

FIRST[®] LEGO[®] League Explore Professional Development

Remote 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 or LEGO[®] Education SPIKE™ Essential. 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.

Remote Course Requirements

- Computer device with Internet access for RingCentral Meeting
- *FIRST LEGO League Explore Set, *Team Meeting Guide* and *Engineering Notebook*
- *LEGO Education WeDo 2.0 or LEGO Education SPIKE Essential Core Set and LEGO Education Software (downloaded on a device that has blue tooth capabilities 4.0 or above)
- Rechargeable battery pack OR 2 AA batteries for the hub

*You can use current or prior season Explore Sets, Team Meeting Guide, and Engineering Notebooks

*Materials are included with a Class Pack or Individual Team Registration and 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 Set, LEGO Education WeDo or SPIKE Essential 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 or SPIKE Essential 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