Course Description

The FIRST LEGO League Explore professional development course gives participants a strong understanding of how to implement all aspects of the Explore program and how to achieve STEM learning objectives. In Explore, teams of students in grades 2-4 focus on the fundamentals of engineering as they investigate real-world problems, learn to design and code, and create innovative solutions made with LEGO bricks and powered by LEGO Education WeDo 2.0. Participants in this course will walk in the footsteps of the students as they engage in the Explore program, gaining technical, engineering, and coding skills through hands-on experience. The course is customized to meet the unique needs of participants in a remote setting while modeling how to inspire their students to become confident and creative innovators and collaborators.

Course Requirements

- Computer with Internet Access (Recommend second screen or device to allow programming and video communication at the same time)
- *FIRST LEGO League Explore Set: Inspire set, Team Meeting Guide, and Engineering Notebooks
- *LEGO WeDo 2.0 Core Set and LEGO WeDo 2.0 Software (downloaded on a device that has blue tooth capabilities 4.0 or above)
- 2 AA Batteries OR rechargeable battery pack for the hub

*You can use current or prior season Challenge Sets, Team Meeting Guide, and Engineering Notebooks
*Explore materials are included with a Class Pack or Individual Team Registration, as well as LEGO products can be purchased through the FIRST Dashboard.

Course Objectives

By the end of this course, you will:

- Participate in the FIRST experience from a student’s point of view
- Identify the essential components of the FIRST LEGO League Explore program and be familiar with how to use the Explore kit, LEGO WeDo materials, and software
- Be able to foster computational thinking, collaboration, coding, and problem-solving skills in students
- Know how to engage students in explore, build, and challenge activities
- Collaborate with other participants and share best practices while building a team model
- Design an innovative solution for a real-world problem
- Create and present a team project
- Build a robot and learn to code using LEGO Education WeDo 2.0 software
- Have experience with Project-Based Learning, the Engineering Design Process, and 21st Century Skills
- Implement Diversity and Inclusion practices
- Utilize, model, and reinforce the FIRST Core Values

FIRST is a global robotics community that prepares young people for the future.

www.firstinspires.org