range
D-15	<b>Handbell &amp; Hand Chime Ringing for Beginners</b>	Learn the basics of making beautiful music by ringing handbells and hand chimes. Playing handbells helps you build fine motor and thinking skills, as well as hearing, pattern recognition, and matching. But the most important thing is that it's lots of fun! No previous knowledge required and you don't need to be able to read music.	12 to 19
D-16	<b>I'm Putting WHAT in My Body?!</b>	Take control of your well-being by exploring key concepts in health promotion and disease prevention, with a focus on understanding substance use. Through interactive, hands-on activities, you'll uncover the health and cosmetic effects of substance use, including how smoking and vaping affect lung capacity. You'll also build the skills you need to adopt healthy behaviors, reduce risks, and lay the groundwork for a lifetime of informed, positive choices.	12 to 15
D-17	<b>Kickball 101</b>	Have fun playing kickball and learning strategies for winning.	12 to 15
D-18	<b>Let's Go to College</b>	Start yourself on a path to a college education in this session. Prepare for the college search process, learn to write a compelling college essay, and find out how to make your college application stand out. You'll also delve into the financials: How to find and apply for college scholarships, grants, and other financial aid.	15 to 19
D-19	<b>Make Your Own Pajama Pants</b>	"What, these old things? I made them myself!" In this hands-on session you'll discover how much fun you can have sewing your own clothes by creating a custom-fit pair of pajama pants with an elastic waist. No sewing experience needed. Sewing machines, fabric, and other materials will be provided.	12 to 19
D-20	<b>Orchids 101</b>	Learn about the care, feeding, and watering of tropical orchids in this hands-on session. You'll pot up your own orchid to take home. Orchids and other supplies will be provided.	12 to 19
D-21	<b>Pellet Rifle for Beginners</b>	Three-position pellet rifle shooting competitions can be found in programs ranging from 4-H all the way to the Olympics. In this hands-on session we'll cover firearm safety, equipment, and the basics of prone, kneeling, and standing pellet rifle positions.	12 to 19
D-22	<b>Personal Leadership Journey</b>	Explore your personal leadership style and characteristics with members of the State 4-H Youth Leadership Council. You'll have the chance to try different leadership styles during activities like building towers, solving lock boxes, setting up tents, and navigating mazes. Learn about opportunities to enhance your leadership skills at the local, state, and national levels.	12 to 19
D-23	<b>Pickleball 101: Learn the Game</b>	Come play the fastest-growing sport in the U.S.! You'll start out learning the basic shots and rules and advance to playing games. Pickleball is all about strategy and defense, making it a great game for friends and family to play together.	12 to 19





Session code	Session title	Session description	Age range
D-24	<b>Rabbit Color Genetics</b>	Discover the mysteries behind rabbit colors. Why don't all rabbit offspring look like their parents?	12 to 19
D-25*	<b>Rabbits: A 4-H Project &amp; Beyond</b>	Learn the basics of raising a rabbit for a 4-H project through fun hands-on activities, games, and videos. Expand what you know about rabbit breeds, market classes, grooming, and health, and making the best choices for your herd. Explore options for showing your project animals and have fun learning about the 4-H rabbit project. No experience needed.	12 to 19
D-26	<b>Reality Farm</b>	Get ready to roll the dice on the Reality Farm! In this simulation, you'll try to make money by selling your 4-H project animal at an auction. You'll pick up tips to help with your real-life livestock project sale, too.	12 to 19
D-27*	<b>Rugby for Rookies</b>	Get off the sidelines and join us on the rugby pitch! You'll learn the rules, terms, and strategies of the game in this active session. Come ready to learn, play, and enjoy the camaraderie of rugby! No experience needed.	12 to 19
D-28*	<b>Savvy Animal Science</b>	Learn to evaluate animal health and practice giving injections in this hands-on session. We'll explore why and how we identify and track livestock and discover the range of animal products we use in everyday life (meat, milk, leather, and much more). We'll also try different animal milks and make a leather craft to take home.	12 to 19
D-29	<b>Soap Making</b>	Making soap is fun and easy! In fact, if you can make a cake, you can make soap. In this hands-on session you'll learn how to make a bar of soap from a variety of nourishing oils and learn the process and history of soap making. You'll also practice skills like measuring, stirring, incorporating oils, math, trial and error, cooperation, problem solving, and following step-by-step directions.	12 to 19
D-30	<b>Stop-Motion Animation Challenge</b>	Create your own fun stop-motion animation using just a phone or tablet. Practice video planning and storyboarding, explore stop-motion animation software, and channel your creativity to complete an animated film. Bring your own or be prepared to share a phone or tablet with stop-motion animation software installed (such as Stop Motion Studio's free version, available for iOS or Android).	12 to 19
D-31	<b>Super Collisions of Atomic Nuclei</b>	You'll get plenty of hands-on experience while exploring a world-class isotope laboratory that smashes nuclei into a target at nearly half the speed of light. Take a behind-the-scenes tour of MSU's Facility for Rare Isotope Beams, where researchers make and study atomic nuclei that don't exist naturally on Earth. Join us to explore the incredible variety of physical science-related careers.	12 to 19





Session code	Session title	Session description	Age range
D-32	<b>Take on Your Financial Future</b>	Learn to prepare a real-world budget with the hands-on Spartan Dollars and Cents: Realistic Budget Simulation. You'll track your monthly income and expenses and see how the lifestyle decisions you make will affect your budget.	12 to 19
D-33	<b>Technology Tools to Make Outdoors Fun</b>	This session will kindle a sense of wonder in the tech savvy, the outdoor adventurer, and everyone in between. You'll learn about data science, business intelligence, and how the latest tools and tech are used to track data about the natural world.	12 to 19
D-34	<b>Venture to Adventure: Careers in Nature</b>	Do you prefer to spend time in and work outdoors? Enjoy camping, hunting, hiking, kayaking, nature photography, or fishing? Learn firsthand about careers that will keep you connected to the natural environment. See what careers in wildlife, forestry, wildfire, and environmental management would be like, and how you can prepare to work in these fields.	12 to 19
D-35*	<b>Veterinary Nurse for a Day</b>	Come learn about the amazing world of veterinary nursing. Hands-on activities will give you an idea of what veterinary nurses do to take care of animals every day. Come with an open and curious mind!	12 to 19
D-36	<b>Working With Search &amp; Rescue K9's</b>	In this hands-on session, you'll work with dogs and handlers to learn what it takes to train a search and rescue dog in the wilderness, air scent, human-remains detection, disaster, and trailing specialties.	12 to 19

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