

Systems of higher Education in an international Comparison

MADRID, ESPAÑA

UNIVERSIDAD POLITÉCNICA DE MADRID

Overview

- ⊙ Working in Spain
 - Internships / Scholarships
 - Job Entry
 - Personal Experience: AENA
- ⊙ Madrid
 - Facts & Figures
 - Job Market
 - Free Time Activities, La Marcha
- ⊙ Universidad Politécnica de Madrid
 - Facts & Figures
 - Faculties / Locations
 - Faculty for Computer Science

Working in Spain

Working in Spain

Internship / Scholarship

- ⊙ Práctica vs. Beca
- ⊙ Beca:
 - Part-time
 - Well-paid
 - Scholarship
- ⊙ How to find?
 - Blackboards at univeristy
 - Online Portal: COIE
 - (relatives, friends, ...)
 - NO DIRECT APPLICATIONS!!!

Working in Spain

Internship / Scholarship

- ◎ COIE – Centro de Orientación e Información de Empleo
 - Completely electronic applications
 - Pool of job offers
 - Digital CV
 - Apply, accept, reject, evaluate, ...
- ◎ Positive response or NO response
- ◎ Interview
 - Usually Spanish
 - Be prepared for your english being tested as well!!!

Working in Spain

Job Entry, Jobs in General

- ⊙ Not that different compared to Germany
- ⊙ How to find a job?
 - COIE again
 - (Other web portals, newspapers, ...)
 - (Relatives, friends, ...)
 - Contacts from former *beca* or final thesis
- ⊙ Salaries on job entry usually lower than in Germany
 - Engineers, Economists: 30%
 - Mathematicians: 25%
 - Computer Scientists: 10%

Working in Spain

Personal Experience: AENA

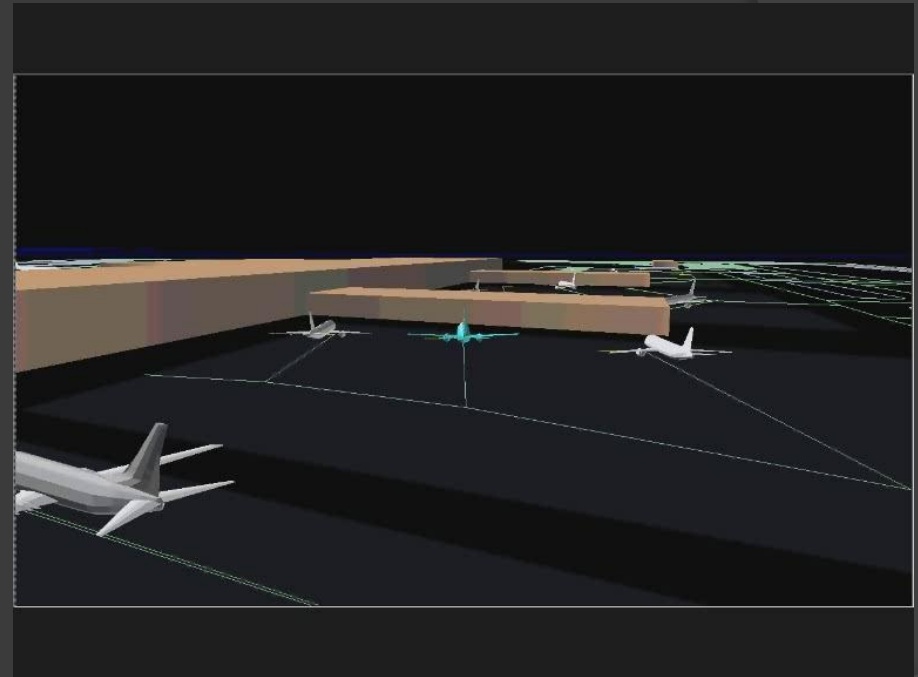
- AENA – Aeropuertos Españoles y Navegación Aérea
- Operator of 47 Spanish + 16 foreign airports
- World's largest airport operator
- Spanish ATC
- R&D



Working in Spain

Personal Experience: AENA

- ◉ DDSNA: División de Desarrollo del Sistema de la Navegación Aérea
- ◉ Division for the Development of the Air Navigation System
- ◉ Part of R&D
- ◉ Mostly: Planning future air traffic flow and control scenarios
- ◉ Cooperations Eurocontrol, EADS, DFS, ...



Working in Spain

Personal Experience: AENA

- ◉ Beca (part-time, well-paid)
- ◉ International flair:
 - Cooperations with foreign companies
 - Colleagues from Italy, France, USA, Serbia, ...coming from Eurocontrol, NASA, Airbus / EADS, ...
- ◉ 4 weeks of introduction / formation
- ◉ Involvement in several projects
- ◉ Visit to ATC Madrid and INDRA
- ◉ “Jornada-intensiva”
- ◉ Influence of Spanish mentality on work
 - Style / way of working
 - Lunch / breakfast
- ◉ Sub-contractors

to be continued...

Madrid

Facts & Figures,

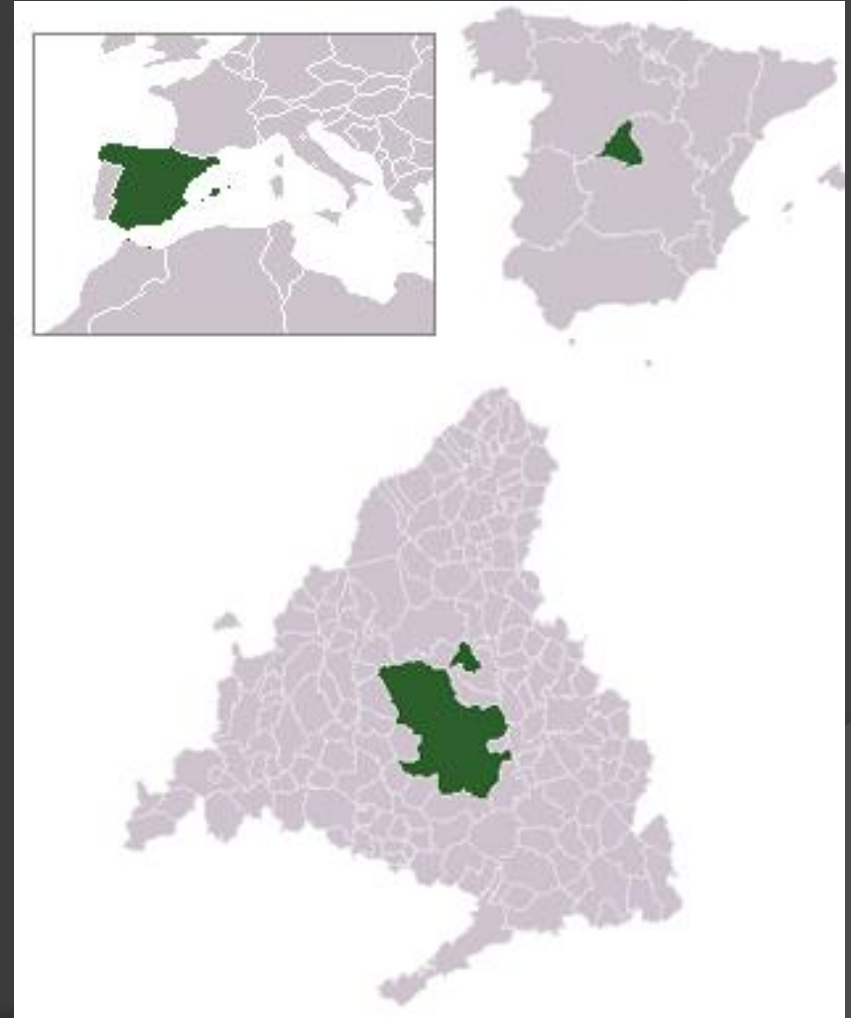
Job Market

Free Time

Madrid

Facts & Figures, Administration

- ⦿ Capital AND center of Spain
- ⦿ Surrounded by Comunidad de Madrid
- ⦿ Population: 3.2 Million (6.1 Million)
- ⦿ Europes third biggest city



Madrid

Facts & Figures, Administration

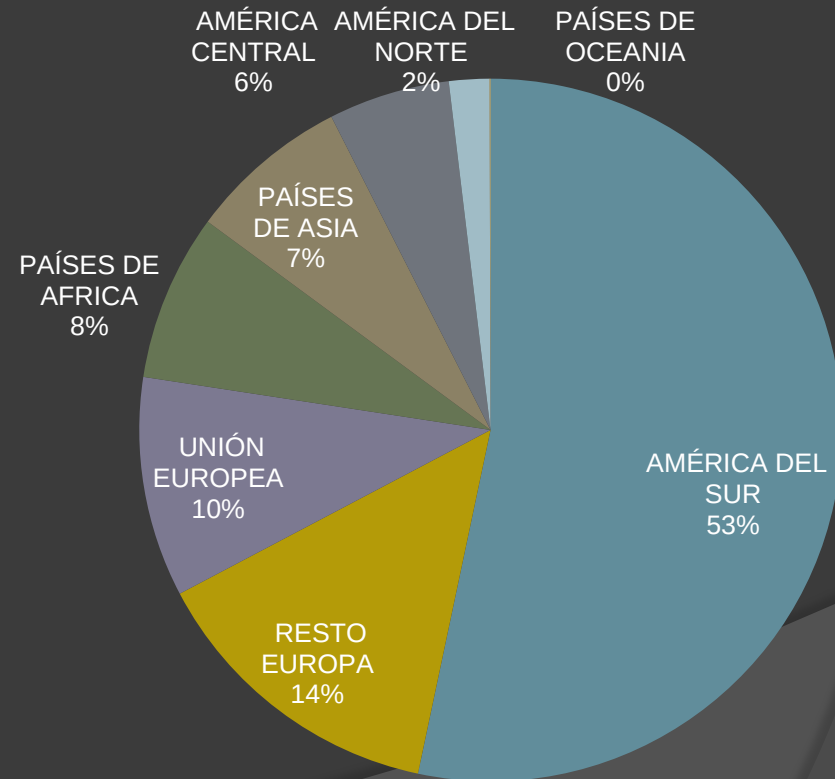
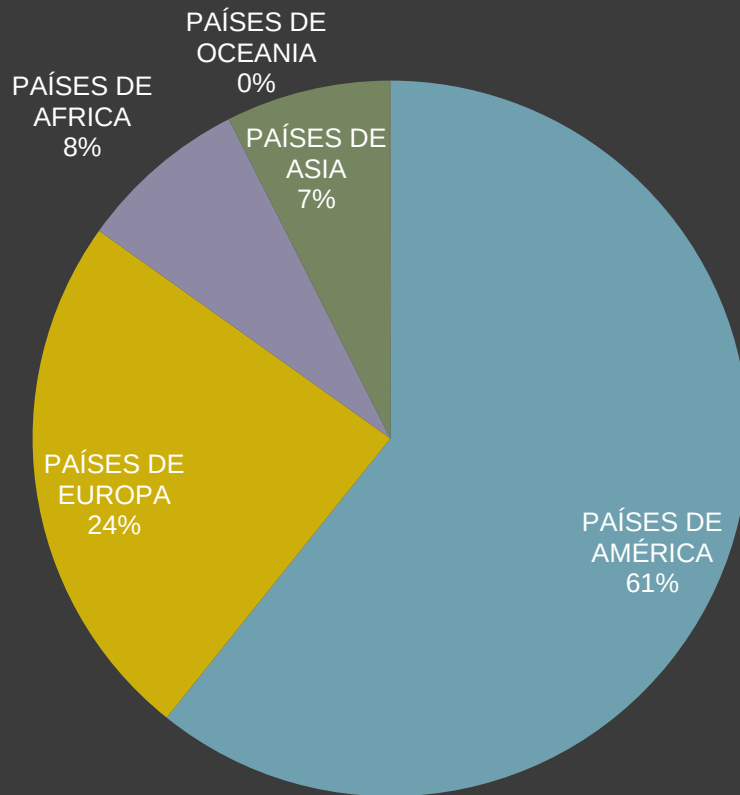
- Center of Madrid (and Spain): Puerta del Sol
- Divided in 21 districts with own administration
- Administration of Comunidad de Madrid also in Madrid
- + Congress + Senate + Royal Palace



Madrid

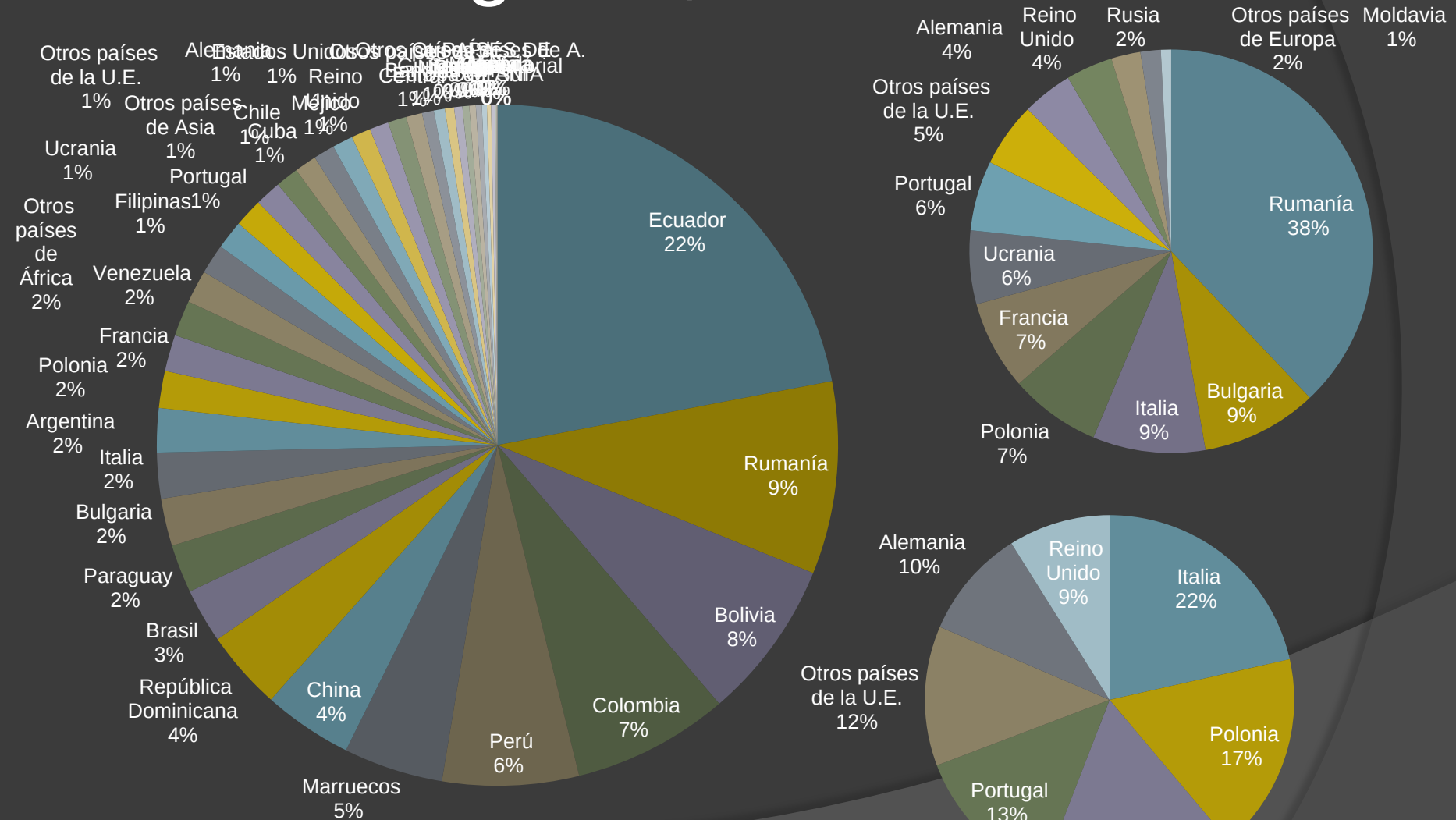
Facts & Figures, Administration

● People from other nations living in Madrid



Madrid

Facts & Figures, Administration



Madrid Job Market

AENA

*(Airport, Air
Navigation, ATC)*

Telefonica

Accenture

Siemens

EADS

Airbus

Boeing

Metro

Vodafone

Acciona

HP

Renfe (Railway)

Iberia (Airline)

Ford

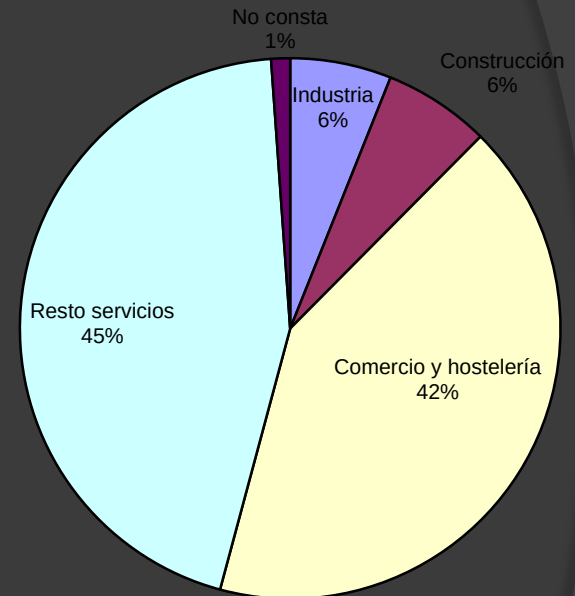
Indra

*(Telecommunications,
Transport, Defense, ...)*

IBM

Isdefe (Defense)

Ineco (Transportation)



Madrid

Free Time Activities

- ◎ Sports (Boulder, Swimming, Jogging, Gym, ...)
 - Open Air Pool @ Lago
 - Jogging: Retiro vs. Casa de Campo
- ◎ Amusement Parks
- ◎ Shopping (Rastro!)
- ◎ Movies, Intercambio
- ◎ Botellón, Siesta
- ◎ Zoo, IMAX, Planetarium, Musical, ...

Madrid

La Marcha

- Chueca
 - Huertas
 - Malasaña
 - Tribunal
 - Argüelles
-
- Palacio Gaviria



to be continued...

**Universidad Politécnica
de Madrid**

Universidad Politécnica de Madrid

History

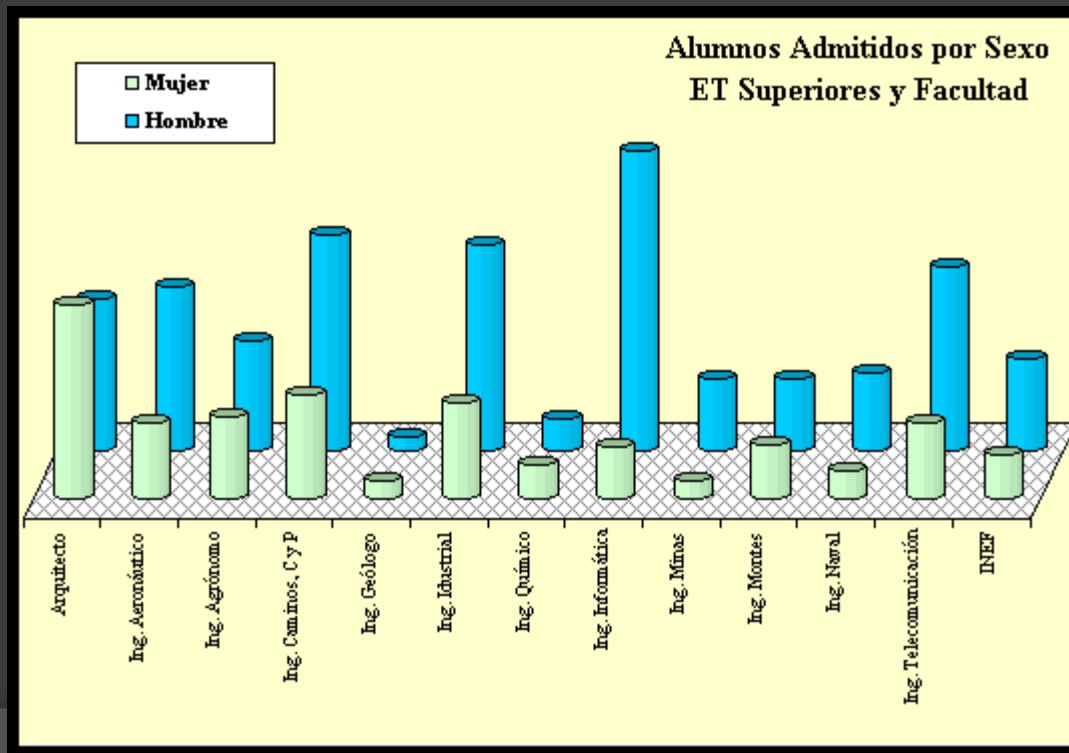
- Founded 1971
- Individual schools date back till 18th century
- Technical schools → UPM
Humanistic and exp. Sciences → UCM
- Oldest faculties: Architecture, naval science and mining (1752, 1777 and 1772)
- Most recent: Computer Science and topography, geodesy and cartography (1977, 2005)



Universidad Politécnica de Madrid

Facts & Figures

- 38.000 undergraduate students
- 6000 postgraduate student
- 3000 persons faculty staff
- Distribution by gender: (Computer Science 18% vs. 82%)

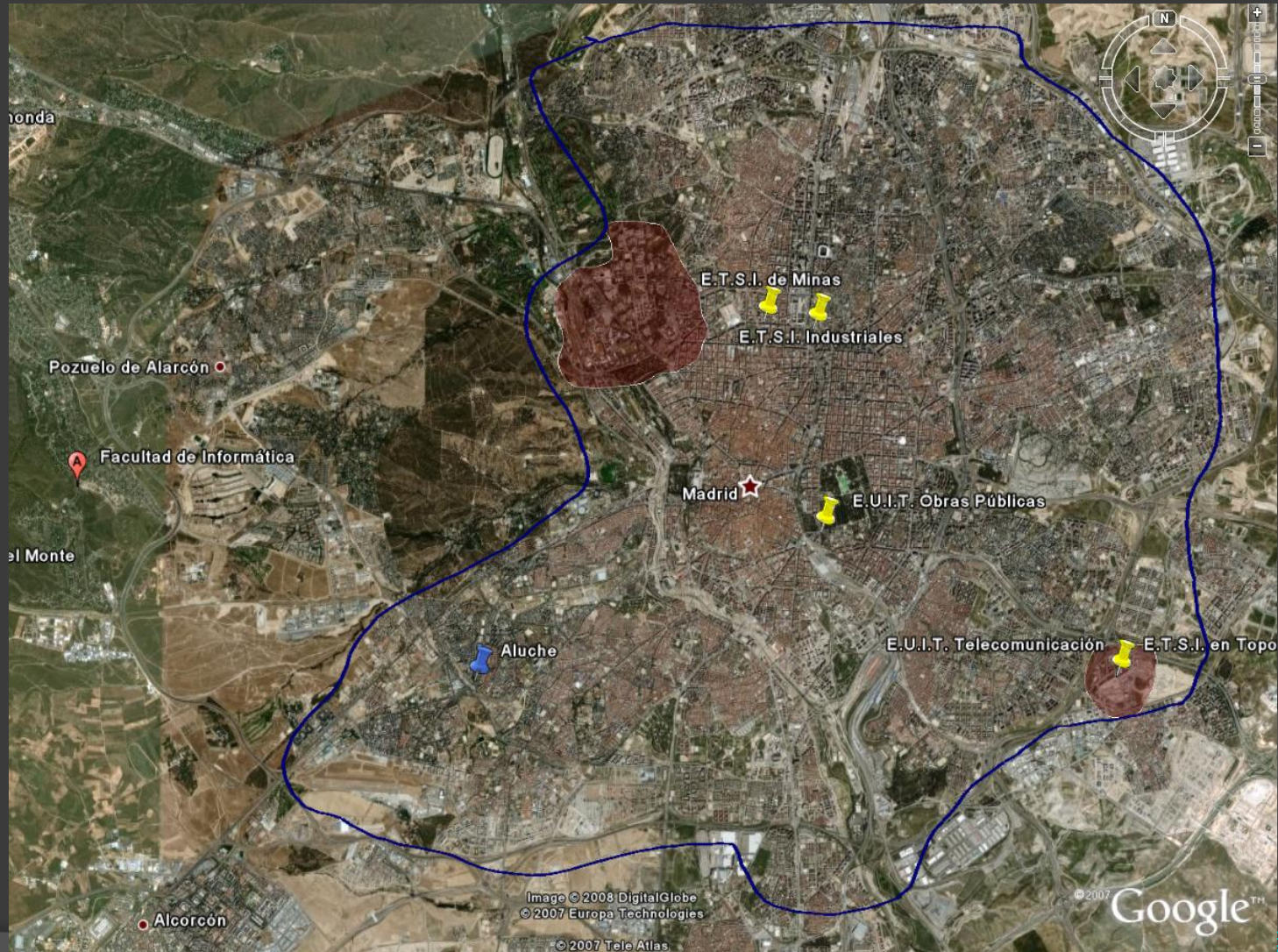


Universidad Politécnica de Madrid

Faculties

University Level	College Level	Others
<i>Escuelas Técnicas Superiores</i> • E.T.S. Arquitectura • E.T.S.I. Aeronáuticos • E.T.S.I. Agrónomos • E.T.S.I. Caminos, Canales y Puertos • E.T.S.I. Industriales • E.T.S.I. Minas • E.T.S.I. Montes • E.T.S.I. Navales • E.T.S.I. Telecomunicación • E.T.S.I. en Topografía, Geodesia y Cartografía	• E.U. de Arquitectura Técnica • E.U. de Informática • E.U.I.T. Aeronáutica • E.U.I.T. Agrícola • E.U.I.T. Forestal • E.U.I.T. Industrial • E.U.I.T. Obras Públicas • E.U.I.T. Telecomunicación	• E. Politécnica de Enseñanza Superior
<i>'Non-Technical'</i> • Facultad de Ciencias de la Actividad Física y del Deporte (INEF) • Facultad de Informática		

Universidad Politécnica de Madrid Locations



Facts & Figures

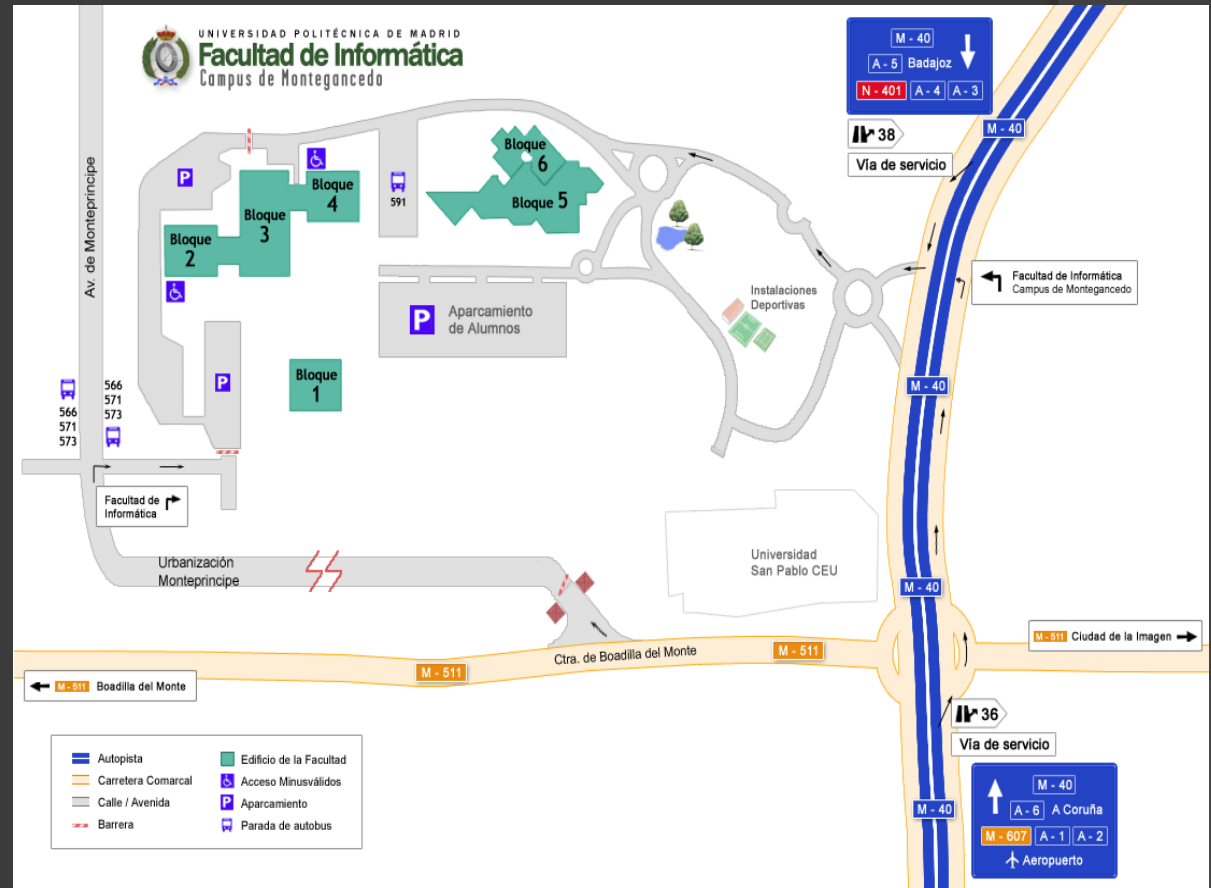
- ⦿ 2000 students
- ⦿ 170 professors
- ⦿ 270 courses
- ⦿ 200 places for international exchange (+30 for double degree)
- ⦿ Library with 200+ study & reading places, 28.000 books and papers

Fields of Study

- ◉ Architecture and technology of computer systems (*Arquitectura y Tecnología de Sistemas Informáticos*)
- ◉ Artificial Intelligence (*Inteligencia artificial*)
- ◉ Languages and computer systems & Software Engineering (*Lenguajes y Sistemas Informáticos e Ingeniería de Software*)
- ◉ Languages applied to science and technology (*Lingüística aplicada a la Ciencia y a la Tecnología*)

UPM: Facultad de Informática Campus

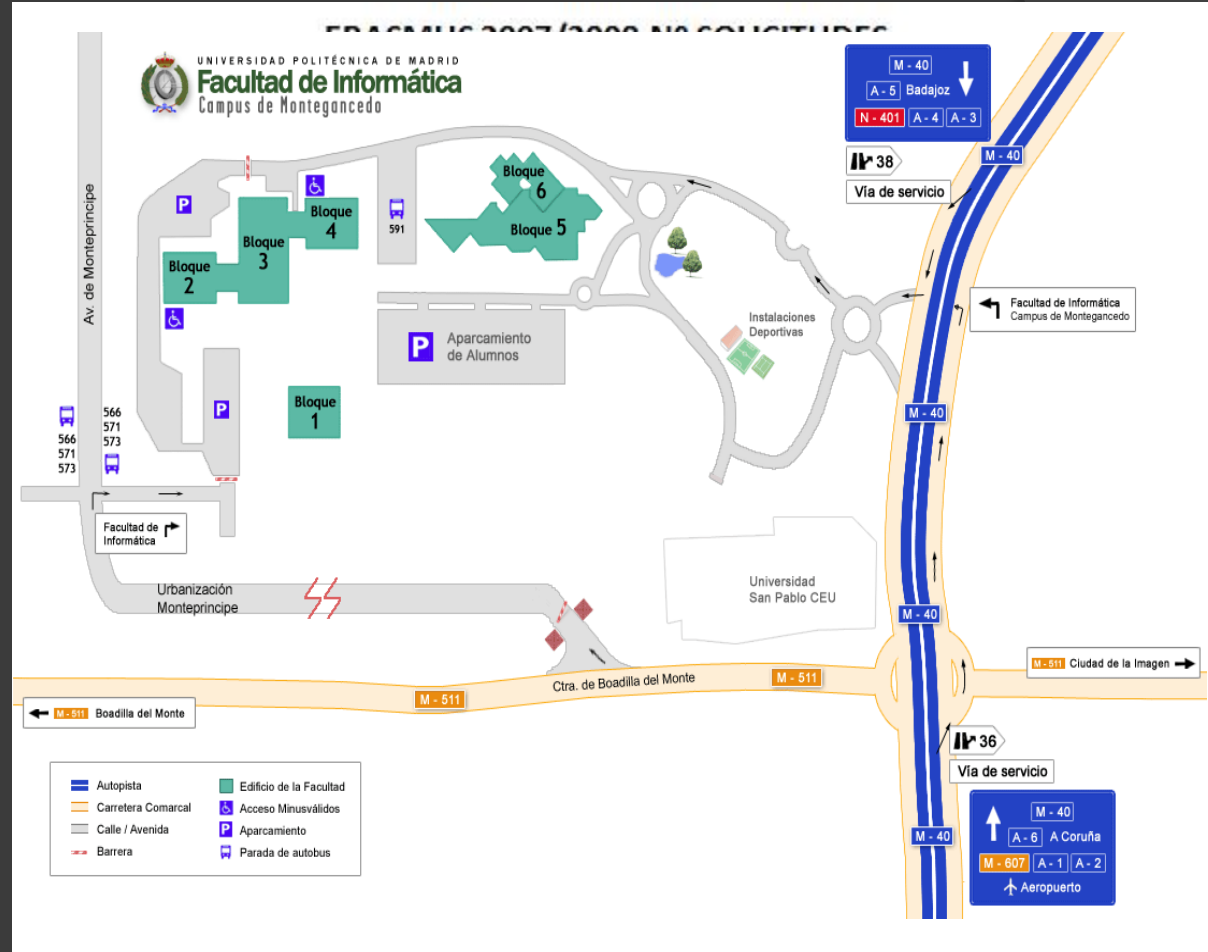
- Administrative Block
- Library
- Five 'Study' Blocks
- Supercomputer
- Historical Museum
- Planetarium
- Study Rooms
- Lunch Hall & Café
- Computer Stations & Notebook Places
- Sporting Ground



UPM: Facultad de Informática

Erasmus

- Over 5000 graduates / year: 20% took part in an exchange
- At some faculties even 50%
- Ranking: aeronautics, architecture, telecommunications, industrial engineering computer science
- Internat. Office Block 3, D.3102
- Student Collaborators
 - Help
 - Activities



UPM: Facultad de Informática

Course & Activity Offers

- ⊙ Approx. 270 courses
 - Standard comp. Science course
 - Languages (faculty independent)
 - Telepresence courses
 - Usually with practical parts
 - Some of them annual
- ⊙ Sistemas Informaticos
 - 15 credits
 - Annual
 - Usually larger project distributed among various students
 - Documentation and presentation (Spanish?!)
- ⊙ Almost all courses in small, class-room like rooms (English?!)
- ⊙ Extracurricular: Theater and Sports (Gym, Soccer, ...)
- ⊙ Barbecue ;-)

Fin.