## Why Grenoble?

Universities in Grenoble host 60 000 students with more than 9000 foreigners each year. The city is the leading research center in France outside Paris and is often described as the 'French Silicon Valley' with booming high tech companies. It lies within an exceptional natural environment with mountains all around.

## Practical Informations

### When does the Summer Session take place in 2013 ?
From early June 2013 to mid-July 2013

### Who is it for ?
It is designed for English speaking undergraduate students from 2nd to 4th year. A good level in science is required, with different prerequisites for each course. Beginners in French as well as more advanced ones are welcome.

### Previsional calendar :
March : deadline for application
April : final acceptance

### Housing :
We will take care of housing: you will have a room in one of the city students dormitories.

### Fees:
Reduced tuition fees for the 2013 : **500€!**
**Grants also available.**

### Contact :
**summer-program@ujf-grenoble.fr**

# Bachelor Summer Program

## June 3 – July 13 , 2013

### Science (60h)
### French language (45h)
### Lab/industry visits
### Cultural visits

**www.ujf-grenoble.fr /international/bachelor-summer-program/**

**Université Joseph Fourier**
GRENOBLE

The Bachelor Summer Program gives you the opportunity to study at UJF, gain credits for your home university and meet students from all over the wordl! It is also open to French UJF students with whom you will interact daily. This 6 week program offers scientific courses taught in English and French classes. You may choose among two scientific courses (Introduction to physical computing, Introduction to large scale facilities). You will discover different aspects of French life through cultural excursions within the city and in its beautiful mountain environment.
**5 Grants with research projects are available with the support of EMBL/ESRF/ILL.**

### Engineering

| | |
|---|---|
| Title | **Introduction to Physical computing** |
| Organisation | 60 h Lecture / tutorials / lab and company visits |
| Prerequisites | Basics in programming and electronics |
| Topic | Computer Science and instrumentation: Physical computing focuses on interactions with the physical world using a variety of sensors and actuators that are controlled by microcontrollers and computers. This module introduces the technical aspects of development with the **Arduino** platform  http://air.imag.fr/ . |

### Physics

| | |
|---|---|
| Title | **Introduction to large scale facilities: probing matter with neutron and synchrotron radiation** |
| Organisation | 60 h Lecture / tutorials / lab work  **/ ESRF** and **ILL** visit |
| Prerequisites | Wave propagation and interferences, background in quantum mechanics is useful |
| Topic | Introduction to crystallography and other neutron and synchrotron techniques. Application to the study of structure in condensed matter and in other domains such as biology, earth science, ... |

### French

| | |
|---|---|
| Title | **French language and civilisation** |
| Organisation | 45 h classes + cultural visits |
| Prerequisites | none |
| Topic | French language for beginners and more advanced students |

© ILL/P. Ginter

## Université
## Joseph Fourier
### GRENOBLE