



THE INFINITY PROJECT™

PDI Description  
*Engineering Our Digital Future*

**Introduction:** The Infinity Project curriculum entitled “Engineering: The Digital Future” focuses on the fundamentals of modern engineering and technology in the information and communications age. To generate and maintain students and faculty interest, engineering and design examples are drawn from wireless and telecommunications, the Internet, electronic music, and other multimedia technologies popular in today's culture.

**Qualifications of Educators:** The teacher must be certified in Technology Education, Math, or Science. The teacher should have a moderate to strong competency in computer hardware and software. A strong background in math is also recommended. The necessary teacher computer skills include the ability to send and receive email messages, search the Internet, and install software from a CD ROM.

**Course Objectives:**

Participants will:

- Cover the topics and lab experiments associated with each module in the curriculum
- Review the math concepts that are reinforced in this curriculum.
- Use *LabVIEW for the Infinity Project* software
  - To create applications
  - Understand front panels, block diagrams, and icons and connector panes
  - To use built-in functions
- Review curriculum support materials including instructor's manual, daily lesson plan guide, Classroom Support on-line

**Topics Covered:**

- Introduction to *LabVIEW for The Infinity Project* software
- The World of Modern Engineering
- Creating Digital Music
- Making Digital Images
- Math You Can See
- Digitizing the World
- Coding Information for Storage and Secrecy
- Communicating With Ones and Zeros
- Networks From the Telegraph to the Internet
- The Big Picture of Engineering

**Course Materials:**

**Textbook:** *Engineering Our Digital Future* by Prentice-Hall.

**Student Lab Manual:** The student manual contains laboratory descriptions and includes step-by-step instructions.

**Instructors Manual:** The instructor's manual contains solutions to the exercises in the textbook, sample test questions, Frequently Asked Questions which can be used to generate student discussions, and references to web sites.

**Presentation Slides:** PowerPoint slides are available for instructors to use in their lectures.

**Daily Lesson Plan Guide:** Contains the calendar of lessons based on a 45-50 class period for the academic year.

**Duration:** 5 days

**Cost:** \$750

**Schedule:** 8:30-5:00