

Georgia Tech

Bertrand P. Boussert, PhD

Head of Academic Programs

Adjunct professor of Electrical and Computer Engineering

Georgia Institute of Technology



Overview

State university in Atlanta, Georgia
Largest engineering program in the
U.S.



23,000 students:
60% undergraduate
40% graduate



4,000+ engineering &
science degrees



Global university: Atlanta, Europe (GT
Lorraine), initiatives in Asia, Latin America

Rankings

- National US

- ★ 5th US Engineering program
- ★ 1st by recruiters
- ★ 1st return on investment
- ★ School ranking
 - * Industrial #1
 - * Aerospace #5 (#2 UG)
 - * Electrical & Computer #5 (#4 UG)
 - * Mechanical #5 (#2 UG)



- International

- ★ 6th World Engineering program

10 Interdisciplinary Research Institutes

Institute for Materials

**Georgia Tech
Research Institute**

**Institute for Electronics
& Nanotechnology**

**Strategic Energy
Institute**

**Renewable
Product Institute**

**Institute for
Robotics**

**Manufacturing
Institute**



**Institute for Bioengineering
& Biotechnology**

**Institute for
Sustainable Systems**

**Institute for People
& Technology**

Innovation

Handled by Enterprise Innovation Institute (EI2)

- ★ programs to help startup companies, industry, the public sector, and students improve their competitiveness and increase their economic impact.
- ★ Several programs proposed, VentureLab, CIC, R&IC, TiGER, i-Corps, ...



ATLANTA

A nighttime aerial photograph of Atlanta, Georgia, showing a dense urban landscape with numerous illuminated skyscrapers and highways. The skyline is dominated by the Bank of America Tower, which has a distinctive golden, illuminated spire. Other prominent buildings include the Georgia State Capitol and the CNN Center. The city lights reflect on the surrounding water bodies, and the overall scene is a vibrant display of urban architecture at night.

#3 Fortune 500 Headquarters
Top 20 Green City
40+ Colleges and Universities
Top City for New Grads

INTERNATIONAL REPUTATION

Georgia Tech Lorraine
The campus of Georgia
Tech in Europe

#6

WORLD ENGINEERING
PROGRAM



Activity I

Education

1990



Activity II

Research

2006



Activity III

Economic Development

2012



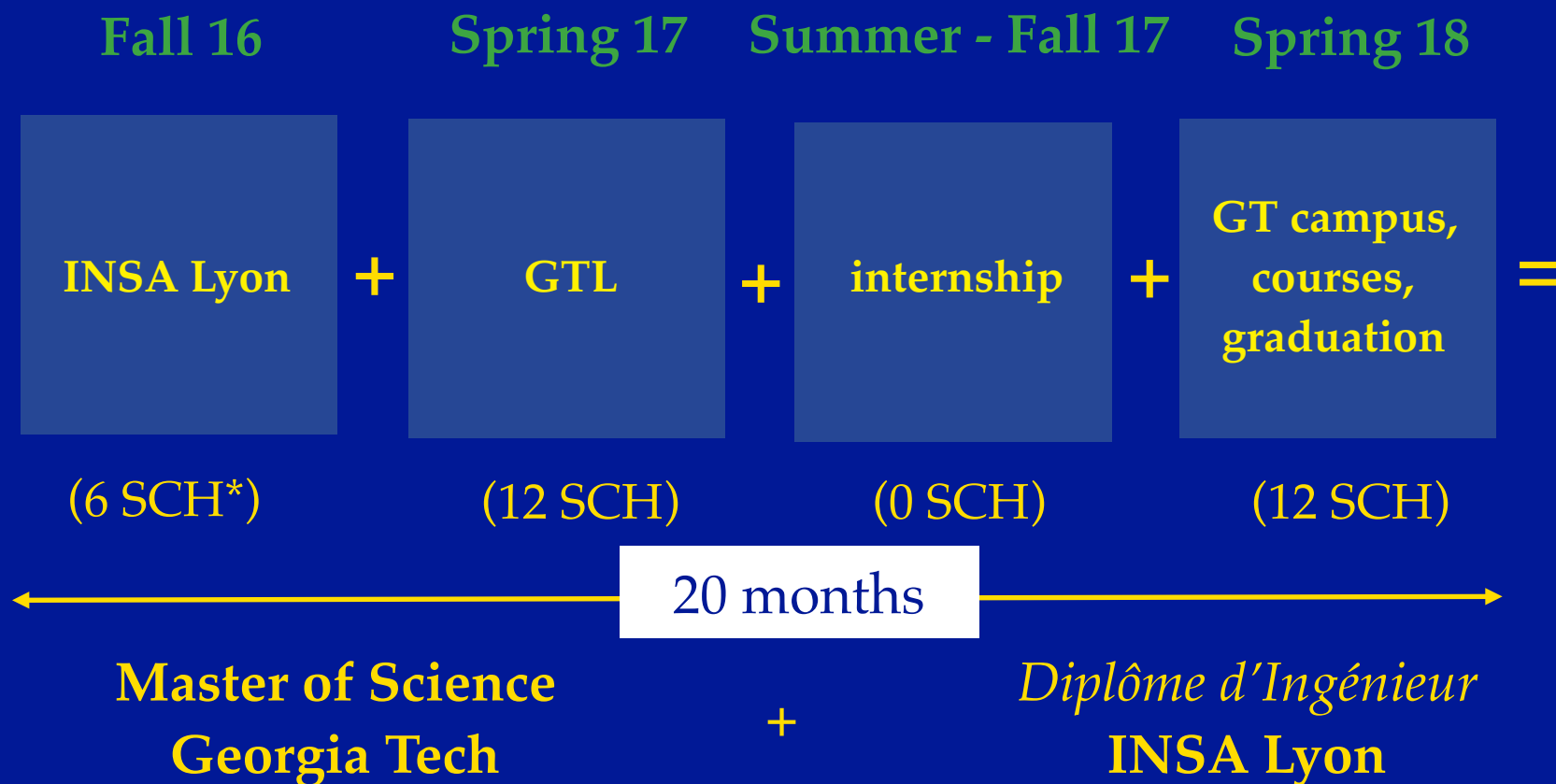
Achieve International Engineering Preeminence

- World renowned program of excellence
- High integration of academia, research, economic development
- Global and international experience
- Excellence valued by industry
- Excellence made affordable with a high return on investment

Double Degree Integrated Program

- MS degree in Computer Science (CS) or in Electrical & Computer Engineering (ECE) or in Mechanical Engineering (ME)
- In-depth knowledge, research-oriented courses, ideal complement of the curriculum of the Diplôme d'Ingenieur
- Each program has 10 courses which 2 will be transferred from INSA-Lyon
 - ★ MSCS: Focus on computational perception, robotics, machine learning
 - ★ MSECE: Focus in telecom, microelectronics, photonics, ...
 - ★ MSME: Focus in acoustics, mechanics of materials, ...

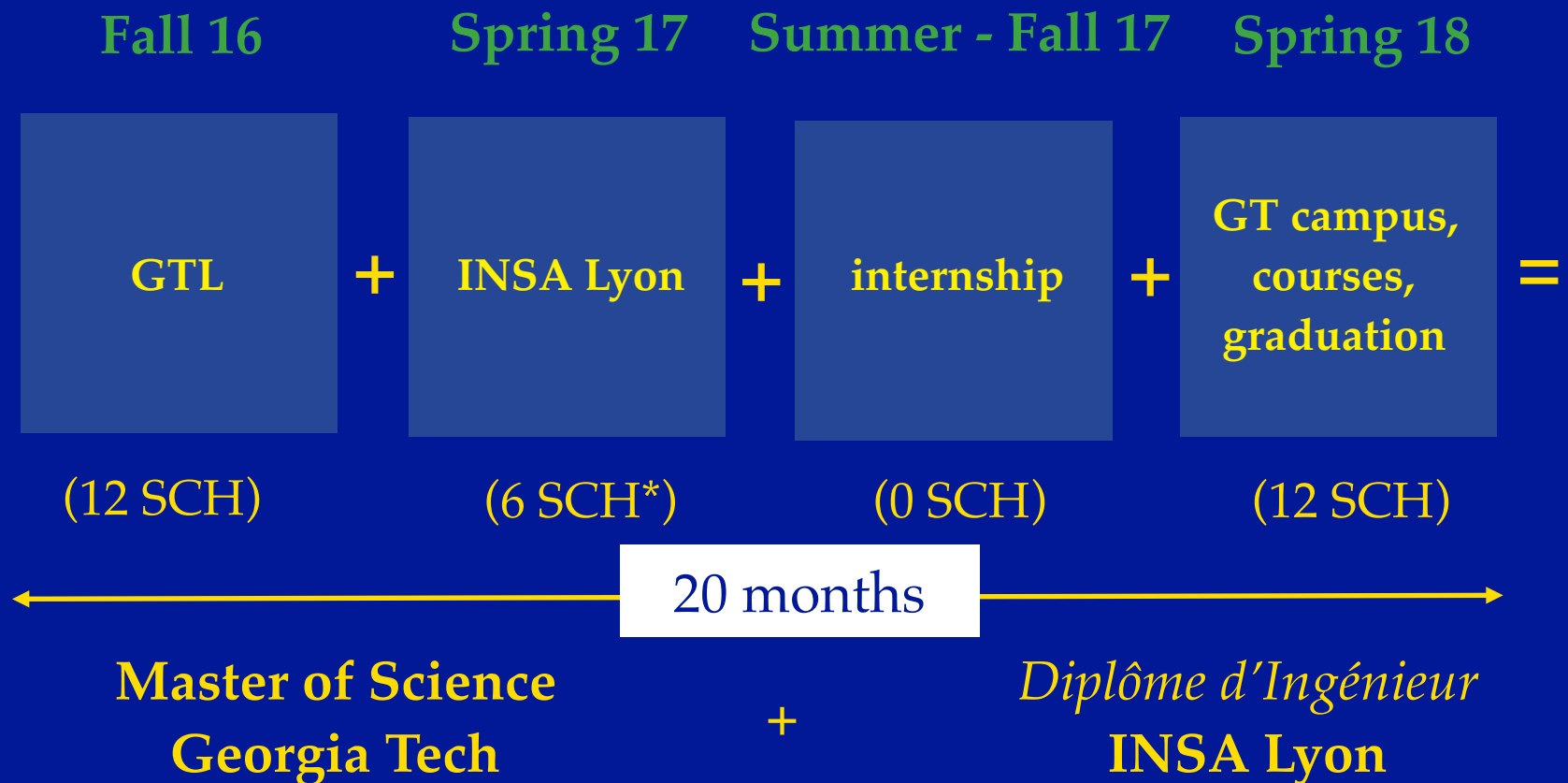
Double Degree Integrated Program⁽¹⁾



* 6 SCH transferred to GT

(1) Génie Electrique, Génie Informatique, Science et Génie des Matériaux

Double Degree Integrated Program⁽²⁾



* 6 SCH transferred to GT

(2) Génie Mécanique (GMD, GMC),
Télécommunications, Services et Usages

Global Engineering Immersion Program

- 3 continents / 3 campuses MS degree in **Electrical & Computer Engineering** from Georgia Tech
- Broaden your horizon, gain rich international experience, enhance competitiveness on job market, ...
- Specific courses on international business, international affairs, economics
- Cost:
 - ★ Resident tuition & fees on GT Lorraine & GT Shenzhen campuses
 - ★ Non-resident tuition & fees on the GT Atlanta campus

Global Engineering Immersion Program

Fall 16

Spring 17

Summer or Fall 17

GT Lorraine

+

GT Atlanta

+

GT
Shenzhen,
graduation

=

(12 SCH)

(12 SCH)

(6 SCH)

12 months

Master of Science in Electrical
& Computer Engineering
Georgia Tech

+

Global Engineering
Immersion Program
Completion, Georgia Tech

Georgia Tech

Admission requirements

- GPA min 3.5/4.0
- Strong letters of recommendations
- TOEFL iBT > 80 / 120 (ECE), >94 / 120 (ME), > 100 / 120 (CS)
- GRE:

	Scores
Verbal	>146 / 170
Quantitative	>155 / 170
Analytical Writing	$\geq 3.5 / 6$

Schedule

- Fall 2015
 - ★ Pre-selection by INSA-Lyon
 - ★ Take TOEFL & GRE by Dec 1st
- Spring 2016
 - ★ Feb 1st Application online is completed with all GRE/TOEFL scores, transcripts and letters of recommendation
- Fall 2016 - Begin program at INSA-Lyon or GTL
 - * see: <http://www.gre.org>



Tuition and Fees

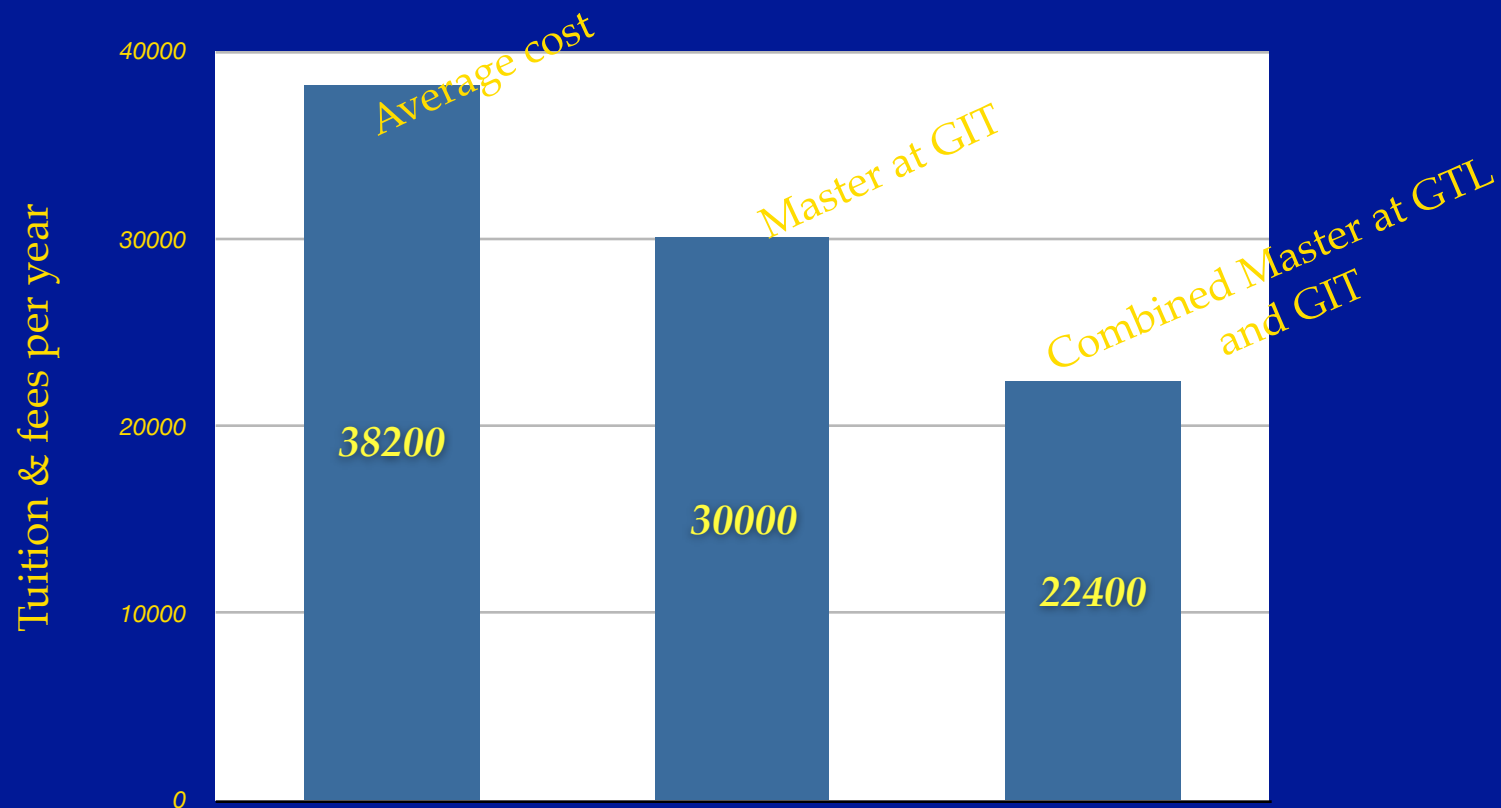
2015 - 2016 AY



	Double degree	GEIP
GIT full time	15,032	15,032
GTL full time	7,398	7,398
GTS 1/2 time		6,531
Total Cost	22,430	28,961

Excellence made affordable

- Highly competitive program among top US Universities



Source: US news & world report, 2015 - 2016

Financial aid

- Assistantships
 - ★ Research Assistantships: for MS thesis or PhD students
 - ★ Teaching Assistantships available on a competitive basis in **Electrical & Computer Engineering**
 - ★ Assistantship: you are paid \$1,200 to \$1,700
- Financial aid available on competitive basis
- US Internships available through alumni network
- Fellowships (Rotary, Region Lorraine, etc....)
- Loans

Excellence value by industry

- Industrial partners involves in academic/ research programs
- 12% of graduates yearly recruited on “High potential program” at Areva, Schlumberger, Eurocopter and GE
- The vast majority of our graduates students take industry positions at companies such as:
 - ★ Areva, Cisco, Schlumberger, France Telecom, Schneider Electric, EADS, Intel, IBM, Thales, Imerys, Total, General Electric, ...

Young graduate figures

- 34% find first job in USA
- 45% in R&D - Energy / Material / Aerospace / Services -
- 15% continue with a PhD
- Yearly salary increased France leads to ROI = 5 to 7 years
- Yearly salary is >\$80,000 (MS) and > 100 k\$ (PhD) on average in USA

Interest in GT Lorraine campus

- Prepare a long-stay in Atlanta for research opportunities, PhD
- Benefit from BNP-Paribas / GT
 - ★ National agreement with Bank of America: No fees associated to USD account opening, wire transfer
 - ★ Local agreement:
 - * Pack esprit libre
 - * **Student loan of 2.4% up to 60000 €, up to 9 years loan repayment**
 - * Free fees on any operation over the duration of the degree

UMI 2958: GeorgiaTech-CNRS



A successful model of International Research Laboratory

A joint laboratory between CNRS and GIT with a presence in Metz and in Atlanta since 2006. The only UMI in France



UMI research program

- Non-linear optics and dynamics

- ★ Non-linear optics

- ★ Non-linear dynamics

- Smart Materials

- ★ Materials and Nanostructures for photonics and electronics

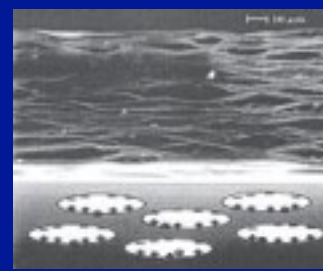
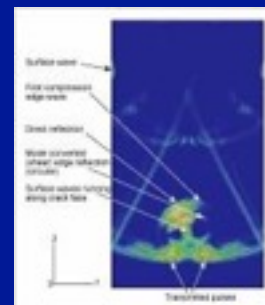
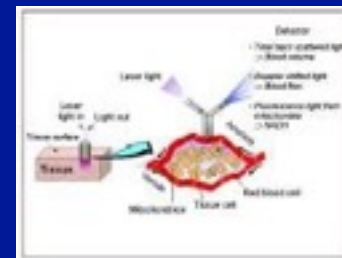
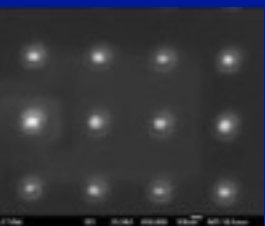
- ★ Materials by design

- ★ Acoustics and non-destructive characterization

- Computer Science

- ★ Situated cognitions and Robotics

- ★ Network information systems





INSTITUT LAFAYETTE



- Groundbreaking event on October 2012
- Inauguration event on May 26th, 2014
- An innovation platform for optoelectronics on the UMI Metz Campus
- > €30 M investments, building of 25,000 sq. ft., including 5,000 sq. ft. lab space and fully equipped 5,000 sq. ft. clean room (> €10 M investment in equipment)

Important Dates / Deadlines

Items	Dates
TOEFL & GRE 1st try	Dec 1, 2015
GT application completed & submit on GT Admission	Feb 1, 2016
Fall semester start	Aug 22, 2016

Visit our website:
www.gt-lorraine.eu

For information on the programs or
inquiries on the application, contact

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Tel: 03 87 20 39 47

Contacts:

International relations contact of
your department

Testimonials

- Alex Brady (GMD, MSME Sp 15),
alexbrady44@gmail.com

I'd like to tell you about the things I liked in the program and why I would recommend it to anyone who plans on working outside of France in the future. Right now I am working as a Robotics Engineer in the research division of a hospital in Vail, Colorado. It's a great job and my studies at Georgia Tech prepared me for it well [...]

I am very interested in robotics so I took a controls class from the school of electrical & computer engineering department, a machine learning class from the Computer Science and a robotic arm class from the school of mechanical engineering [...]

The graduate level courses are about the same difficulty and workload as the courses at INSA, but you're only taking four per semester [...]

Globally my experience at Georgia Tech was fantastic. I met a lot of great people who I am close friends with now, I took a lot of interesting classes, did research with really smart professors and explored cool places. I hope this helps you make your choice, if you have any questions or just need advice feel free to email me [...]

- Mamoun Kacemi (TC, MSECE), mamoun.dk@gmail.com

School Reputation in the world: Among the best engineering schools in the world (Top 10 in both Shanghai Rankings and Q&S Rankings).

International Career : Getting a career anywhere in the world is easier (especially in the US) whether it is a job or applying for a PhD.

Course selection & format: You choose your courses depending only on your interest. Less course load than INSA but more personal work (Homework and projects).

Bigger Network = Easier job/Internship search: First, The Georgia Tech' Network with people working in all the big companies (USA, France and all around the world). Every Tuesday, the seminar session makes you meet companies who come with offers to hire you.

I am doing an internship in Sweden part of an International Internship Program for Graduate Students who requires international teamwork experience, easy to prove with Georgia Tech in your CV.