

# Master's Double-degree **Programs**

by

Prof. Ray-Guang Cheng

Email: crg@mail.ntust.edu.tw

Go as far as you can see; when you get there, you'll be able to see farther.

J.P. MORGAN

## 台科大出國研習獎學金

--本國國籍之在校學生,英文檢定能力達 多益750分、雅思6分、托福IBT 79分以上

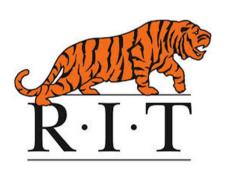
--大學部:學業總平均GPA達2.92分(含)以上, 且班排名為40%以內。

--研究所:學業總平均達80分(含)以上

亞洲: 6萬、非亞洲9萬,雙聯可申請2學期

#### Outline

- RIT@USA (3+2)
- CTU@Czech Republic (1.5+1)
- ECM@France (2+2+2)







#### **USA** and Rochester



NiagaraFalls (niagarafallstourism.com)

Letchworth Park (kleberly.com)





TAIWAN TECH

National Taiwan University of Science and Technology

## Rochester Institute of Technology

- Computer Engineering Department
  - Established in 1975, ~420 undergraduate and graduate students
  - 13 full-time faculty, 5 adjunct faculty, and 6 staff members, 7 research labs and 6 teaching labs
  - Core Areas:
    - Advanced Computer Architecture
    - Digital IC and Nano-Systems
    - Networks and Security
    - Computer Vision and Machine Intelligence
    - Embedded Systems, Signal Processing, and Control

## Rochester Institute of Technology

- Co-op Program
  - ~120 companies come to RIT to recruit CE students every fall and spring, for Co-op and full time positions
  - Close to 100% placement (BS and MS), Average starting salary: ~US \$73,000
  - Selected Industry Partners:
    - Freescale, Harris RF, Parsons, NVIDIA, ARM, Microsoft, Apple, Dell, Agilent, Boeing, Google, IBM, Intel, Xerox, Xilinx
  - Co-op and full-time hires, research collaboration, lab sponsorship, equipment donation, etc.
- BS/MS Double-degree:
  - 5-year program (3 years in NTUST + 2 years in RIT)
  - BS @ NTUST and MS (Computer Engineering)@ RIT

## Application

#### Requirement:

- GPA >=3.4, <=12 credits remaining at the end of the 3<sup>rd</sup> year.
- Same degree requirements for BS @ NTUST & MS @ RIT, with up to 3 graduate electives (9 credits) counted for both degrees.

#### Application

- Deadline: March 30 (Fall semester), Oct. 31 (Spring semester)
- TOEFL iBT: >=88 (full admission), 79~87 (conditional), or equivalent in other forms of TOEFL or IELTS.
- Application waived, GRE waived, 40% tuition scholarship.

## Czech Republic and Prague

- Czech Republic
  - Central Europe
  - Population: 10.5 millions
  - Currency: Czech Crown (100 TWD = 80 CZK)





- Prague
  - Capital of Czech Republic
  - City of hundred spires
  - 1.2 millions people







### Czech Technical University in Prague

- Czech Technical University in Prague
  - Among oldest universities in Europe (1707~)
    - ≈ 25 000 students
  - 8 Faculties
  - Faculty of Electrical Engineering (FEE) (1950~)
    - ~ 7 000 students (largest faculty within CTU)
    - 19+4 Departments
- MS Double-degree
  - "Electronics and Communications (EC)" Program, FEE
  - Program Duration: 5 semesters
  - 3 semesters in home university, 2 semesters in host university
  - Diploma of Master of Science in the study field Communications, Multimedia, and Electronics (CTU) 11



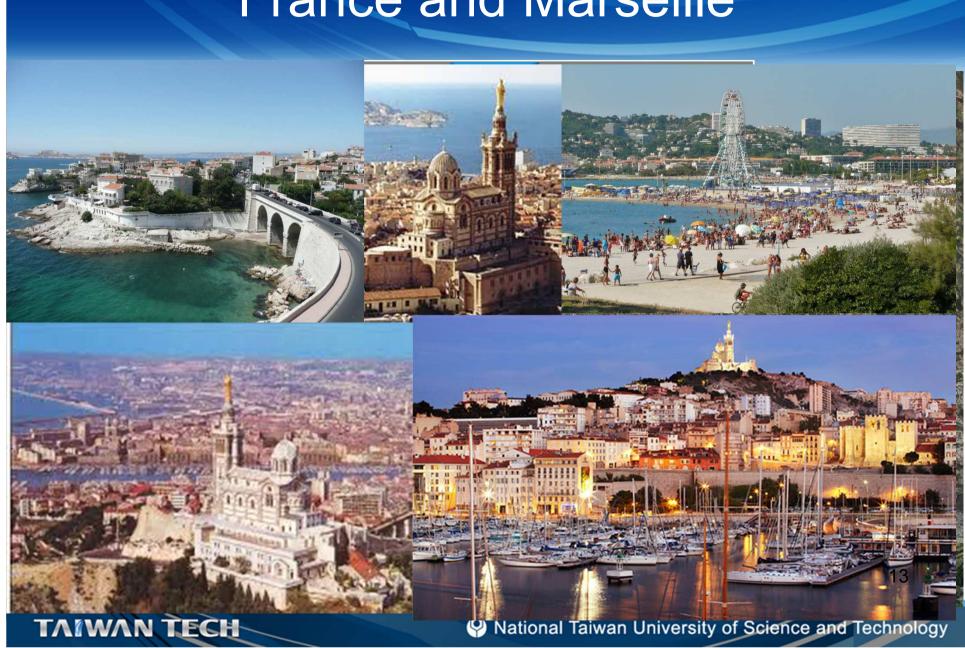
#### **Application**

- Requirement:
  - should receive 60 ECTS credits from CTU FEE
    - including 25 ECTS credits for diploma thesis.
    - 60-25=35 ECTS (~ 7 courses), one course should be Project
    - 6 courses/year, ~9 hours/week
  - Master thesis is
    - Written and presented in English
    - Defended in front of the examination committees at both universities.
- Application
  - Deadline: March 30 (Fall semester), Oct. 31 (Spring semester)
  - Language requirement: TOEFL 70/IELTS 6/TOEIC 800, or admission interview in English
  - Tuition fee is paid to Taiwan Tech

12







#### **Ecole Centrale Marseille**

- Centrale Marseille is not a university.
- Centrale Marseille is part of higher education establishments called "Grandes Ecoles" (≈ elite graduate schools). (~10%)
- "Grandes Ecoles" select students for admission based on national ranking with competitive exams in Mathematics and Physics.
- Academic staff: 120 permanent teachers and researchers and more than 200 instructors
- Technical and administrative staff: 70 collaborators
- Students: **702 engineering students**, 48 **PhD students**, 25 nationalities
- 7 research laboratories, 11 Master programs

#### NTUST and Centrale Marseille systems

	NTUST			ECM		
Yr.	Level	Workload	Credits	Level	Workload	Credits
1	Bachelor 1			Prep' school I	1052 hours	60 ECTS
2	Bachelor 2			Prep' school II	1033 hours	60 ECTS
3	Bachelor 3			ECM 1st year	803 hours	60 ECTS
4	Bachelor 4			ECM 2 <sup>nd</sup> year	716 hours	60 ECTS
5	Master 1			ECM 3 <sup>rd</sup> year	630 hours	60 ECTS
6	Master 2					

An opportunity for a student from NTUST to **obtain a high-level**, **generalist** engineering education recognized by French, European and International Companies

**Learn about industrial world** through company-linked experience of the French educational system (projects, internships ...) 15

## Application

- Requirement:
  - Should finish the Common Core (120 ECTS) @ ECM
  - Should finish the master program @ Taiwan Tech
  - Receive Two Master Degrees from ECM and Taiwan Tech
  - Selection based on academic result, motivation, and language skill
  - Tuition in French (建議具備法文B1 or B2能力)
- Application
  - Application Deadline: March 31
  - Acceptance Notification: June 15
  - Tuition fee is paid to Taiwan Tech

語言:法國文化協會(台大推廣部),師大法語中心



For details,

crg@mail.ntust.edu.tw

### Living Expense @ RIT

#### Tuition and fees:

- ~\$50K over two years for 30 semester credit hours (SCHs).
- Recommend 9, 9, 9, 3 or 9, 9, 6, 6 SCHs over four semesters.
- If selected, 40% tuition scholarship (higher possible based on academic performance) => ~\$30K over two years

#### Graduate Co-op opportunities:

- During summer after completing the first year of study at RIT, students may go for Co-op in US or in Taiwan.
- https://www.rit.edu/emcs/oce/student/intro-to-co-op
- Avg. Co-op pay rate: ~US\$25 / hr (40 hrs a week for 10 weeks)

#### Living expanses:

Varies significantly, but ~US\$1,000 per month is a reasonable estimate

### Living Expense @ CTU

- Tuition Fees (1 CZK =1.2~1.5 NTD)
  - Pay registration fee to Taiwan Tech
    - i.e. Master's program is 55 000 CZK/semester not paid by double-degree students
- Health Care Insurance: ~ 300 EUR/year
- Student dormitory: 150~300 EUR/month
- Food and meals: 100+ EUR/month
- Public transport pass: 10 EUR/month, OpenCard
- Personal expenses: 200+ EUR/month
- Flight ticket
- VISA application takes around 3 months
- Survival guide: <a href="http://intranet.cvut.cz/current-students/survival-guide">https://intranet.cvut.cz/current-students/survival-guide</a>
   <a href="https://www.fel.cvut.cz/en/education/information-for-applicants.html">https://www.fel.cvut.cz/en/education/information-for-applicants.html</a>

### Living Expense @ ECM

#### **Tuition fees are paid at NTUST not Centrale Marseille**

Health expenses : subscription to French student health insurance is compulsory

Travel expenses



Housing From 150€ to 350€ per month



Food : 350€ per month



#### Scholarship

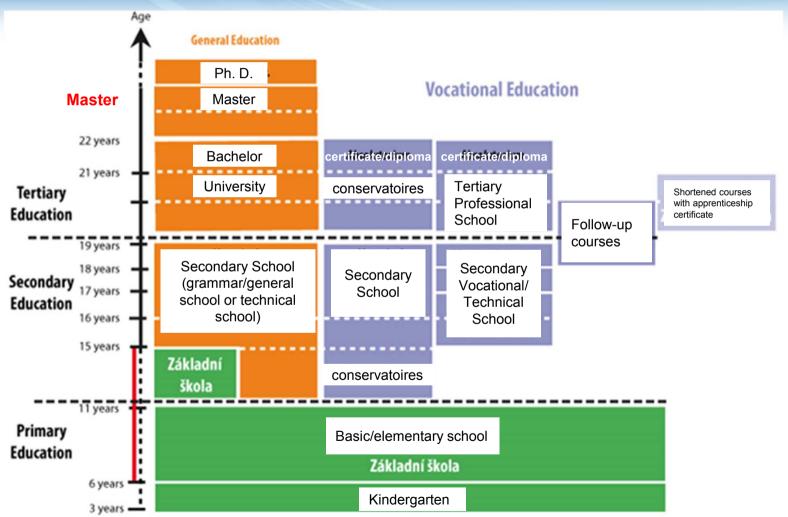
Eiffel Scholarships: 1100 € per month during 2 years
Based on academic merit (~3 students from China get it)

#### Joseph Fourier scholarship (25~30, acceptance ratio: 30%)

- Application deadline (March 31),
- 優先審核:理工科技、經濟商管、法律政治及語言科學、翻譯
- 法國在台協會傅立葉獎學金(BJF):屬激勵獎學金,獎助期限為碩士學程第一學期(期限六個月).獎助金615歐元/月
- 法國在台協會-宗倬章教育基金會傅立葉獎共同學金(BJF-TCC):本獎學金由宗倬章教育基金會及法國在台協會共同提供,獎助期限以取得碩士學位為原則(至多24個月)。獎助金800歐元/月

語言:法國文化協會(台大推廣部),師大法語中心

## Czech Education System



## France Education System

Engineering school (3 yr)

'Classe preparatoire" (2 yr)

University institute of technology (2 yr)

General High School (3 yr)

University PhD (3 yr)

Master (2 yr)

Bachelor (3 yr)

> Vocational High School (4 yr)

College (4 yr)

Elementary School (5 yr)