

ARTS ET METIERS PARISTECH

Graduate School of Engineering

***Partnerships for Excellence
in China***



Arts et Métiers ParisTech: 1st ranked French Graduate School in Mechanical Engineering



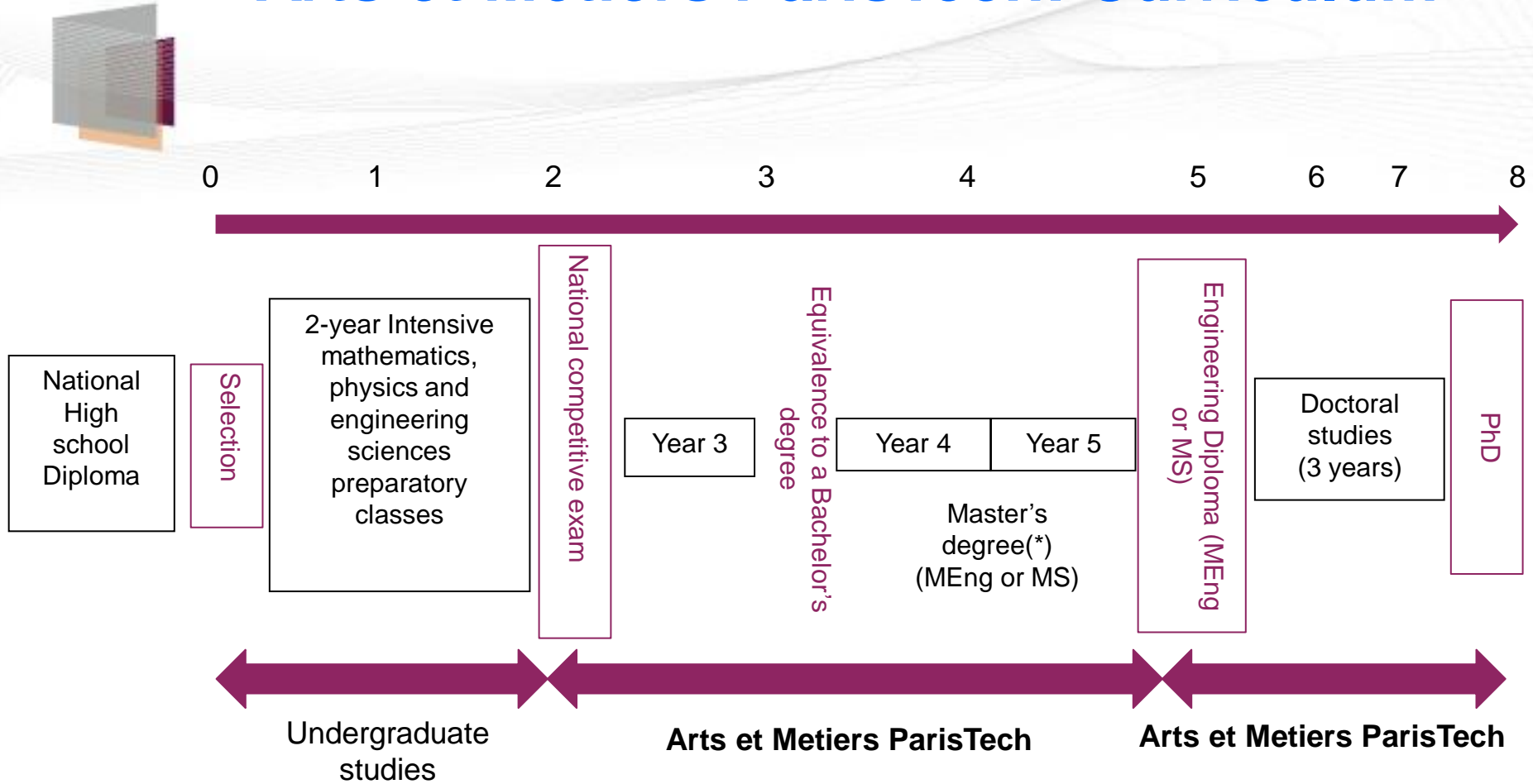
Key figures

- 5,700 students
- 1,000 graduate engineers per year
- 500 other degrees (including 250 PhD's)
- 380 full-time faculty
- 300 industrial lecturers
- 30,000 alumni
- 8 campuses all over France (research and education) and 3 research institutes

Background

- 1780: founded by the Duke La Rochefoucauld Liancourt
- 2008: ENSAM becomes “Arts et Métiers ParisTech”

Arts et Métiers ParisTech: Curriculum



(*) About 60% of total enrolled students graduate with an MEng

Arts et Métiers ParisTech: Research



Design, Innovation, Risk, Decision Department

85 Faculty members and 80 PhD students

Research topics:

- Process design and innovation, new concepts and trends, eco-design
- Preliminary design: product concept record, reduced models, architectures of specific products
- Industrial engineering methods and tools
- Virtual Immersion: geometric modeling, human-machine interface for digital mockup
- Mechanics and Design
- Intelligent Products
- Management of production systems, Lean manufacturing
- Risk management

Fluids and Energy Systems Department

75 Faculty members and 50 PhD students

Research topics:

- Characterization of physical phenomena with the development of dedicated instrumentation devices and associated methodologies
- Development of fluids mechanics models
- Development of controlled law of components (energy conversion systems) and supervision of large power systems (power grids).
- Design of energy conversion systems (turbomachineries, electrical machines...)

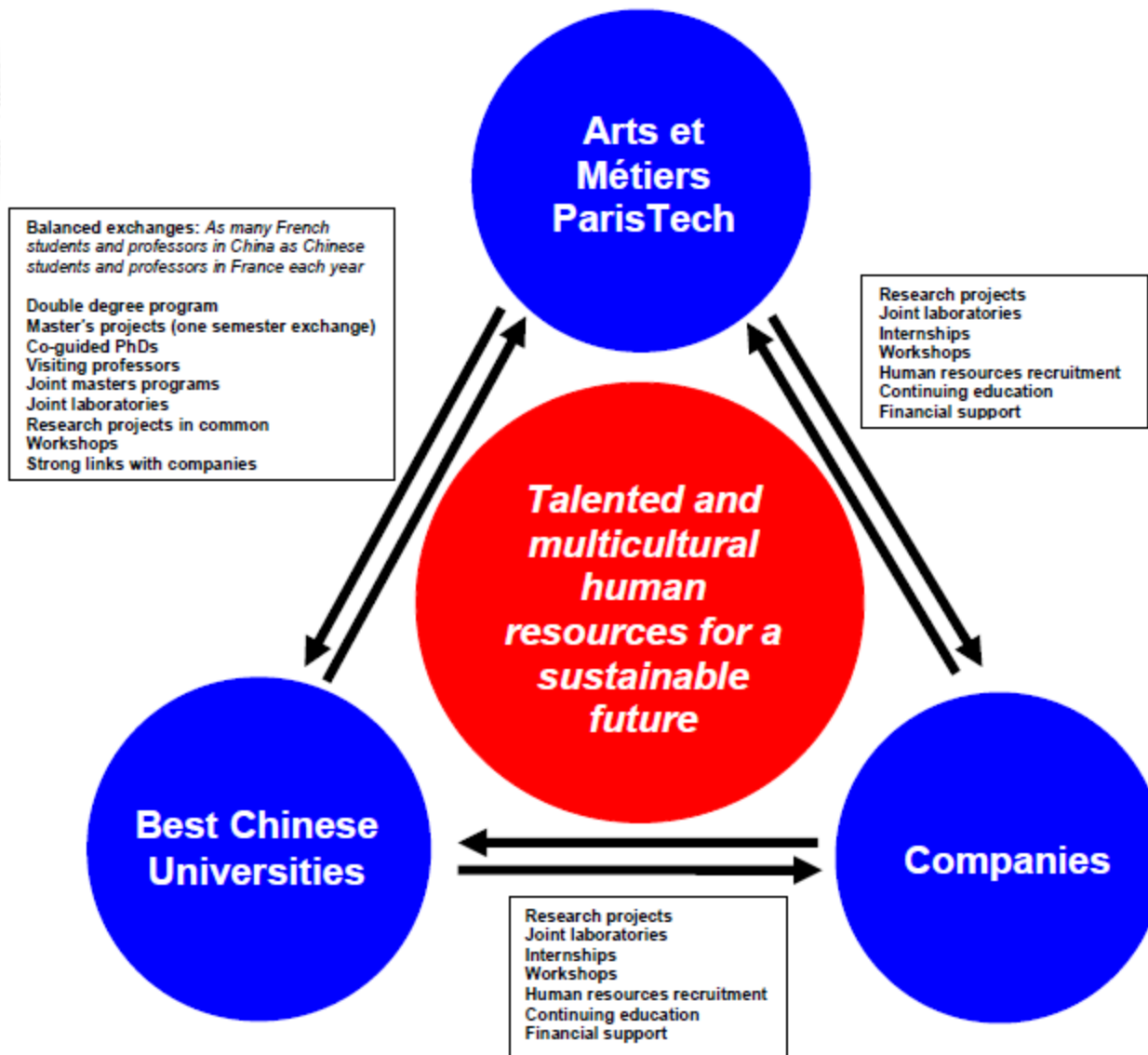
Mechanics, Materials and Processing Technologies Department

140 Faculty members and 120 PhD students

Research topics:

- Manufacturing and Industrial Processes (squeeze-casting, hot isostatics compression, thixoforming, rheocasting, laser manufacturing)
- Experimental studies on Materials
- Mechanical experimental studies on specific tooling (titane machining, belt grinding, high speed drilling, wood machining)
- Characterization of Material and Surfaces/ Sub-Surfaces (strain and deformation in a grain, analysis by X diffraction, strains analysis by X rays diffraction, topological characterization of surfaces)
- Thermo-mechanical characterization
- Biomechanics (musculoskeletal modeling, impact mechanics, nervous system modeling and movement restoration)

Arts et Métiers ParisTech: China Project



Arts et Métiers ParisTech: Partnerships in China

Partner Universities

BEIHANG, CQU, HIT, NUAA, NWPU, SDU, SEU, SJTU, TONGJI, TSINGHUA, UESTC, XJTU and in the next future: HUST, ZJU...

**Balanced exchanges of students at Master and PhD level (short and long term)
aimed to develop strong research links
between Arts et Métiers ParisTech and its Chinese Partner Universities**

Short term (1 semester)

Exchange of students for research projects co-guided between French and Chinese key-labs

Long term: double degree

(3 semesters (courses + research project) + internship in company)

Since 2008: 6 double degree agreements with SJTU, TONGJI, BEIHANG, HIT, XJTU and SEU

Long term: co-guided PhDs

Since 2012: co-guided PhD subjects proposed to all Chinese Partner Universities

Visiting professors

In 2011: 8 visiting professors from Chinese Partner Universities invited for a one-month stay at Arts et Métiers ParisTech for courses and research

Workshops

April 2012: 1st workshop on Materials Sciences with SJTU organized in Paris





Arts et Métiers ParisTech: Double Master Degree in China

Excellence exchange program at master level

- 2 degrees

Arts et Métiers ParisTech Engineer Diploma + Chinese University Master Degree

- Scheme

M1 at home institution

M2 abroad: 3 semesters (including master's thesis) + internship in company

Cursus for the French students

Selection of the candidates

Semester B3.1	Semester B3.2	Semester M1.1	Semester M1.2	July August	Semester 2.1	Semester 2.2	Summer	Semester 2.3	
Last Year of Bachelor ARTS ET METIERS PARISTECH		Master Year 1 ARTS ET METIERS PARISTECH		Succeed in China Package	Master Year 2.1 CHINESE UNIVERSITY	Master Year 2.2 CHINESE UNIVERSITY	Industrial Internship in China	Master Year 2.3 CHINESE UNIVERSITY	Possibility of Doctoral studies (co-guided PhD)

CHINESE U. Master degree
ENSAM Diplôme d'Ingénieur

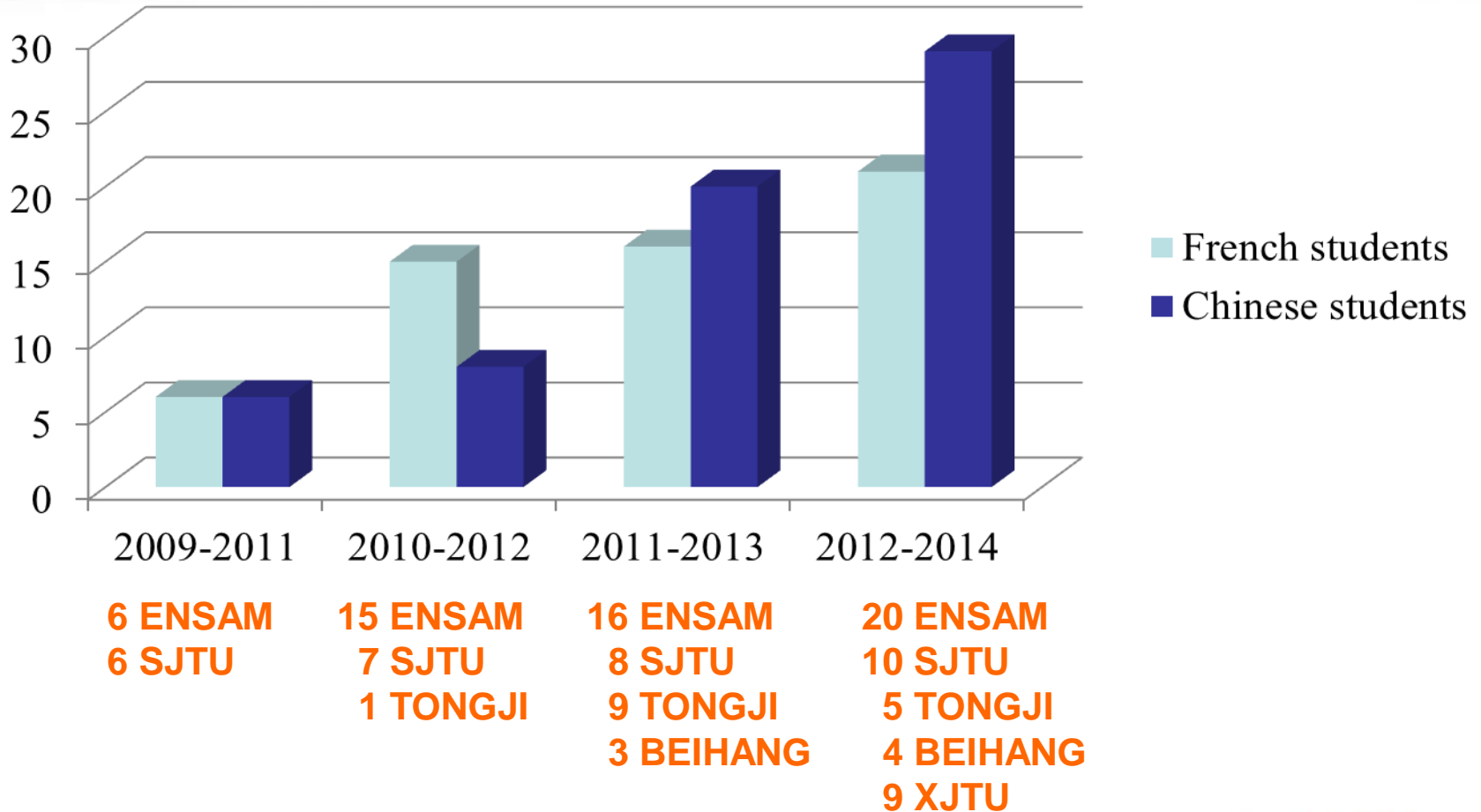
Cursus for the Chinese students

Selection of the candidates

Semester B4.1	Semester B4.2	Semester M1.1	Semester M1.2	July August	Semester 2.1	Semester 2.2	Summer	Semester 2.3	
Last Year of Bachelor CHINESE UNIVERSITY		Master Year 1 CHINESE UNIVERSITY		Succeed in France Package	Master Year 2.1 ARTS ET METIERS PARISTECH	Master Year 2.2 ARTS ET METIERS PARISTECH	Industrial Internship in France	Master Year 2.3 ARTS ET METIERS PARISTECH	Possibility of Doctoral studies (co-guided PhD)

CHINESE U. Master degree
ENSAM Diplôme d'Ingénieur
(+ Master of research)

Since 2008: 6 double degree agreements (Arts et Métiers ParisTech Engineer Diploma – Chinese University Master Degree) signed in China with SJTU, TONGJI, BEIHANG, HIT, XJTU and SEU



Succeed in China Package in Kunming for the French Students just before their courses in the Chinese Universities



Succeed in France Package in Kunming for the Chinese Students just before their courses at Arts et Métiers ParisTech



Welcoming Dinner by Arts et Métiers ParisTech Alumni in Shanghai for the Chinese Students before their Departure for France (June 2011)



Arrival in Paris: Welcome by Arts et Métiers ParisTech Alumni at Paris Roissy Airport



Angers Campus: 3-week cultural and pedagogical internship before the beginning of the courses



Application process for the double degree

September-October:

Preselection by home university: At the beginning of Bachelor 4 among the students selected directly for the master studies without taking the Master's national examination

At the end of October:

List of candidates and application forms with relevant documents for Bachelor 4 students and updated application forms with relevant documents for Master 1 students (preselected the year before) send by home university to ENSAM

At the end of November:

Interview of the students (Bachelor 4 and Master 1) by ENSAM professors

French language requirements: TEF 450 or TCF 400 in May of Master 1

Fees:

Tuition fees paid at home university (no tuition fees abroad)

Living expenses in France: around 600 € per month

Scholarships:

December: Eiffel scholarships (application by ENSAM for the best candidates)

March: CSC scholarships (application by Chinese students at home university)

April: « Pays de la Loire » scholarships (application by ENSAM)

May: Arts et Métiers ParisTech Foundation scholarships (application by ENSAM)

Other scholarships: Companies, French Embassy...



Welcome at Arts et Métiers ParisTech!