• 50,000 Students
• 1,900 Lecturers and Researchers
• 1,600 Technical and Administrative Staff and Language Assistants
Schools:
- Agriculture
- Architecture
- Economics
- Education and Humanities
- Engineering
- Law
- Human Health Sciences
- Mathematics
- Physics and Natural Sciences
- Political Science
- Psychology.
• 5,000 Students
• 160 Professors and researchers

• 3 Engineering Departments:
  - Civil and Environmental
  - Industrial
  - Info Tech
UNIFI campus permeates a UNESCO World Heritage:

*Opportunities and responsibilities*
UNESCO CHAIR

PREVENTION AND SUSTAINABLE MANAGEMENT OF GEO-HYDROLOGICAL HAZARDS

Applied research for a Safer Society
50th Anniversary of the Flood of Florence
4 November 1966/2016
2013 – 2016 -2019
a 3+3 years portfolio of projects

01 – INTERNATIONAL EVENTS

02 – EVENTS THAT ACTUALIZE THE PAST

03 - THE FLORENCE CHARTER

04 – THE SCHOOL PROJETC

06 – RISK REDUCTION IN THE FUTURE

After 50 years, much remains to be done. Promoting respect for water, this activity fosters cooperation among players in the study of interactions among environment and living communities. With a focus on integrated measures for flood risk reduction.
**Focus of collaboration**

Overcoming difficulties of implementing Nature Based Solutions while preserving ancient cultural heritage and landscapes

*Foreseen collaboration activities (on top of ‘standard’ scientific exchanges) on equal and mutual basis:*

- At master/undergraduate level: internship during thesis preparation (Erasmus+ type)
- At PhD level: cotutoring and exploring possibilities for joint/double degrees (e.g. Industrial* PhD programs)

* Sponsored by Italian Ministry of Education
Example: Contaminated sites (CSs) at risk

NaTech and cascade effects
Challenges of adaptation:
- Dealing with NBSs in a historic cultural landscape
Bypassing the urban rigidity of art cities ...

... while valuing the natural capital of surrounding landscapes
Burrowing activity in channel levees: impact of the invasive red swamp crayfish *Procambarus clarkii*. Laboratory experiments and mathematical modeling.
Lagoon morphodynamics

Salt marsh edge erosion due to wind-induced waves: field measurements in the Venice lagoon and mathematical modeling
Ingegneria Sanitaria Ambientale
Unità di ricerca dell'Università degli Studi di Firenze

Links
Rotating bioreactors for sustainable hydrogen sulphide removal

BIOSUR
LIFE+Environmental Policy and Governance
BIOSUR
Project n° LIFE11 ENV/IT/075
Duration: Jul 2012 - Dec 2015
www.biosurproject.eu

BIOprocess Control through Online titrimetry to reduce Carbon footprint in wastewater treatment

biocloc
LIFE+Environmental Policy and Governance
BIOCLOC
Project n° LIFE12 ENV/IT/000120
Duration: Sep 2013 - Feb 2017
www.bioclocproject.eu
BIOCLOC Project

**TITLE:** BIOprocess Control through Online titrmetry to reduce Carbon footprint in wastewater treatment

**LIFE PROJECT:** LIFE+ Environment Policy and Governance project application - contract LIFE 12 ENV/IT/000120

**DURATION:** September 2013 - February 2017