

## Vocational Training

The main functions of the vocational training center are to invite top European experts in the field of renewable energy to share their knowledge with Chinese professionals, and organize tailored topic training.

### • Training Objectives

To provide intensive training courses which cater to the special demands of professionals in the field of renewable energy.



To Help companies and research institutes in the field of renewable energy to gear up to new technologies and development trends in the context of a constantly changing and complicated market.

To promote exchange and cooperation between EU and China in the concern of new technologies and equipment in renewable energy field.

### • Training Contents

Systematic training courses in renewable energy with a focus in the fields of solar energy, wind energy, biomass energy, geothermal energy, and energy efficiency.

### • Training Methods

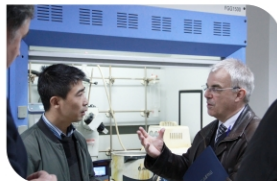
Lecture, onsite practice, seminar and discussion, dedicated training kit and, inspection by leading EU and Chinese enterprises and relevant government agencies.

### • Trainees

government officials, project investors, corporate managers, technicians, designers, educators, researchers, etc.

## Research and Consulting Platform

The Research & Consulting platform helps to facilitate communication between top energy experts in China and in Europe as well as to enhance cooperation in research and consulting in the field of clean and renewable energy.



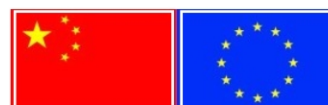
### mains functions

- Organizing international project application
- Offering consulting service for companies and governments
- Providing high profile international workshops and forums
- Ph.D exchange between EU and China
- Arranging visiting trip for experts

Research fields: solar energy, wind energy, biomass energy, geothermal energy, energy efficiency, and other clean and renewable energies.



Administration center: 86-27-87559714  
Educational center: 86-27-87559713  
Vocational training center: 86-27-87559715  
Research center: 86-27-87559715



ICARE is funded by the European Commission and the Chinese government  
本学院得到中国政府与欧盟委员会的资助

**China-EU INSTITUTE**  
**for Clean and Renewable Energy**  
at Huazhong University of Science & Technology

华中科技大学 中欧清洁与可再生能源学院

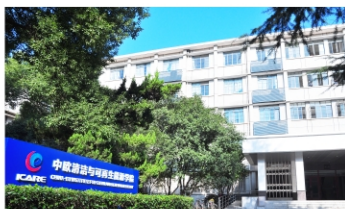
[HTTP://ICARE.HUST.EDU.CN](http://icare.hust.edu.cn)  
[HTTP://WWW.CEICARE.EDU.CN](http://www.ceicare.edu.cn)



# Introduction of ICARE

The China-EU Institute for Clean and Renewable Energy (ICARE) is the third institute co-sponsored by the Chinese government and the European Commission, following the China-EU International Business School and China-EU School of Law. Nine key universities and one institution from six countries participate in ICARE :

- Huazhong University of Science and Technology in China (HUST)
- ParisTech in France
- The National Technical University of Athens in Greece
- The University of Zaragoza in Spain
- Northumbria University in UK
- The University of Rome in Italy
- The University of Perpignan in France
- Southeast University in China
- The Wuhan University of Technology in China
- International Office for Water in France



## 3 functions

China-EU Double degree program



## 5 subjects

- Solar energy
- wind energy
- Biomass
- Geothermal energy
- Energy efficiency

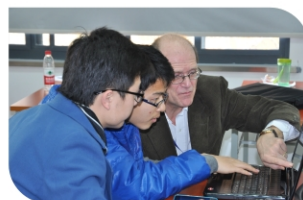
## Objective

The overall objective of ICARE is to enhance the capacity for implementing sustainable energy policies with a primary focus on renewable energy and energy efficiency in order to shape a more sustainable, environmentally friendly, and efficient energy sector.

## Double-degree Master Programme

The double master programme is a two-year based programme dedicated to outstanding students who already have a bachelor's degree in engineering or other relegated disciplines.

The qualified student will be granted the French Master Degree and the Chinese Master Degree.



### Double MasterDegree

New Energy Science and Technology  
(HUST)

Clean and Renewable Energy  
(Paris Tech)

### Characteristics:

- Double master degree
- European and Chinese teachers & tutors
- English language teaching
- Access to internship in China & Europe

## Way of cultivation

Year	1st Year (M1)		2nd Year (M1)		3rd Year (M1)
	1st semester	2nd semester	3rd semester	4th semester	5th semester
Course	General and basic theory courses	Specialized basic courses	Specialized three modules	European internship & English thesis defence	Internship & Eng. thesis (International stud.)
	ECT-credits transfer		Research work in labs according to ICARE regulations		
Credit	≥30 ECTS	≥30 ECTS	≥30 ECTS	≥30 ECTS	
	≥24 credits		≥24 credits		
Diploma				≥120 ECTS for European diploma	≥36 credits for Chinese diploma

## How to apply

- Application for International candidates shall be in accordance with the latest HUST Administrative Rules on the Acceptance of Foreign Students by Colleges and Universities.  
Website: <http://iso.hust.edu.cn/>
- Application for form mainland, Hongkong, Macao, and Taiwan candidates shall be in accordance with the latest HUST Graduate Enrollment Guides.  
Website: <http://yz.chsi.com.cn>

## Curriculum

Semester	Course name	Lecture hours	Credit	Internship	Faculty	Language
1 <sup>st</sup> semester	Survey of China ( for international students)	160	10	Submit research topic according to ICARE requirement	Chinese professors	English
	Basic Theory of Renewable Energy	≥ 48	3			
	Introduction to Renewable Energy	≥ 32	2			
	Policy and Management of Renewable Energy	≥ 16	1			
2 <sup>nd</sup> semester	Fundamentals of Solar Energy	≥ 32	2	Confirm research topic		
	Fundamentals of Wind Energy	≥ 32	2			
	Fundamentals of Biomass Energy	≥ 32	2			
	Fundamentals of Geothermic	≥ 32	2			
	Fundamentals of Energy Efficiency	≥ 32	2			
	Fundamentals of Electricity and Distributed Generation System and Micro-grid	≥ 32	2			
3 <sup>rd</sup> semester	1 optional course	3 optional courses	≥ 288	Attend lab research according to ICARE requirements	European Professors	English
	Solar Energy Technology	•Energy Economics and LCA •Conversion and Grid-connection Control				
	Wind Energy Technology	•Thermal Energy Efficiency •Electrical Energy Efficiency •Geothermal Energy Technology				
	Biomass Energy Technology	•Hydrogen Energy				
4 <sup>th</sup> semester	European degree thesis		12		Chinese and European tutors	English
5 <sup>th</sup> to/or 6 <sup>th</sup> semester	Chinese degree thesis		12		Chinese tutors	English

