



# THE ULTIMATE SPORT OF THE MIND!

FIRST ® Robotics Competition (FRC) combines the excitement of sports with the rigors of science and technology. High school students use sophisticated technology to build and program industrial-size robots for a challenging field game. Participants and alumni have access to education and career discovery opportunities, along with connections to scholarships and employers.

It's a sport where all participants can go pro!

## FIRST ROBOTICS PROFESSIONAL DEVELOPMENT

To help build experience and confidence, North Carolina educators are invited to participate in a four (4) day FIRST
Robotics Professional Development workshop. This hands-on PD will provide a strong foundation and support system for teaching and mentoring FRC teams in North Carolina. Over the course of the professional development participants will build, wire and program a robot, as well as engage in the following:

# Day 1



- Overview of FIRST
- Safety Training
- Mechanical Engineering: Building the Robot Chassis

## **Day 2**



- Explore the FRC curriculum
- Electrical Engineering:
   Preparing the Electrical
   Board
- Programming Basics

## **Day 3**



- Team Structure & Organization
- Robot Design: Mechanisms
- Prototyping and CAD

## <u>Day 4</u>



- Project Management
- Preparing for a FIRST Robotics event
- Robot showcase

### **DATES & INFORMATION**

• Option 1: July 21 - July 24, 2025

• Option 2: July 28 - July 31, 2025

• Daily Hours: 9AM - 4PM

- Location: FIRST North Carolina Office, Greensboro, NC
- Cost: Free! Lunch is also provided; participants will need to cover travel expenses
- Provided Items: Notebook full of guidance and resources;
   XRP robot (one per district); a certificate of completion;
   fun FIRST swag!

## To register, please complete the form here:

https://firstnorthcarolina.formstack.com/forms/fncfrcpd2025





Or scan to register



### **BEYOND THE PD**

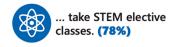
- Prepare a team for an FRC Off-season event (Fall 2025)
- Learn about the 2026 FRC Kick-off & the launch of the REBUILT Season (1/10/26)
- Workshops and Team PD opportunities
- Explore how to earn Micro-credentials
- Lots of resources and a great community to support!

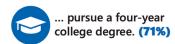
# FRC IMPACT IN NORTH CAROLINA\*

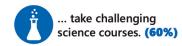
#### **FUTURE PLANS**

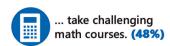
After participating in FRC, students said they were more interested in **taking upper-level STEM** courses and in **pursuing a STEM career**.

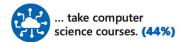
#### FRC students said they plan to ...



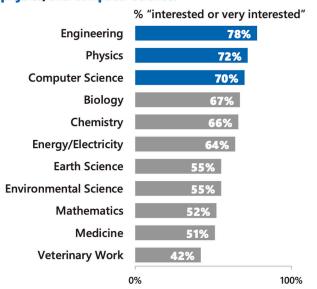






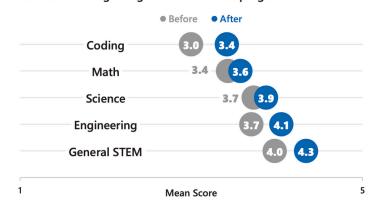


# The most popular career fields were engineering, physics, and computer science.



### ATTITUDES TOWARD STEM

FRC students **demonstrated significant gains in self-efficacy and confidence** for all STEM subject areas from the beginning to the end of the program.



of students said they enjoyed participating in FRC.

90% of students said STEM is really important to the world.

The survey was adapted from the S-STEM (Friday Center for Educational Innovation, 2012) and the ESCAS (Mason & Rich, 2020). Each subscale score ranged from 1 (lowest) to 5 (highest). All subscale increases shown above were statistically significant (p<.01).

\*Full impact report available upon request: info@firstnorthcarolina.org
National FIRST Impact data can be found: www.firstinspires.org/about/impact

### Questions? We are always here to support you:

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

FIRST is the world's leading youth-serving nonprofit advancing STEM education. Through a suite of inclusive, teambased robotics programs for ages 4-18, FIRST has a proven impact on learning, interest, and skill-building inside and outside of the classroom, creating the people who will change the world – today and tomorrow.