

**GONZAGA-IN-FLORENCE SPRING 2013**

# Engineering in Italy



  
**GONZAGA**  
UNIVERSITY  
SCHOOL OF ENGINEERING  
AND APPLIED SCIENCE

# Engineering in Italy Spring 2013

GONZAGA-IN-FLORENCE STUDY ABROAD



Engineering students have the opportunity to study abroad in Florence, Italy during the spring semester of their sophomore year. Gonzaga-in-Florence courses are designed to fit into engineering students' existing curriculum and requirements.

## Campus & Housing

### The Mozilo Center

The Gonzaga-in-Florence campus is located in the center of Florence, not far from the Duomo, and looks onto the Giardino dei Semplici, a sixteenth century garden created by the Medici family. It is a few steps from Fra Angelico's frescoes painted for the San Marco monastery and minutes from Michelangelo's David in the Galleria dell'Accademia.

Gonzaga-in-Florence, housed in the Mozilo Center, provides students with all the facilities required for learning and socializing. The school is equipped with wireless internet and twenty desktop computers. In addition, the center's Martin Library collection contains over ten thousand volumes. For research, students have access to Gonzaga University's Spokane campus Foley Library via twelve dedicated computers. A student lounge and a fitness room are located on the lower level.

## Room & Board

### PENSIONI

While studying in Florence, most spring students live in Italian boarding hotels (pensioni) located close to the school in the heart of Florence. The pensioni are run by Italian staff who provide good food, safe living conditions, and support. The living arrangements are conducive to learning the language and to better understanding the Italian culture. The pensioni are carefully screened and most have hosted GIF students for many years.

Students can choose their own roommate(s). Each pensione generally accommodates anywhere from twelve to thirty students. All of our pensioni are co-ed, although the rooms (double, triple, and quad) are gender specific. Since the majority of the students usually travel during the three-day weekends, the weekly meal plan, included in the program cost, consists of seven breakfasts, four midday meals, and three dinners.

### HOMESTAY OPTIONS

No other experience can substitute for the cultural and linguistic immersion that results from living with an Italian family. Interested students may apply for the homestay option.

## Academics

### CHALLENGE YOUR THINKING

Gonzaga-in-Florence offers courses to challenge, maximize, and enhance your study abroad experience in Italy.

### Academic Advisors

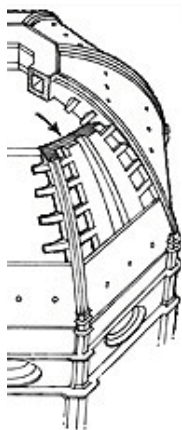
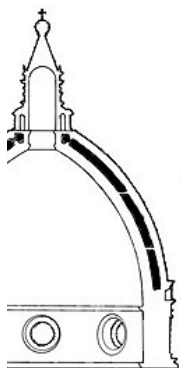
Engineering students are encouraged to begin discussions with their academic / School of Engineering advisors about GIF courses early in their academic career to help clarify how they relate to graduation requirements. Academic advisors are an important resource in exploring how study abroad fits into a student's academic plan. GU students may also consult with the Office of Academic Advising and Assistance on the Spokane campus.

### PROPOSED ENGINEERING & MATHEMATICS COURSES:

Full course descriptions and syllabi are available on the website.

## Mathematic Courses

**MATH 260/Ordinary Differential Equations (3 credits)** Study solution methods for first order equations and for second and higher order linear equations. The course includes series methods and solution of linear systems of differential equations. Prerequisite: MATH 259 Calculus and Analytical Geometry III



Study abroad allows engineering students to gain insight into the past, present, and future of engineering technologies.

- Enhance your engineering studies
- Engineering & Math courses taught in English
- Classes Monday - Thursday



### **MATH 321/Statistics for Experimentalists (3 credits)**

An applied statistics course for those with calculus preparation. Descriptive statistics, probability theory, discrete and continuous random variables, and methods of inferential statistics including interval estimation, hypothesis testing, and regression. Prerequisite: MATH 258 Calculus and Analytical Geometry II

## **Engineering Courses**

### **ENSC 301/Mechanics of Materials I (3 credits)**

Behavior of materials, elementary theories of stress and strain, generalization of these theories to stress distribution, and deformation and instability in structural members. Prerequisite: ENSC 205 Statics

### **ENSC 306/Dynamics (3 credits)**

A vector treatment of kinematics and kinetics. General motion of a particle, energy and momentum methods for particles and rigid bodies. Prerequisite: ENSC 205 Statics

### **ENSC 352/Fluid Mechanics (3 credits)**

Fluid properties, fluid statics, fluids in motion, momentum and energy equations, dimensional analysis, boundary layers, flow in conduits, drag and lift. Prerequisite: ENSC 205 Statics

## **Other Courses**

### **VART 394: Renaissance Architecture (3 credits)**

This seminar on Renaissance Architecture, Civil Engineering and Design from Brunelleschi to Leonardo and Michelangelo will introduce students to the interdependence of such applied fields to Florentine Humanism.

**Courses in other disciplines are also available. Consult the website.**

## **Life in Florence**

### **BEYOND THE BOOKS**

#### **Travel**

**OPENING TOUR/ ORIENTATION**  
The semester begins with an Opening Tour that incorporates orientation. During the Opening Tour, students learn the essentials of being a savvy traveler. The site for the Opening Tour is traditionally selected for its historical significance and educational value. The orientation and tour are included in the program cost. Students are required to attend the Opening Tour.

#### **WEEKEND TRIPS**

The academic schedule of Gonzaga-in-Florence allows students three-day weekends throughout the duration of the program. GIF offers organized optional excursions during some of these three-day weekends, as well as some day trips to Tuscan

towns. Students participating in these trips may do so for an extra fee. Some of these trips concentrate on cities on the Italian peninsula while others may include travel opportunities beyond Italy.

#### **CULTURAL AND CIVIC ACTIVITIES**

Enjoy concerts, ballets and operas with world-class performers at some of Florence's most prestigious theaters such as the magnificent 18th century Teatro della Pergola. Enhance your cooking skills with classes on Italian cuisine. Be a part of the many opportunities Florence offers as part of its cultural heritage.

#### **ATHLETIC ACTIVITIES**

Whether on a court, a field, or a race course, a variety of competitive and "just for fun" athletic activities occur throughout the year. Meet up with local Italian students by forming a basketball team. Exercise your mind and body in a yoga class. Participate in local and regional running events. Join our men's and women's GIF soccer teams which compete against other American and Italian teams.

#### **VOLUNTEER OPPORTUNITIES**

#### **CONVERSATION PARTNER PROGRAM**

#### **ENGLISH FOR PASTA PROGRAM**

#### **INTERNSHIPS**

#### **GUEST LECTURERS ...**

# Admissions

## Program Dates

SPRING 2013     **JANUARY 3 - APRIL 20**

## Program Requirements

- 2.8 cumulative GPA (through Fall 2012) or permission from the Dean of Engineering at Gonzaga University
- Sophomore standing at the start of the program; apply during freshman year or early fall of sophomore year
- Students are required to complete a minimum of 12 credit hours per semester with a maximum of 19 credits allowed if taking ITAL 101, 102, 201 or 202 which are four credits each.
- No Italian language requirement for engineering students

## Program Cost

SPRING 2013 Preliminary estimated costs:

Tuition	\$16,539
Room and Board	\$6,556
Opening Tour	\$742
Technology Fee	\$133
Overall Program Cost	\$23,970

## DEPOSIT

Within two weeks of the date of acceptance, students are required to reserve their place on the program with a \$500 deposit that is applied to the cost of the program. Deposits are non-refundable after October 15, 2012 for spring.

## ADDITIONAL EXPENSES

In addition to the program cost, other expenses include textbooks, round trip airfare, optional Christmas Tour (year and semester), optional Spring Break trip (spring only), and weekend trips. Personal spending, independent travel, and currency exchange rates should be taken into consideration when planning your budget.

## OPTIONAL CHRISTMAS TOUR COST (OPEN TO SPRING STUDENTS)

The cost of the Christmas Tour (\$4000 in 2011/12) is contingent on the destination selected and length of the tour, both of which, at the time of publication, have not yet been finalized.

## FINANCIAL AID

Gonzaga University students: With the exception of work study awards and some scholarships, all Gonzaga University financial aid applies to the Gonzaga-in-Florence year and semester program. Non-GU students: Contact the Financial Aid office on your home campus to determine what aid may travel.

## SCHOLARSHIPS

Applicants must be admitted to the Gonzaga-in-Florence program by February 1, 2012 in order to ensure priority consideration for Gonzaga-in-Florence scholarships.

## INSURANCE

The following insurance is included in the cost of the program:

- Gonzaga Student Accidental Injury Insurance
- Italian Health Insurance
- International Student Identity Card (ISIC)

## When to Apply

The Gonzaga-in-Florence program is open to all undergraduate students who meet the program requirements and are matriculating at a four-year U.S. college or university. Students interested in applying to Gonzaga-in-Florence are encouraged to apply early as space is limited. The application process may close early if the program capacity is reached before the program deadline. Late applications will be considered based on space availability and visa requirements.

## Application Deadline & Decision Date

Spring 2013 priority application deadline is January 1, 2012 for a decision by February 1, 2012. Based on space availability, we will continue to admit qualified students from February 1 up to October 1, 2012, or until the program is filled.

## How to Apply

### GONZAGA UNIVERSITY STUDENTS

1. Application form (download a copy from the website)
2. \$50 non-refundable application fee payable online
3. Two academic recommendations (one for summer)
4. Academic Services clearance online form
5. Student Life clearance online form
6. Return application to the Study Abroad office either in person or by campus mail to AD Box 85.

### NON-GONZAGA UNIVERSITY STUDENTS

1. Application form (download a copy from the website)
2. \$50 non-refundable application fee payable online
3. One academic recommendation
4. Official transcripts from all colleges/universities attended
5. Program Approval form
6. Mail to: Study Abroad, Gonzaga University, Ad Box 85, 502 E. Boone Avenue, Spokane, WA 99258-0085

## Passport & Visa

All students must have a passport that is valid for six months after the end of their study abroad program. An Italian student visa is a stamp in your passport that allows you to study in Italy for over 90 days. Generally, students studying in Italy for a semester or a year must have an Italian student visa. Summer students do not need a visa. Do not plan to use your passport three months before departure to allow for visa processing. Detailed instructions will be provided by the Gonzaga Study Abroad office.

## For more information

**call** 1-800-440-5391  
**visit** [www.GonzagainFlorence.org](http://www.GonzagainFlorence.org)  
**email** [studyabroad@gonzaga.edu](mailto:studyabroad@gonzaga.edu)  
**mail** Gonzaga University, Study Abroad  
Center for Global Engagement  
502 E Boone Ave, Spokane, WA 99258-0085

**contact** Wanda Reynolds, Director Study Abroad  
(509) 313-3583, [reynolds@gu.gonzaga.edu](mailto:reynolds@gu.gonzaga.edu)  
Donna Ryan, Assistant Director  
(509) 313-3598, [ryan@gu.gonzaga.edu](mailto:ryan@gu.gonzaga.edu)