

ART AND ENGINEERING

from the Parthenon to the Bean

Levels B1-C2

Lisa McErlean

Learning Goals

What do the Parthenon, the Duomo in Florence, the Millau Viaduct and Anish Kapoor's *Cloud Gate* (the Bean) have in common? They are all important artistically and were engineering challenges.



In this course, we will cover examples of architecture and art from antiquity to the 21st century, concentrating on how things were made, from simple tools to reinforced concrete. We will discuss architecture and art movements through history and learn about the artistic styles they belong to. We will also consider how political, economic and social factors influence artistic choices.

Discussions concerning the available construction techniques for each time period will be central to each class. We'll question the engineering of monumental works. What tools and techniques were used to build the Pantheon? How were illuminated manuscripts made? How does the Statue of Liberty's arm and torch sway in the wind without breaking? Why does Cloud Gate look like liquid mercury?

Learning objectives

In this course, we will see images of artworks and architecture, read press articles, watch videos on art and engineering and have group discussions and debates. Students will practice speaking and listening to English and build vocabulary and ease speaking in public while analyzing images and press articles, expressing personal opinions and giving presentations.

Course Expectations

Activities will include article reading, listening activities, games, discussions and debates in groups. Students will give individual and group presentations and write summaries. The group presentation includes a mandatory visit (a field trip!) to the building, bridge, public artwork, etc. of the presentation.

Autonomy project

A 30-minute presentation beginning or ending with a game, question and answer section or a debate. In groups of 3 or 4, students will choose a building, bridge, public artwork, etc. to view together outside class hours. They will decide on a framework and discuss the technical, historical and aesthetic angles of the work, do research and put together a slide show. Before the official presentation, the students should practice in front of each other and their slideshow should be submitted for correction.

Grading 60% spoken English: 40% for presentations, 20% for active participation; 40% written English: **8 class summaries**, slide shows