FIRST IN U

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Nebraska FIRST LEGO League Challenge 2023-2024

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Lights, camera, STEAM! Science, technology, engineering, arts, and math (STEAM) inspire big ideas, bold action – and creativity. Our skills make it possible to create art and experiences that bring us together, entertain us, and move us. During our 2023-2024 artsinspired robotics season, FIRST® IN SHOWSM presented by Qualcomm, we will celebrate the roles our STEM skills play in the arts and design and build a world of endless possibilities. The future is yours to create.

Educator Professional Development | FIRST (firstinspires.org)

FIRST Certified Professional Development is available in three ways.

- •Remote Join a cohort via our flexible learning option that features live collaboration using remote meeting tools and includes hands-on learning using your materials.
- •In-Person Regional Join us at various locations around the U.S. no need to have your own materials, we provide everything you need.
- •School District On-Site Training Custom session to meet the needs, program levels, and educator quantity of your choice. Pricing may differ from list pricing. Request a quote.





Educator Professional Development | FIRST (firstinspires.org)

Program Levels and Pricing

- •FIRST® LEGO® League Discover (grades PreK-1) 1 Day \$300 per seat
- •FIRST® LEGO® League Explore (grades 2-4) 2 Days \$600 per seat
- •FIRST® LEGO® League Challenge (grades 4-8) 2 Days \$600 per seat





Self-Paced Trainings:

FIRST Education has created free training resources on the FIRST programs for coaches, mentors, and teachers. These training courses are located within the FIRST Thinkscape Learning Management System. If you don't have an account, choose a link below to register for an account and join a course. Once you have an account, you can join additional courses by entering the course codes.

- •FIRST LEGO League Challenge Class Pack training course- Register for a new account and join the course. If you are an existing user, choose Join a Course and enter: CD11F986.
- •FIRST LEGO League Challenge Team training course- Register for a new account and join the course. If you are an existing user, choose Join a Course and enter: FE6F60CE.





- Fall Camps
 - Potential camp in Omaha
- General Information Sessions
 - Online and in-person?
- Single Day Coach Camps?
 - Any interest from a veteran perspective? Geared for new rookie coaches and mentors
- Other?





Innovation Project

How we share our own hobbies and interests with others can be an expression of our creative selves. People who work in the arts can teach us a lot about how to communicate, how to engage, and how to entertain an audience of any size. What can you learn from museums, theaters, and films that can help you share what you love to do?





Innovation Project



How can you use technology and the arts to help engage others or increase participation in what you love to do?

→ Identify a specific problem related to sharing your hobbies or interests.

Performing. Reading. Collecting. Skateboarding. Your hobbies and interests might be different from your friends'. Can you teach people about your hobby in a way that makes it fun and engaging?

Research your problem and solution ideas.

Explore the many ways people share their interests with others. Using the arts as a guide, think about creative ways you could teach people about what you love to do. Can you find a fun way to get more people interested in your hobby? How can you use technology to make learning about your interests more immersive? Are there any experts you could interview?

→ Design and create a solution that helps people learn about your passions!

Use your research and explorations to either improve an existing way your hobby is shared or design a new innovative way to share! Can you think of any technology that could be used in a new or creative way? Make a drawing, model, or prototype of your solution.

→ Share your ideas, collect feedback, and iterate on your solution.

The more you iterate and develop your ideas, the more you will learn. What impact will your solution have on your audience?

→ Communicate your solution with a live presentation at an event.

Prepare a creative and effective presentation that clearly explains your innovation project solution and its impact on others. Make sure your whole team is involved in sharing your progress.

Use your critical thinking and innovation to inspire others to learn and be entertained with FIRST® IN SHOWSM presented by Qualcomm.











Updates & Clarifications

Updated August 1st, 2023

UPDATE 02 – SCORESHEET UPDATE – MISSION 14 – The scoresheet values of Mission 14 found on page 30/31 of the Robot Game Rulebook are incorrect and do not match those found in the mission description. The second sentence of the scoresheet should read as follows:

If a target destination has at least one audience member completely in it: 5 EACH DESTINATION

UPDATE 01 – SCORESHEET UPDATE – MISSION 13 – The scoresheet found on page 30/31 of the of the Robot Game Rulebook mentions the following mission constraint:

To score, team equipment may not be touching the craft machine at the end of the match.

This constraint does not exist in this mission's description and thus should be ignored. Restated, team equipment MAY be touching the craft machine at the end of the match.





Shifting gears to a new format! FIRST LEGO League will be shifting from the single day competition to a new look of multiple Mini-Play opportunities throughout the season!

- Youth, parents, and educators will gather in a low-pressure environment and have fun exploring robotics and building meaningful connections between teams
- This opportunity will allow teams to experience the program without the commitment of going to an official event and allow them to experience robotics within their own schedule
- Youth will be able to learn from others and see what others are doing, knowing what to expect
- Increase the opportunity for youth to run their robot more than one time at an official event
- Families/Parents/Sponsors/Etc. can learn more about the program before the official event to gain more support for the youth interests around STEM
- Teams will get to practice before the official two-day Championship event held on campus





Mini-Play Questions

- What do you want these to look like?
- When thinking about a league type of setup, how many teams do you imagine would be manageable to connect to meet more than one time?
- Would you be willing to be a Captain or Co-Captain of a League/Pod/Region?
- When would you want to start meeting with other teams?
- Do you think it should be a requirement or highly suggested that teams attend one mini-play?





Mini-Play Playlist Ideas

What areas would you like to see on the "playlist" at these informal team days?

- Examples may include:
 - Building and programing practice
 - Mock Judging
 - Scored robot games matches
 - Mentoring from veteran volunteers and FIRST alumni
 - Coach/Mentor learning sessions
 - FTC Mentoring?

Championship 2023-2024

New in 2024, the Nebraska FIRST LEGO League Challenge Championship will be coming to campus!

When: Friday, March 15, and Saturday, March 16

Where: UNL City Campus, Cook Pavilion and Coliseum

General Overview of the Schedule:

- Friday-Judging and practice rounds
- Saturday-Official Robot Matches and Award Ceremony

What to look out for: 4-H STEM event that will provide STEM opportunities to FIRST LEGO League youth, industry/career connections, and campus opportunities to see facilities and departments



