Illinois Institute of Technology Chicago, U.S.A. www.iit.edu

Presented by: Dr. Vanita Misquita Ph.D. Director of Overseas Programs iitparis@aol.com misquita@iit.edu



3<sup>rd</sup> largest city in the U.S. 35 miles of lakefront, 15 miles of bathing beaches 552 parks, 46 museums, 7000 restaurants #1 in the U.S. in manufacturing #1 in the U.S. in nanotechnology





## **IIT: Illinois Institute of Technology Location: Chicago, Illinois**

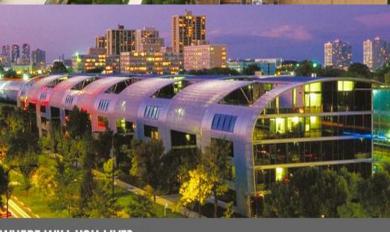




## Illinois Tech "A vibrant campus in a global city"



See Illinois Tech in 106 seconds.



1000

WHERE WILL YOU LIVE? »

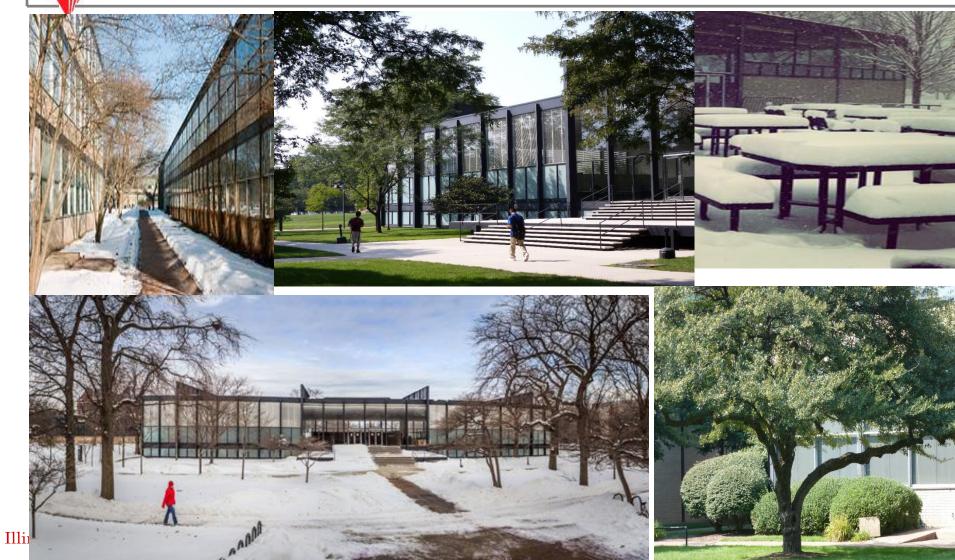
Illinois Institute of Technology

Visit IIT Þ

## 8 Colleges/Centers/Institutes à I.I.T.

- Armour College of Engineering and Science
- College of Architecture
- Lewis College of Human Sciences
- Stuart School of Business
- Chicago-Kent College of Law
- Institute of Design
- School of Applied Technology
- College of Science

# The IIT campus –Winter & Spring









## **IIT SPORTS Mascot: SCARLET HAWKS**





- National Hub for the « Perfect Grid » & International hub for hybridelectric vehicles
- Location in Chicago 3rd largest city in the U.S. job opportunities
- Cutting-edge research with 2 world famous labs Argonne National Lab & Fermi Lab in the Chicagoland area
- Possibility to complete a Master's degree in 1 year (12 months) without adding an extra year to your studies
- No quotas at the Master's degree level 9 ch scholarship (\$13,230) offered to those who qualify for admission to IIT – no quota
- F1 visa allows students to work for 12 months in the U.S. in their field of study after the degree from IIT, and extend the work possibility to another 24 months if the field is under the STEM category



<u>SPAIN:</u>

- Oniversidad Politecnica de Madrid (UPM – ETSIT, ETSII, ETSIA, ETSIAE, ETSICCP, ETSIInf, ETSAM)
- Oniversidad Politecnica de Catalunya (UPC – ETSETB, ETSEIB, ETSAB, ETSCCPB, ETSEEIAT, FME)
- Oniversidad Politecnica de Valencia (UPV – ETSA, ETSII, ETSIT, ETSICCP & ETSIAMN)
- Universidad de Seville
- Universidad Pontificia Comillas, Madrid
- EHU Bilbao –Universidad del Pais Vasco (UPV)



## **Graduate level**

- I. Double degree Master's program in 1 year for ETSII, ETSIT, ETSA, Camins & ETSIAMN

- II. Research (TFM) for a period of 6 months or upto 1 year maximum for the above schools



#### **Armour College of Engineering**

Dept of Mechanical, Materials & Aerospace Eng (ETSII-UPV) Dept of Biomedical Engineering (ETSIT, ETSII-UPV) Dept of Electrical & Computer Engineering (ETSIT, ETSII-UPV) Dept of Civil, Architectural & Environmental Eng (ETSA, ETSICCP-UPV) Dept of Chemical & Biological Eng (ETSII-UPV)

#### **School of Applied Technology**

Dept of Information Technology & Management (ETSIT, ETSII-UPV) Dept of Industrial Technology & Operations (ETSII-UPV) Dept of Food Science & Nutrition (ETSIAMN-UPV)



#### **College of Science**

Dept. Of Physics (M.S. in Applied Physics)\*\* (ETSIT, ETSII-UPV)

#### CHOICE OF MASTER'S MUST BE PRE-APPROVED BY UPV

\*\*Applied Physics trains engineering students seeking careers in the area of nanotechnology also trains students interested in optics, laser technology, semi-conductors, nuclear energy, nanofabrication, biotechnology

# Procedure for the Master's double degree program

Pre-selected by UPV > Year 6 at IIT  $\succ$  TOEFL min. 90 ibt or IELTS min. 6.5 > GRE general revised exam score minimum for the department > Application deadlines: Fall semester: April 15, or, Spring semester: October 15 > Final decision made by Illinois Tech



# ✓ 6th year at Illinois Tech ✓ Master's in 1 year (12 months) ✓ Includes TFM $\checkmark$ 2 degrees (IIT Master's and UPV Master's equivalent)



## MASTER'S DEGREE at IIT - GRADUATE

#### Master's degree = 30, 32, 33 or 34 <u>credits</u> (Each course usually equals 3 hours ) i.e. 3 contact hours per week with a professor) 32 credits = ~11 courses

#### Transfer of credit of 2 courses (validated by IIT) = less <u>6 credits</u>

#### M.S. at IIT in 1 year (2 semesters)

34 - 6	=	28 credits (U.S.)
33 - 6	=	27 credits (U.S.)
32 - 6	=	<u> 26 credits (U.S.)</u>
30 - 6	=	24 credits (U.S.)



## **TOEFL ou IELTS**

Non-admissible <70 ; <5.5 Admissible 70 – 89 ; 5.5 – 6.0 with IIT PESL assessment

Admissible **90+ ; 6.5+ ( no IIT PESL assessment)** Cost (Spain) : 2017: 245 USD - TOEFL 212 Euros - IELTS

Website:

http://appliedtech.iit.edu/english-languageservices/graduate-faqs-assessments

# TOEFL & IELTS TEST DATES & LOCATIONS IN SPAIN

#### **TOEFL TEST DATES & LOCATIONS IN SPAIN**

https://www.ets.org/bin/getprogram.cgi?urlSource=toefl&newRegURL=&test=TOEFL&greClosed=new&greClosedCountry=China&browserType=&toeflType=&redirect=&t\_country1=group\_Spain

#### Cost: \$245 - Year 2017 (~208 Euros)

#### **IELTS TEST DATES & LOCATIONS IN SPAIN**

https://www.britishcouncil.es/en/exam/ielts/dates-fees-locations

**Cost: 212 Euros – Year 2017** (~ 250 USD ( 1.175 USD= 1Euro 10/10/17)

## **IIT English Proficiency Requirements**

## **IIT English Proficiency Requirements:**

http://admissions.iit.edu/graduate/apply/english-proficiencyrequirements

#### **PESL:**

http://pl.iit.edu/pesl-assessment/faq.pdf



TOEFL score minimum - 90 ibt www.toefl.org – (ETS administers this exam)

#### OR

IELTS – score minimum - 6.5 www.ielts.org(IELTS administers this exam)

#### AND

GRE revised general (ETS administers this exam) https://www.ets.org/gre/revised\_general/about Score minimum – per department at IIT https://admissions.iit.edu/graduate/apply/gre-requirements

Must request ETS to send your Official TOEFL and GRE scores directly to IIT Chicago – Institution



GRE General MINIMUM Requirements per department at IIT (Master's Level) admissions.iit.edu/graduate/apply/gre-requirements

Department of Information Tech Mgmt V+Q = 295 ( 151Q; 144V), A = 3.0

Department of Electrical & Computer Engineering V+Q= 304 (159Q), A = 3.5

Department of Mechanical, Materials & Aerospace Engineering V+Q = 298 (151Q), A = 3.0

Department of Civil, Architectural & Environmental Engineering V+Q = 292, A = 2.5

Department of Chemical & Biological Engineering V+Q= 292, A = 2.5

Department Of Computer Science V+Q= 292/300, A = 2.5/3.0

Department of Physics V+Q = 304, A = 2.5

Master of Data Science V+Q = 304, A= 2.5 Illinois Institute of Technology GRE General MINIMUM Requirements per department at IIT (Master's Level)

admissions.iit.edu/graduate/apply/gre-requirements

Dept. Of Biology Q+V = 298, A = 2.5

Dept. Of Chemistry Q+V=304, A=2.5

Dept of Industrial Technology & Operations Q+V = 292, A = 2.5

Dept. Of Applied Math Q + V = 304, A = 2.5

## New majors for Fall 2018 – Graduate Level

- Master of Energy Systems ( 30 c.h.) (ETSII, ETSICCP) https://engineering.iit.edu/programs/graduate/master-engineering-energy-systems
- Urban Systems Engineering (ETSII, ETSICCP) https://engineering.iit.edu/programs/graduate/master-engineering-urban-systems -engineering
- Engineering Management (ETSII, ETSIT, ETSICCP) https://engineering.iit.edu/programs/graduate/master-engineering-management)
- Master of Engineering in Advance Manufacturing (ETSII) https://engineering.iit.edu/programs/graduate/master-engineering-advanced -manufacturing
- Master of Computational Engineering (ETSIT, ETSII) https://engineering.iit.edu/programs/graduate/master-computational-engineering
- Master of Pharmaceutical Engineering (ETSII)
- https://engineering.iit.edu/programs/graduate/master-pharmaceutical-engineering

# Double Degree (Master's level - GRADUATE)

- ✓ Pre-selection by UPV is required
- ✓ TOEFL 90 iBT minimum or IELTS 6.5 or PTE 63 (official score) admissions.iit.edu/graduate/apply/english-proficiency-requirement
- ✓ GRE general (request ETS to send your official score directly to IIT Chicago –Institution code 1318)
- admissions.iit.edu/graduate/apply/gre-requirements
- ✓ IIT Graduate International application

http://admissions.iit.edu/graduate/apply/degree-seeking-checklist

- ✓ 1 or 2 letter(s) of recommendation (depending on the department)
- ✓ Professional statement
- ✓ Proof of Bachelor's degree equivalent certified in English
- $\checkmark\,$  Transcripts certified in Spanish and in English
- ✓ 1 Copy of the identity page of your passport
- ✓ Recommended deadlines: <u>15 April</u> (Fall semester) et 15 October (Spring semester) or as early as possible

N.B. IIT makes the final decision. Pre-selection does NOT guarantee admission to IIT



## **UPValencia:**

## ETSII-UPV: INTM 502 or 561, MMAE 450, 451, 520, 530 or 532 ETSA-UPV: CAE 521 & CAE 552

#### N.B: 6 ECTS = 3 U.S. credits = 1 course at IIT

Can only choose 2 courses successfully passed at UPV that are compatible & similar to 2 courses in the Master's program chosen at IIT



#### Example of a 32-credit hour program

24 credits =  $\sim$ 7 courses

1 - 5 credits = Research project option

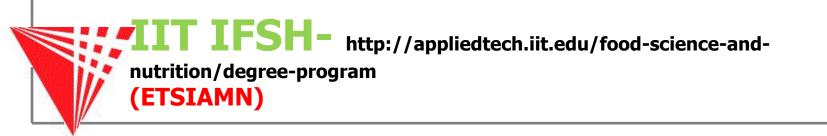
(No. of credits awarded for research is dependent on the department at IIT per the required courses to be completed)

#### 26 credits = Master's degree N.B. – 1 U.S. credit = ~2 ECTS credits Illinois Institute of Technology

#### Department of Electrical & Computer Engineering (engineering.iit.edu/ece) (ETSIT, ETSII-UPV)

Master of Science in Electrical Engineering ( 32 c.h.) Master of Science in Computer Engineering ( 32 c.h.) Master of Science in Electrical & Computer Engineering (32 c.h.) Master of Biomedical Imaging & Signals ( 30 c.h.) Master of Electricity Markets ( 30 c.h.) Master of Network Engineering ( 30 c.h.) Master of Power Engineering ( 30 c.h.) Master of Telecommunications & Software Engineering ( 30 c.h.) Master of VLSI & Microelectronics ( 30 c.h.) Master of Electrical & Computer Engineering ( 30 c.h.)

#### N.B. - This department has a Doctoral program



- Master of Food Process Engineering (Nonthesis option with research project)
- Master of Food Safety & Technology (Nonthesis option with research project)

**JIT Department of Industrial Technology & Operations** (appliedtech.iit.edu/intm) (ETSII-UPV)

# Master of Industrial Technology & Operations (<u>30 c.h.</u>) Specializations:

- **1. Industrial Facilities**
- 2. Industrial Sustainability
- 3. Manufacturing Technology
- 4. Supply Chain Management

# No Ph.D. (Doctoral) program

#### IIT Department of Information Technology Management (appliedtech.iit.edu/itm) (ETSIT-UPV)

1. Master of Cyber Forensics & Security (30 c.h.)

2. Master of Information Technology & Management

## (30 c.h.) with Specializations:

- Web Design	Systems Analysis
Management Information System	IS
Digital Systems Technology	Data Center Operations
& Mgmt	
Software Development System	ns Administration
Computer & Network Security Technologies	Data
Management	
Information Technology Management & Entrepre	neurship
Web Design & Application Development	Voice & Data Comm Tech
• No Ph D (Doctoral) program	

#### Department of Civil, Architectural & Environmental Engineering (engineering.iit.edu/cae) (ETSICCP, ETSA-UPV)

- ► Master of :
- Construction Engineering & Management
- Architectural Engineering
- Geo-technical Engineering to be modified
- Structural Engineering
- Transportation Engineering
- Public Works
- Environmental Engineering

N.B. The department has a doctoral program (Ph.D.)

# Department of Physics (science.iit.edu/physics)

- Master of Science in Physics (32 c.h.) with upto 6 c.h. towards research
- Master of Science in Applied Physcis ( 32 c.h.) for those with an engineering background
- http://science.iit.edu/programs/graduate/master-science-appliedphysics

N.B. – The department has a Doctoral program ( Ph.D. level)

Department of Biomedical Engineering (engineering.iit.edu/bme) (ETSIT-UPV)

Master of Biomedical Engineering (30 c.h.) (no required research)

N.B. – The department has a Doctoral program (Ph.D. level)

IIT Department of Chemical & Biological engineering (engineering.iit.edu/chbe) (ETSII-UPV)

- > MASTER:
- Master of Chemical Engineering ( 30 c.h.)
- Master of Biological Engineering ( 30 c.h.)

N.B. The department has a Doctoral program (Ph.D. level)

IIT Department of Mechanical, Materials & Aerospace Engineering (engineering.iit.edu/mmae) (ETSII-UPV applicants)

Master of Engineering (<u>30 c.h.</u>) in: Mechanical & Aerospace Engineering Material Science & Engineering Manufacturing Engineering (1.5 yrs)

<u>Research Centers</u> Fluid Dynamic Research Center (fdrc.iit.edu)

#### Thermal Processing Technology Center (mmae.iit.edu/~tpc/)

N.B. The department has a Doctoral program (Ph.D. level)

## Department of Biology science.iit.edu/biology

M.S. 32 – 34 credit hours with thesis or non-thesis option

- M.S. in Biology
- M.S. in Biology with Biochemistry specialization
- M.S. in Biology with Cell & Molecular Biology specialization
- M.S. in Biology with Microbiology specialization
- M.S. in Biology with Molecular Biochemistry & Biophysics specialization

N.B. – The department has a Doctoral program ( Ph.D. level)



## **CHOICE OF COURSES AT IIT**

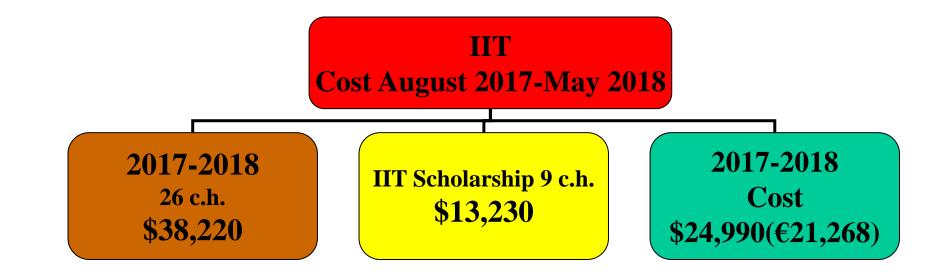
### **IMPORTANT POINTS TO REMEMBER:**

- Not all courses are offered all of the time
- Some courses will be offered once every two years
- Some courses will be offered once every year
- Some courses will be offered each semester
- Some courses may not be offered/opened if there are less than 10 students registered for the courses

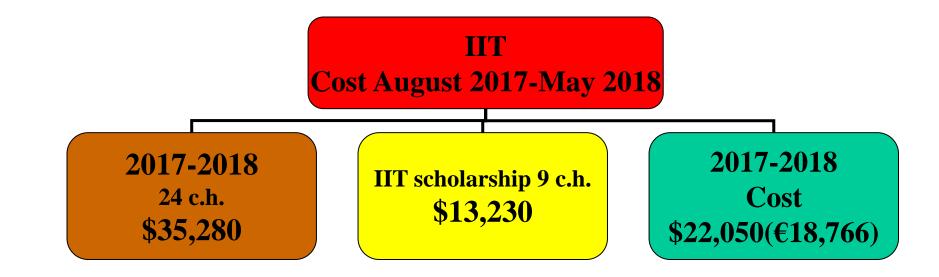
#### What you should do:

- Regarding electives, discuss with your professor at your home university, the elective courses you will need to take for validation & alternatives & submit only once admitted
- In this case, it is imperative that once selected, you submit complete documents to IIT for an early decision well before Illinois Institute of Technology





## IIT Master's Degree (30 credits) (ITM/Biomedical Eng/MMAE/INTM) Cost – August 2017 – May 2018



## Other Fees(2017-2018) (Engineering/Science/Tech)

#### August 2017 – May 2018 (9 months)

Insurance (Health)	\$1,441
Service Fee	<b>\$864</b>
U-Pass (Transport)	<b>\$270</b>
Activity Fee	<b>\$250</b>
<b>New Student Fee</b>	<b>\$250 (</b> one time only )
<b>Graduation Fee</b>	<b>\$331</b> (one time only)
Total	<b>\$3,406</b> ( 1 an ~ €2,899

Update on Feb/March 2018 for Aug 2018-May 2019):

https://web.iit.edu/student-accounting/tuition-fees/current-tuition/main-campusgraduate

Exchange rate: 1.175 USD = 1 Euro ( Oct.17, 2017) Illinois Institute of Technology



#### Fall Semester

#### **Mid-August – mid-December**

(Recommended deadline – 15 April)

\* \* \* \* \*

#### **Spring Semester**

#### **Mid-January – mid-May**

(Recommended deadline – 15 October)

Web.iit.edu/registrar/academic-calendar



New car = €24,000 Rolls out of the garage = Value reduced by -20%



#### Master's d'IIT : €24,000

#### Graduate from IIT = Salary: €53,000 (+30% aux US )



# UPON GRADUATION - POSSIBILITIES

- Work in the U.S. under F1 OPT for 12 months
- Possible extension if STEM-related to 24 months in addition under OPT
- Median salary : 64,000 USD (55,000 Euros) according to specialization
  - PhD. (Doctorate) in the U.S. or elsewhere
    - Work in Europe or elsewhere

## Average annual salary in the U.S.

http://www.mastersportal.eu/articles/1609/from-novice-to-chief-engineer-6-best-paying-careers-for-engineering-graduates-in-the-us.html

ELECTRICAL ENGINEERING AVG ANNUAL SALARY = 96,000 USD COMPUTER ENGINEERING AVG ANNUAL SALARY = 110,000 USD MECHANICAL ENGINEERING AVG ANNUAL SALARY = 87,000 USD ENVIRONMENTAL ENGINEERING AVG ANNUAL SALARY = 96,000 USD CHEMICAL ENGINEERING AVG ANNUAL SALARY = 96,000 USD CIVIL ENGINEERING AVG ANNUAL SALARY = 96,000 **USD** 



Profesionales Espanoles en Chicago (PEC)

### Javier Perez –javierptg@gmail.com Sergio Perez – serpear@gmail.com

https://www.pec-network.com/about-pec

### Testimony from an alum Mr. Javier Perez, of ETSII-UPM & IIT ( IIT-MMAE 2008)

#### Was it worth it?

"Absolutely! The experience is worth the cost a compensation point of view as well as a personal endeavor Without the IIT, I would have not been able to work in the USA"

Would you recommend this experience to others & why? *The job market is a very competitive one. You need to be able to differentiate yourself. Coming to study in the USA gives you that differentiation*"
Salary range: first year 50+ 10K; 3<sup>rd</sup> yr: 65 +10K
"After F1 OPT, and then several H1bs, I got my green card last year, 9 years after I arrived in the USA"
Current job position: Senior Associate for Strategy

Illino

## Program II – Research -PROCEDURE

- Selected by school name submitted to IIT Europe
- Send required docs (certified copy of transcript in english only, 2 letters of recommendation, CV, copy of the name page of passport, certified letter of proof of intermediate level in English or official & valid TOEFL/IELTS score & a professional statement – identify three professors in one department at IIT, with whom you would like to work), proof of Bachelor's degree in English, VIA EMAIL to IIT France office
- IIT Europe will distribute the dossier to the 3 professors you are asked to identify within 1 department at IIT Chicago
- ➢ MUST CHOOSE ONLY ONE DEPARTMENT AT IIT
- IF APPROVED BY THE PROFESSOR AT IIT, IIT Europe OFFICE will inform you, after which you will send your certified transcripts in the native language and english, and the Financial support form IN ORIGINAL BY POST, directly to the Department coordinator at IIT. You will be informed where to send the documents once approved.

> DO NOT SEND ANY DOCUMENTS TO THE GRADUATE ADMISSION OFFICE NOR Illinois Institute TO THE PROFESSORS, AS THEY DO NOT PROCESS RESEARCH APPLICANTS



> Application deadlines: > Spring: Nov 1: Fall: Feb 15 Pre-selection by UPValencia > NO TOEFL nor GRE required Research period: 6 months  $\succ$  Registration fee at IIT for 3 credits (4,410 USD) (August 2017-May 2018 cost)

## Some Research Centers @ IIT

- > Ubiquitous Security & Privacy Research Lab
- Electric Power & Power Electronic Center
- Future Networking Research lab
- Computational Design & Manufacturing Lab
- > Medical Imaging Research Center
- > Embedded Capacity & Signal Processing Research
- Electric Drives & Energy Conversion La
- Fluid Dynamics Research center National Center of Excellence
- > Thermal Processing Technology Center
- Advanced Thermal & Environmental Systems Research Lab –(ATESR)
- > Robotics Lab
- > Wanger Institute for Sustainable Energy Research
- Particle Test & Crystallization Center
- Robert W. Galvin Center for Electricity Innovation Illinois Institute of Technology

## On-campus Housing @ IIT Gunsaulus Hall



#### On-campus Housing – State Street Village (SSV) designed by Helmut Jahn



## On-campus Housing @ IIT McCormick Student Village







#### **ROOM FEES:**

https://web.iit.edu/sites/web/files/departments/housing/pdfs/HousingRnB\_2 016-17%20x2.pdf

#### **BOARD ( MEALS) FEES:**

https://web.iit.edu/sites/web/files/departments/housing/pdfs/2016-2017%20Board%20Rate%20Sheet.pdf



## In the city : ~ min. \$1,000 on average (€426 - shared) or €852 (studio) – meals not included

Exchange rate: 1 Euro = 1.175 USD (Oct. 17, 2017)

## Your journey to Illinois Tech begins!





## For further information: Dr. Misquita iitparis@aol.com

#### **Attention:**

Please check the IIT website and the weblinks provided for any changes and/or updates that are likely to occur



#### ARMOUR COLLEGE OF ENGINEERING engineering.iit.edu

#### **COLLEGE OF SCIENCE** science.iit.edu

#### STUART SCHOOL OF BUSINESS www.stuart.iit.edu

#### SCHOOL OF APPLIED TECHNOLOGY appliedtech.iit.edu



<ul> <li>Undergraduates</li> </ul>	2,858
<ul> <li>Master's</li> </ul>	3, 253
• PhD's	615
• J.D.'s	888
<ul> <li>Non-degree</li> </ul>	236

Total

<u>7,850</u>



- 70.4% male
- 29.6 % female
- 12:1 student to faculty ratio
- **59% international students**
- \$60 million in research per year



## **Illinois Institute of Technology**

### Member of the Association of Independent Technological Universities www.theaitu.org (22 membres)

## I.I.T. Carnegie-Mellon CalTech M.I.T. Case Western Reserve ...

**MISSION OF THE AITU:** 

- Recruiting the <u>best and the brightest</u> to member schools by promoting the liberating experiences and rewarding careers that a technology-oriented education offers; and
- Fostering and advancing excellence in engineering, science and professional education from K-12 onward.
- Sharing ideas and best practices to advance and inspire creativity, innovation and entrepreneurship within the membership



## **Motto of IIT**

# ILLINOIS INSTITUTE OF TECHNOLOGY

Transforming Lives. Inventing the Future.



#### MAJOR IIT INVENTIONS BY ILLINOIS TECH'S ALUMNAE



#### Marvin Camras (Alumnus of IIT) IIT B.S. EE 1940; M.S. EE 1942 Inventor - Magnetic Tape

Born in Chicago in 1916, Camras was known to his family as an "inventor" by the age of five In the late 1930s, Camras was studying electrical engineering at the Armour Institute of Technology (now the Illinois Institute of Technology).

- Camras spent a fifty-year career at Illinois Institute of Technology, where he taught until 1994.
- By the time of his death in 1995, he had earned over 500 US and international patents for his work. He was inducted into the National Inventors Hall of Fame in 1985, and in 1990 he won the National Medal of Technology.





#### Marty Cooper ( Alumnus of IIT (B.S. EE 1950; M.S. EE 1957) Inventor – Cell Phone



Illinois Institute of Technology

1st Cell Phone – 1973 (« The Brick ») –weighed 2.5 pounds!! Named one of the best inventors of all time for his work on the first personal cell phone in the "Best Inventions of the Year" article in the October 30 Time Magazine 2007

**2nd invention – A new wireless** 

#### Internet system called iBURST

that puts high-speed data transmission at your fingertips!!

#### Ed Kaplan (Alumnus of IIT) (B.S. ME 1965) Inventor of the Bar Code printer

- CEO and Chairman, Zebra Technologies
- Ed Kaplan, one of Chicago's most successful technology entrepreneurs, studied at IIT, where he graduated with a bachelor's in mechanical engineering
- At 26 years old, Kaplan he co-invented the Bar Code printer called the « Zebra » and also created the first thermal transfer printer to print barcodes directly on products