

University of Toulouse

November 2019



Université
Fédérale

Toulouse
Midi-Pyrénées

Toulouse - Some Key Facts



TOULOUSE

Almost 472 000 citizens
4th biggest city in FRANCE



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Toulouse - Some Key Facts

- **World capital** of aeronautics
- **European capital** of space industry
- **Toulouse** plays a **key role** in international space projects such as Galileo, Curiosity (Mars) or Philae ...
- The **A380**, the largest aircraft in the world
- **25%** of population are students
- **European capital of Science (European label)**

Other important facts:

- Jean TIROLE, laureate of the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred **Nobel** in 2014
- **3 UNESCO** World Heritage sites (8 in Occitanie Region)

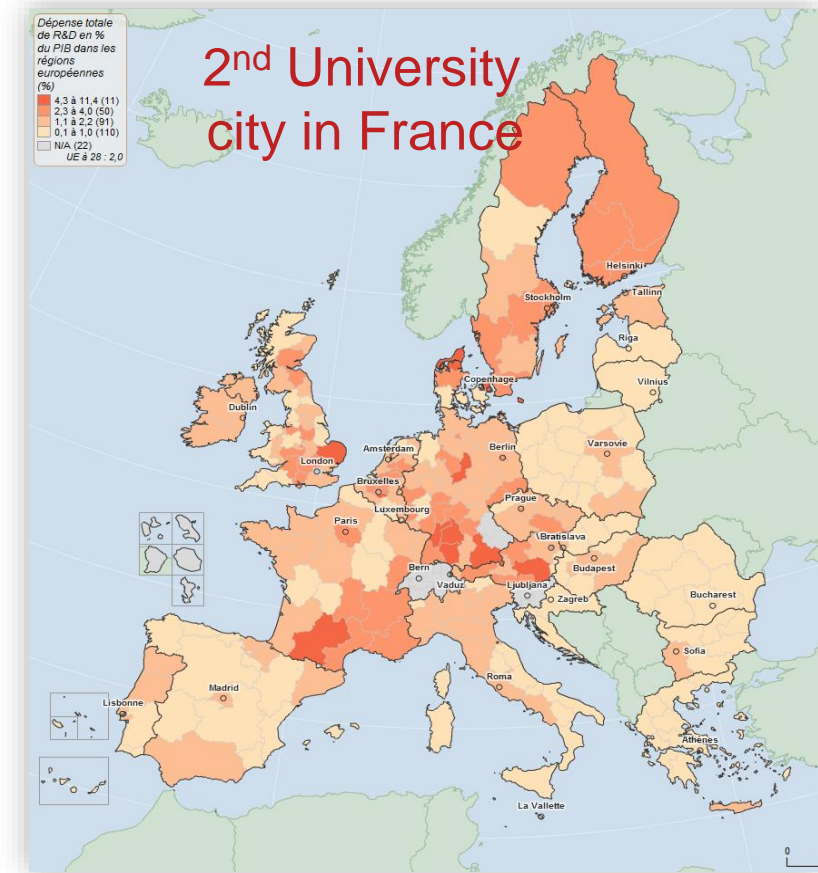
Basic economic aggregates:

- Economic growth: **+2,9%/year** in Gross Domestic Product per capita – in Europe's **top 10** urban areas (of more than 1m people)
- R&D investment: **€5bn/year**, 4,8% of GDP– in Europe's **top 10** Regions (2013)



Toulouse - A Top 10 R&D region in Europe

- Midi-Pyrénées / Occitania, **6st** most R&D oriented region with expenses totaling **4.8%** of GDP (cf. illustration)
- **1st** French city for the annual arrival rate of highly educated workers (research and design executives: 6,17 for 1000 jobs; Paris 5,57 - Bordeaux 3,34; INSEE 2013)
- **1st** French city in research intensity with **16.2** researchers for 1000 employees
- **1st** French region for executives working in R&D: **40%**



Toulouse – World Capital of Aeronautics

25% of the
French R&D in
Aerospace

85,000 jobs
in 700
companies

Airbus Group
World HQ

718 aircrafts
delivered /
850 net orders
in 2017

1st French
industrial site:
650ha & 40k
employees

Design, final
assembly,
flight tests

Cradle for
tomorrow's
technologies



Toulouse - European Capital of Space

- Satellite imagery (SPOT IMAGE),
- Meteorology (METEO France)
- Oceanography (MERCATOR OCEAN)

25% of European workforce

12,000 jobs in 400 companies

French National Space Agency major site



Design et fabrication de satellites: 10,000 m² of clean rooms

OneWeb FAL opened mid 2017 using Airbus Group manufacturing capabilities

Exploration of Mars, International Space Station, Rosetta mission...

WITH ONEWEB CONSTELLATION...

A REVOLUTION IN SATELLITE MANUFACTURING
No one has ever built a satellite in one day... we will build several every day!

TOTAL COVERAGE
Internet to everyone, everywhere on Earth



Toulouse - A large choice of partners and contractors

AERONAUTICS

AIRBUS

Rockwell
Collins

AR

THALES
AVIONICS

AIRFRANCE / KLM
INDUSTRIES Engineering & Maintenance

SAFRAN
AEROSPACE · DEFENCE · SECURITY

SPACE

ThalesAlenia
Space
A Thales / Finmeccanica Company

AIRBUS
DEFENCE & SPACE

HEXCEL

Telespazio
A Finmeccanica/Thales Company

OneWeb

METEO
FRANCE

INTELLIGENT
TRANSPORTATION

Continental

SIEMENS
MOBILITY

ACTIA

NVO
EASY
MILE

HYPERLOOP
TRANSPORTATION TECHNOLOGIES

VECTOR

EVA
ELECTRIC VEHICLES AND MOBILITY

RENAULT
Passion for life

HEALTH
COSMETICS

Pierre Fabre

SANOFI

evotec

ab7
group
INVEST THE FUTURE

InvivoGen
Innovation within Reach

CYCLOPHARMA
LABORATOIRES

LUCASMEYER
COSMETICS

CLARIANT

DIGITAL

Capgemini
CONSULTING · TECHNOLOGY · OUTSOURCING

OU
qssystem

AON

ALTRAN
TECHNOLOGIES

CGI

T · Systems

Toulouse - A French Tech City

- **3,000** IT companies / 200+ startups & 78 newly founded since 2014
- **38,000** IT jobs / 1 298 startup jobs created since 2014
- **94** startups have raised **414M€** since 2014 / **11** have raised **185M€** in 2016
- **6** startups in Deloitte Technology Fast 500 2016 EMEA
- **20** public and private accelerators
- **163** R&D centers
- **20,000** highly qualified students



Internet of Things



Autonomous Sensing & Systems



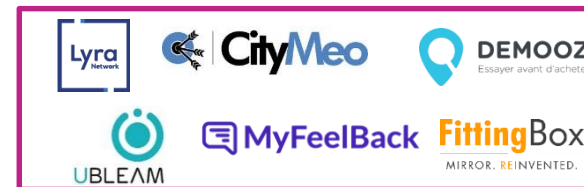
Healthtech / Medtech



Creative Industries



Retail



University of Toulouse - A federation of institutions

— **University of Toulouse is a legal body gathering Higher Education and Research institutions**



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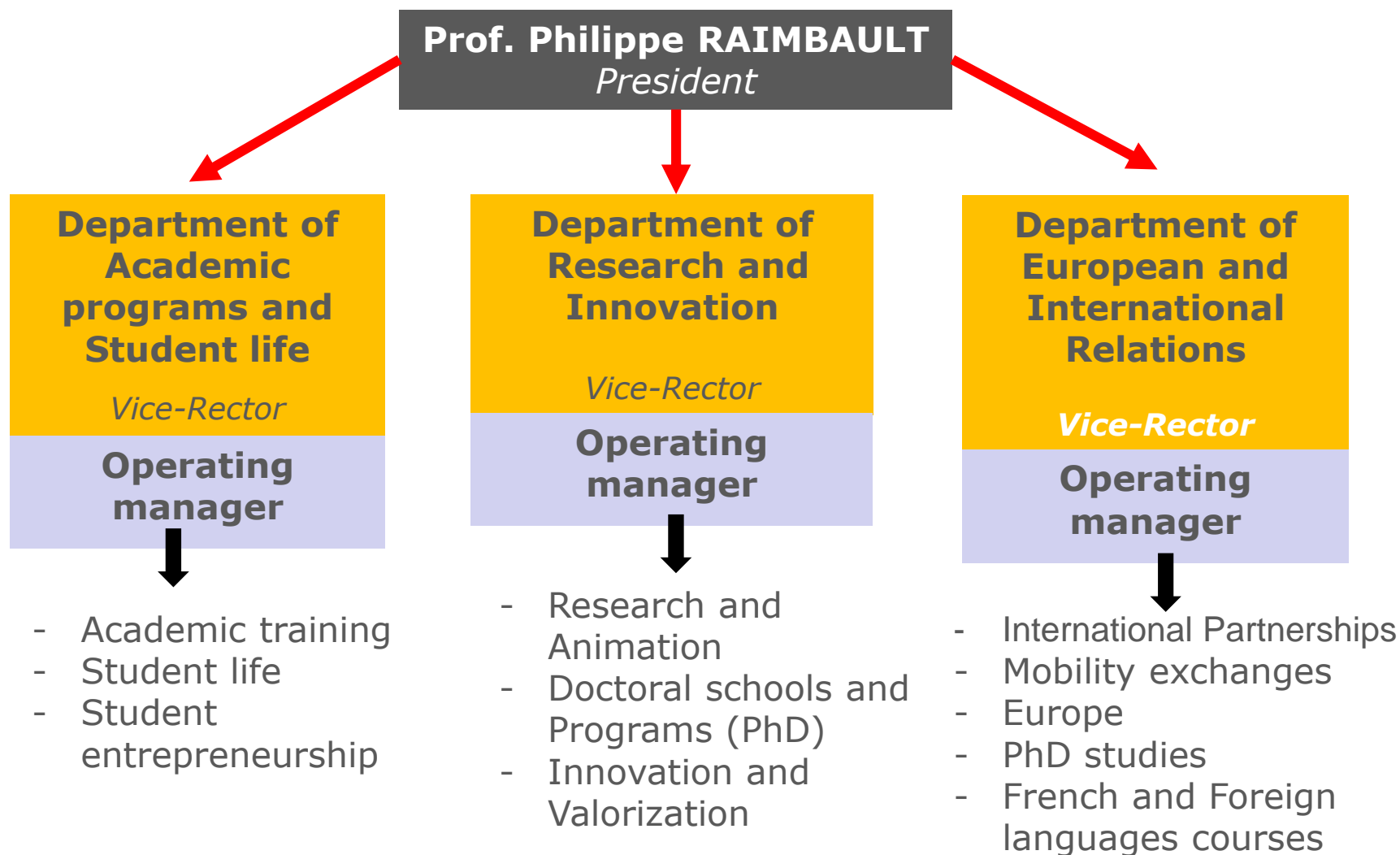
University of Toulouse - Key facts and numbers

- University of Toulouse, **founded in 1229**, is one of the oldest in Europe (almost 800 years old)
- **2nd largest** University in France
- **European University, LMD system (Bologna process)**
 - Bachelor (L), Master (M), PhD (D)
- **Large possibilities of majors:**
 - Law, Economy, Management - Humanity & Social Sciences – Arts, Literatures, Languages – Sciences & Technology, Sport - Health



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University of Toulouse - Simplified Chart



University of Toulouse - A Federation of Institutions

23 Members: 4 Universities, 1 National Institute of HE and 18 Engineering and Specialized Schools, 1 Teaching Hospital, 7 National Research Bodies, settled in 11 towns



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University of Toulouse - A federation of institutions

7 National Research Bodies:

- National Center for Scientific Research



- National Institute for Agricultural Research



- National Institute of Health and Medical Research



- Research Institute for Development



- The Aerospace Research Center



- Space Studies Research Center



- Center of Meteorology



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University of Toulouse - Key facts and numbers

- **18** institutions / **7** research bodies
- **144** Research labs
- More than **100 000** students (B 55% M 40% D 5%)
- **16 700** foreign students
- **32 500** degree awarded / year



- **15** doctoral schools
- **900** PhD thesis awarded each year
- **4 300** PhD candidate
- **6 000** researchers and faculty
- **6 500** staffs



- **1 500** frame agreements signed with **110** countries
- **1 000** permanent foreign researchers
- Fastly developing Master **fully taught in English**

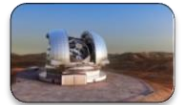
Science and Technology



Biology, Health and Biotechnologies



Ecology, Veterinary, Agronomy, Bioengineering



Geosciences, Astronomy and Space Sciences



Mathematics, Informatics, Telecoms



Electrical, Electronics, Engineering



Systems



Physics, Chemistry and Materials Sciences



Mechanics, Energetics, Civil and Process Engineering



Aeronautics and Astronautics

Human and Social Sciences



Behavior, Language, Education, Socialization and Cognition



Arts, Literature, Languages, Philosophy and Communication



Time, Spaces, Societies, Culture

Economics and Law



Law and Political Sciences



Management Sciences



Toulouse School of Economics

University of Toulouse – granted excellence programs

Granted by the French program ‘Invest for Future’ (Highly selective calls for French Universities)

LabEx (Center of excellence)

- **TULIP** (Ecosystem resilience)
- **NEXT** (Nano measurements)
- **IAST** (Institute for Advanced Study in Toulouse in social sciences)
- **SMS** (Sociology and social order)
- **TOUCAN** (cancer)
- **CIMI** (Mathematics and computer sciences)
- **IAM-TSE** (Economics and Business)

Graduate schools (International PhD tracks – Links between Master and PhD studies – more links with research)

- **MINT** (Math Interaction)
- **TULIP** (Ecosystem resilience)
- **TSAE** (Aeronautical engineering)
- **TESS** (Earth sciences)
- **CHESS** (Social sciences)
- **CARE** (Medicine and aging)
- **BIOECO** (Biomass and agro-resources)
- **NanoX** (Nano-Physics)
- **ANITI GS** (Artificial Intelligence)

Interdisciplinary Institute for Artificial Intelligence

- **ANITI**

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ANITI Artificial and Natural Intelligence Toulouse Institute



- Toulouse supported by the French government to become a leading place for research and innovation related to AI (after a selective call, best ranking with Paris)
- Integrative Institute receiving 80M€ per year to challenge the future of transport/mobility, robots, and economic/social issues related to AI
- Attracting scholars from abroad
- Educating the best students for research and entrepreneurship in AI
- Becoming a central node in the network of AI Institutes in Europe

Top 50 Shangai “Subjects”

Leading positions in Europe in central topics, as climate change, social sciences, mathematics:



5-WW (1-EU) **Remote sensing**

21-WW (4-EU) **Oceanography**

21-WW (1-EU) **Economics**

31-WW (5-EU) **Earth Science**

42-WW (10-EU) **Mathematics**

45-WW (10-EU) **Atmospheric Science**

Missions and Objectives focused on Internationalization

- Targeting **TOP 100-150 ranking** in 5 next years
- Active policy of exploring potential partners and of welcoming foreign delegations
- **Strategic Partnerships** with top leading universities worldwide
- Manages an office in charge of **European Affairs**
- Promotes and manages **student mobility** (fairs, tools for ingoing and outgoing)
- A policy of **“premium” welcoming** dedicated to foreign researchers and students
- Develops Masters **fully taught in English**, fosters **double-degrees**
- Promotes the **PhD studies at an international level** (cotutelle, co-supervision)
- Offers and manages **French language courses for foreigners**

Tools for ingoing and outgoing student mobility

- **TOUL'BOX, *the unique welcome kit in France***

Created in 2014, this service helps the students to prepare their stay from their home until they have settled in: long-term accommodation booking, pick up at the airport or at the train station, bank account opening, Housing insurance, language courses, individual appointments with the Toul'Box team etc...




<https://toulbox.univ-toulouse.fr/>

- **MOUV'BOX**

Created in 2017, this service supports students who want to live an experience abroad : mobility opportunities, country profiles, practical information, administrative procedures, student and professional testimonials etc....



<https://mouvbox.univ-toulouse.fr/>



**Thank you
for your attention**

www.univ-toulouse.fr

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