

## Benefits for the Educator

- Increase the level of technological literacy in our local school district
- Facilitate enhancements in science and technology curricula
- Enable the exposure of pre-college students to engineering and science professions
- Develop collaborative relationships with local engineers and scientists, and technology volunteers
- Provide packaged lesson plans for hands-on science and technology topics, with volunteer assistance



## Teacher In-Service Program

On-line at:

[www.ieee.org/cnc](http://www.ieee.org/cnc)  
[www.TryEngineering.org](http://www.TryEngineering.org)  
[www.ewh.ieee.org/r3/cnc/tisp](http://www.ewh.ieee.org/r3/cnc/tisp)  
[www.ieee.org/education/precollege/tispt](http://www.ieee.org/education/precollege/tispt)



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Central North Carolina  
Section

Teacher In-Service  
Program (TISP)  
&  
TryEngineering.org



# Teacher In-Service Program

The IEEE and its local Sections have a commitment to the enhancement of the level of Science, Technology, Engineering & Mathematics (STEM) literacy among pre-college educators and ultimately their students. The IEEE Teacher In-Service Program was developed to provide effective outreach to teachers by IEEE Sections. We have created pre-defined lesson plans on STEM topics that can be presented to students with the help of local IEEE volunteers. Each lesson is tied to education standards, and includes teacher summaries, student worksheets, and activities.



## Pre-Planned Lessons



The Teacher In-Service Program provides the educator with pre-packaged lesson plans for a variety of science, mathematics, physics, and engineering topics, aimed at (depending on the lesson) elementary, middle-school and high-school students (ages 8-18), available in both English and Spanish.

- Electric Motors
- Electric Messages: Then and Now
- Simple Machines
- Robotics
- Heart of the Matter
- Electric Circuits
- Electric Insulators and Conductors
- Electric Components
- Adaptive Device Design
- Cracking the Code

In general, most lessons are designed to be taught in one or two class periods. The objectives and activities within each plan are aligned with the [NC Standard Course of Study](#), and science, technology, and mathematics standards as developed and adopted by the [American Association for the Advancement of Science](#), [International Technology Education Association](#), [National Science Teachers Association](#) and the [National Council of Teachers of Mathematics](#).

## What is IEEE ?

The Institute of Electrical and Electronics Engineers, Inc. (IEEE) is a non-profit, technical professional association of more than 365,000 individual members in approximately 150 countries. Through its members, the IEEE has been a leading authority in technical areas ranging from [computer engineering](#), [biomedical technology and telecommunications](#), [to electric power, aerospace engineering and consumer electronics](#) for over 120 years.



- Produces **30 percent** of the world's published literature in electrical and electronics engineering, and computer science areas.
- Holds annually more than **300 major conferences**
- Has nearly **900 active standards** with almost 500 under development
- Over 68,000 **student members**
- 307 **sections**
- 1,446 **chapters**.
- More than 1,300 **student branches** in 80 countries.

[www.ieee.org](http://www.ieee.org)