

WIE Teach Rules

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Competition Description

The purpose of WIE Teach is to involve young girls in math and science based events and competitions to inspire the next generation of female engineers. Local middle school girls will be competing alongside IEEE College Students from Region 2 to grow the WIE Initiative. The mission of WIE Teach aligns with the WIE vision to “Facilitate the development of...activities that promote the entry [of women] into...engineering programs”. In WIE Teach, teams of 3-4 participants, comprising of 2 middle school (MS) girls and 1 or 2 college students, will be given a set of components. The college participants will be explaining and instructing the MS girls on how to create a circuit. Then, the students will be judged by the completeness of the circuit and how well the MS girls understand the electrical engineering concepts behind the circuitry.

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1.3 Materials

Each team will be provided a whiteboard and marker, a “cheat sheet”, Breadboards, Circuit Components, Power Supply, and necessary datasheets.

1.4 Lecture

After being paired, college students will conduct a lecture and have the MS girls build simple circuits as they explain different parts of circuitry.

1.5 Tiers

The competition has five tiers of progression on five different aspects of electrical engineering.

1.6 Student Testing

Following the end of tier one, three, and five the MS girls will answer questions on Kahoot (a website where the MS girls will be able to answer multiple choice questions) regarding the lecture material the college student covered.

1.7 Circuit Judging

After the completion of tiers two and five, teams will be judged on circuit functionality.

1.8 Rubric

Each team shall be judged based on a pre-determined rubric.

1.9 Time

Teams will be allotted 2 hours to complete this challenge, at the end of which judges will compile the results and a winner will be announced at the award banquet.

1. Procedure

1.1 Sign In

Teams will sign in and report to their assigned room, where they will be paired with their middle school girls.

1.2 Pairing

The competitors will be randomly paired with two MS girls who they will be instructing.

2. Judging Criteria

2.1 Questions

Teams will be judged based on correct answers to multiple choice questions and circuit functionality.

2.2 Response Time

The faster each team answers the questions, the more points the team gets.

2.3 Difficulty

Points are weighted based on the difficulty of questions.

2.4 College Student Help

Points will be deducted for any communication between the college students and the middle school girls during testing times.

2.5 Circuit Help

Points will be deducted if the college students touch any circuit components over the entire duration of the competition.

2.6 Time Limit

Points will be deducted if teams are still touching circuit components after time is called.

2.7 Outside Resources

Teams will be disqualified for any outside resources or collaboration used during the competition.

