THURSDAY, MARCH 28, 1:00PM-4:50 PM

**Advanced Design Applications (High School Grades 10/11)**

*ADA* focuses on the three dimensions of technological literacy "knowledge, ways of thinking and acting, and capabilities" with the goal of students developing the characteristics of technologically literate citizens. It employs teaching/learning strategies that enable students to explore and deepen their understanding of "big ideas" regarding technology and makes use of a variety of assessment instruments to reveal the extent of understanding.

**Technological Systems (Middle School Grade 8)**

*Technological Systems* is newly revised! Workshop participants will use hands-on activities to explore the course content and implementation strategies. *Open to all attendees. Laptop/smart device required.*

**TEEMS PreK-2 (Elementary School Grades PreK-2)**

The EbD-TEEMS™ Integrative-STEM Curricula for PreK-2 program leverages technological design challenges in an environmental context as the focus for learning. Science and mathematics conceptual development is supported through deliberate and strategic integration of key content and skills, and as the result of aligning the conceptual sequence of the curricula to the conceptual sequence of widely adopted science and mathematics curricular programs. A central design component that is unique to the EbD-TEEMS™ program is the use of the *Grand Challenges for Engineering* identified by the National Academy of Engineering as a context for problem solving. Another important aspect of the program is the use of inquiry and design-based instructional strategies as a curriculum delivery model. Design challenges are used not only as a strategy for student engagement, but also to foster the development of creativity and innovative thinking.
FRIDAY, MARCH 29, 1:00PM-4:50PM

Advanced Technological Applications (High School Grades 10/11)

ATA challenges students to use design processes so that they can think, plan, design, and create solutions to engineering and technological problems. Students are actively involved in the organized and integrated application of technological resources, engineering concepts, and scientific procedures. 2017-18 revision includes units on Engineering Design Graphics and Spatial Skills, Cybersecurity, Information Technologies, Biotechnology, and Robotics. Workshop participants will use hands-on activities to explore the course content and implementation strategies. Open to all attendees. Laptop/smart device required.

Exploring Technology (Middle School Grade 6)

Exploring Technology prepares students with an understanding of what technology is, the universal systems model, and opportunities to apply the engineering design process in problem solving. In this course, students learn all about the nature of technology and problem solving. Students have opportunities to study the scope of technology and its impacts on society. They learn about the core concepts of technology and about the various approaches to solving problems, including engineering design and experimentation. Students participate in engineering-design activities to understand how criteria, constraints, and processes affect designs. Students are involved in activities and experiences where they learn about brainstorming, visualizing, modeling, constructing, testing, experimenting, and refining designs. Students also develop skills in researching for information, and communicating design information. Workshop participants will use hands-on activities to explore the course content and implementation strategies. Workshop participants will use hands-on activities to explore the course content and implementation strategies. Open to all attendees. Laptop/smart device required.

TEEMS 3-6 (Elementary School Grades 3-6)

The EbD-TEEMS™ Integrative-STEM Curricula for Grades 3-6 program leverages technological design challenges in an environmental context as the focus for learning. Science and mathematics conceptual development is supported through deliberate and strategic integration of key content and skills, and as the result of aligning the conceptual sequence of the curricula to the conceptual sequence of widely adopted science and mathematics curricular programs. A central design component that is unique to the EbD-TEEMS™ program is the use of the Grand Challenges for Engineering identified by the National Academy of Engineering as a context for problem solving. Another important aspect of the program is the use of inquiry and design-based instructional strategies as a curriculum delivery model. Design challenges are used not only as a strategy for student engagement, but also to foster the development of creativity and innovative thinking. Workshop participants will use hands-on activities to explore the course content and implementation strategies. Open to all attendees. Laptop/smart device required.

Questions regarding EbDLabs™ should be directed to Nancye Hart at nhart@iteea.org