Lesson Plan

Time Needed:
2-3 class periods

Materials (for each student or group of students):
• Natural Inquirer Scientist & Engineer Cards
• Blank paper or notebook
• Writing utensil
• University course catalogue (hard copy or Internet)

For many science and engineering careers, it’s important to continue your studies past high school. Some scientist and engineers begin jobs during college or after college. Others continue schooling, getting a Master’s or Doctorate level degree. In this lesson, students learn about a university course catalog, then pick out classes that support a particular science and engineering career.

Methods:

Prep
Order a free set of Natural Inquirer Scientist and Engineer Cards (http://www.naturalinquirer.org/Scientist-Card-Ordering-Page-v-155.html) or print out a set of cards from the Natural Inquirer website.

Gain access to a university course catalog, either in hard copy or via the Internet. For example, many universities have a page like this, from the University of Georgia: http://bulletin.uga.edu/. Select multiple potential catalogs to ensure different course offering are available.

Day One
Hand out at least one card to each student. Direct students to read the entire card. Once they are finished, redirect student attention to the back of the card.

Provide students blank paper or a notebook and writing utensil. Ask students to write down as many skills they believe the scientist or engineer might need to complete their job. Also ask students to write down the information the scientist or engineer would need to know (i.e., about birds, wiring, GIS).

Days Two - Three
Introduce the concept of a course catalog. In K-12 education, many schools have required classes. In college, however, schools allow you to choose an area in which to specialize. This allows students to take classes that will interest them and benefit them in their career.

Explain that the scientists on the cards could have taken a wide range of classes, but for many, they took classes that enabled them to complete their job as a scientist.

Students should choose one scientist or engineer card. Specifically, ask students to pick a card which aligns to a career that interests them. Then task students to create a course of study for that readies the scientist or engineer for their career.

Remind students to read the description of each course closely to ensure it is useful. Students should choose approximately 10 courses.

All courses should be listed in the student notebook by title. Then students should write a 1-page essay describing why the courses were chosen to support the science or engineering career.

Hold a class discussion about different courses students chose to support the scientists or engineer they chose. What courses sound interesting? What courses sound difficult? Did anyone have a similar career? If so, what similarities or differences were there in the courses students chose?