

History of Science & Mathematics

Custom, Experiential Study Abroad



PARIS • FLORENCE • LONDON • MADRID • **ROME**

Students of science, technology, engineering, and mathematics often feel bound by curricular requirements and tradition to carry out their entire degree at the home campus, not considering study abroad, let alone its tremendous relevance to their educations and future careers. However, a sophisticated understanding of the past is essential to innovate for the future and few destinations provide as clear and complete a view into history as Rome. From 2,000 year-old aqueducts to the Pantheon and Teatro Marcello, Rome showcases millennia of technological innovations and sustainability that students explore first hand. Many programs have chosen the Eternal City to study the history of science and mathematics, exploring the sites and artifacts related to the great minds of the Renaissance and beyond – Michelangelo, da Vinci, Galileo, Bruno – and the conflict of knowledge, science, and innovation with the teachings and laws of the Catholic Church. This document outlines a sampling of the site visits that have been used to enhance and enrich programs exploring the history of science and mathematics in Rome.

Sample Course

Science & Religion

Fr. Philip Larrey, PhD

This course will examine the debate between science and religion in an Italian context with emphasis on the birth of the “new science” that emerged in the early 17th century. Galileo occupies a central place in this study as his challenge to Aristotelian physics and astronomy and to the traditional interpretation of the Bible powerfully influenced the beliefs and convictions held by enlightened men and women for almost two millennia. In order to understand the challenge correctly, students will read excerpts of Aristotle, Thomas Aquinas, Francis Bacon, and Nicolaus Copernicus. After examining in some depth the “Galileo Affair,” the course will explore analogous issues raised by Giordano Bruno and Charles Darwin, emphasizing the role of rationality in the knowledge of a Divine Being.

Site Visit Samples

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| <i>Santa Maria Sopra Minerva</i> | Site of the tribunal of the Roman Inquisition, including the rooms in which Galileo, after being tried for heresy, was forced to repudiate his theses in favor of the Copernican theory |
| <i>Collegio Romano</i> | Principal seminary of the Jesuits, active in astronomy and physics, and site of Galileo’s telescope; today known as the Pontifical Gregorian Institute |
| <i>St. Ignazio of Loyola</i> | The primary church of the Jesuits in Rome, originally a chapel for the Collegio Romano |
| <i>American Academy in Rome on the Gianicolo Hill</i> | The exact spot where Galileo first demonstrated his telescope to Roman officials and clergy |
| <i>Campo de’ Fiori</i> | Statue of Giordano Bruno, philosopher, mathematician, and astrologer, convicted of heresy and burned at the stake |
| <i>Museum of Mathematics</i> | Museum of the history of mathematics within the Department of Mathematics at the University of Rome La Sapienza |
| <i>Vatican Museums, Sistine Chapel, St. Peter’s Basilica</i> | Great artists and minds throughout history; the genius of Michelangelo; St. Peter’s as a feat of engineering; the Roman Inquisition; art history; chemistry and restoration |

