



# **Tongji University**

International Master's Degree Program in Environmental Management and Sustainable Development

2022

**Shanghai, China** 





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# 1. Overview

Since 2015, Tongji University has undertaken the International Master's Degree Program in Environmental Management and Sustainable Development with the support of the Ministry of Commerce of People's Republic of China. The Program is designed to foster policy makers and practitioners for developing countries with integrated environment management vision and leadership ability at the local, national and regional levels on sustainable development.

Tongji University ranks A+ in the discipline of Environment according to the recent evaluation by the Chinese Ministry of Education. Among the 155 universities that were evaluated only 2 other universities ranked A+. According to 2021 Shanghai Ranking's Global Ranking of Academic Subjects,

# Environmental Science and Engineering at Tongji University ranks 32th in the world.

Over the past 5 years, 153 government and enterprise officials from 54 recipient countries have joined the Program. The Program provides a variety of courses including 15 core courses and 2 sets of public courses about Chinese language and culture. Senior experts of UN agencies, professors from world-renowned universities and diplomats are invited to give lectures and speeches, and more than 200 lectures are held throughout the year.

As for the positive effects and good results brought by the Program in strengthening economic ties and friendship between China and the recipient countries, the Ministry of Commerce will continuously intensify its efforts in enlarging the enrollment scale and improving the quality of education. By attending the Program and achieving the Degree, applicants will embrace a successful career and brighter future.



The alumni from this Program are now working in their specialties back in home, undertaking an increasingly significant role in the environment and economic development cooperation between China and their home countries. They are currently active in international organizations (e.g. the World Bank, UNDP, ESCAP), national government agencies (e.g. the Turkish Environment and Urban Planning Ministry, the Ministry of Labor and Social Security of Zambia, Egypt Ministry of Agriculture, Serbian Ministry of Agriculture and Environment, Ministry of Natural Resources of Ukraine, Ministry of Environment of Romania, Ministry of Economy and Trade of Indonesia, Ministry of Agriculture of Zimbabwe, Ministry of Energy of Liberia, Ministry of Environment of Ethiopia, Ministry of Environment of Mongolia), NGOs (e.g. WWF), academic institutions (e.g. Chinese Academy of Sciences, University of Wisconsin, University of Missouri, Tongji University), corporate departments (e.g. PricewaterhouseCoopers, Michelin) and other industries.

#### **EUROPE**

Albania Belgium Britain Denmark Finland France Germany Greece Italy Netherland Poland Portugal Rumania Serbia Spain Slovenia Turkey **Ukraine** 

Zanzibar

#### **AFRICA**

Afghanistan Algeria Benin Burundi Congo(Kinshasa) Chad Cambia Egypt Ethiopia Eritrea Ghana **Ivory Coast** Kenya Lesotho Liberia Malawi Mauritius Morocco Mozambique Namibia Niger Nigeria Rwanda Sudan Sierra Leone South Sudan Togo Tanzania Tunisia The Central African Republic Uganda Zambia

Zimbabwe

#### ASIA

Azerbaijan Bangladesh China **East Timor** India Indonesia Jordan Japan Kazakhstan Korea Laos Malaysia Maldives Mongolia Myanmar Nepal Philippines Oman Singapore Russia Tajikistan Thailand Turkmenistan Vietnam Yemen

#### **OCEANIA**

Australia Fiji Papua New Guinea Samoa Tonga

#### **NORTH AMERCIA**

America
Bahamas
Canada
Costa Rica
Cuba
Grenada
Jamaica
Mexico
Panama

#### **SOUTH AMERCIA**

Brazil Chile Ecuador Guyana Venezuela



# 2. Program Introduction

Academic Education Programs sponsored by the Ministry of Commerce of People's Republic of China are designed to foster high-end business officials and managerial personnel for the recipient countries, offering two-year master programs for the purpose of educating high-end and inter-disciplinary talent working in the applied fields of government, trade, foreign affairs, agriculture, technology, education, culture and health, building intellectual capacity and facilitating the economic and social development of the recipient countries.

In the aim of equiping applicants with integrated environment management vision and leadership ability at the local, national and regional levels on sustainable development, these programs provide assistance to governmental officials, research fellows, and senior managerial personnel on their education in China, which are fully conducted in English.

## **Objective**

To foster policy makers and practitioners for developing countries with integrated environment management vision and leadership ability at the local, national and regional levels on sustainable development

# Enrollment Plan

- Program: International
   Master's Degree Program in
   Environmental Management
   and Sustainable Development
- Enrollment quota: 30 persons
- Teaching language: English
- Duration: 2 years (1 year for courses and 1 year for research)
- Research topics: water treatment, environment management, solid waste management, environmental policy, biodiversity, climate change, SDG-related topics, etc.

## Scholarship Coverage

- Students are exempt from tuition fee, teaching material fee, research and survey fee, allowance of English-taught program, dissertation guidance fee
- Free on-campus accommodation
- Monthly stipend: 36000RMB per year per master student
- One-off resettlement fee: 3000RMB per person
- Free medical insurance for international students
- One-time round-trip international airfare for all the students (First time fly to China after enrollment, and Fly back to home country while graduation), and a maximum of "n-1" ("n" is for the length of schooling year which is set while the student was enrolled by the program, "n" is maximally to three) round-trip international airfares for home visits (one time per year set at the end of an academic year)
- The annual review is compulsory for all students.
   Those who pass the review may continue to enjoy full scholarships in the next year
- Other expenses shall be managed and used by the Ministry of Commerce or the universities as a whole, and shall not be distributed to students
- The Ministry of Commerce only provides students with financial assistance within their enrolled academic duration. Students who postpone their graduation will not receive the continuing sponsorship

## Academic Plan 2022-2024

**Sept. 2022** | Registration and start of semester 1

**Sept. 2022 - Jan. 2023** Semester 1 - Completion of courses

**Feb. 2023** Winter vacation

**Feb. 2023 - Jul. 2023** Semester 2 - Completion of courses

Jul.2023 - Aug. 2023 Summer vacation

**Sept. 2023 - Jan. 2024** Semester 3 - Research

Feb. 2024 Winter vacation

**Feb. 2024 - Jul. 2024** Semester 4 - Research and dissertation

**Jul. 2024** Defense and graduation

## **Curriculum and Faculty**

The Program offers a variation of 16 professional courses in the field of environment and sustainability and 2 sets of public courses about Chinese language and culture. All the courses will be taught in English. Courses will be taught with the form of lectures, seminars, case studies, field visits, and scientific research and so on.

This college's current community of scholars includes 171 staff members, among which there are 2 members from "Thousands of Plans", 2 member of Outstanding Youth Fund, 67 professors, 50 associate professors, 66 doctoral supervisors. Meanwhile, the college also invited Academician DUAN Ning, Academician HOU Li'an, former Executive Director of UN Under-Secretary-General, the United Nations Environment Programme, Dr. Klaus Töpfer and other prestigious environmental experts as honorary professors and visiting professors, and many universities



and research institutions from all over the world have a close cooperation with the college in teaching and research.

## **Graduation Requirements**

#### **Study Plan and Credits**

Each student will make a study plan before starting all the courses. Students can customize their study plan according to their interests and research topics.

According to the credit standard of Tongji University, academic degree graduates are required to get at least 31 credits: 6 credits for public degree courses, no less than 12 credits for professional degree courses, no less than 8 credits for non-degree courses, 5 credits for compulsory courses.

## **Study Plan**

课程性质 Type	课号 Code	课程名	Course name	学期 Semester	学分 Credit	Remarks
公共学位课	2300001	第一门外国语 (汉语)	Chinese Language	Spring/Autumn	3	compulsory, available in both semesters
Public Degree Course	2900006	中国概况	A General View of China	Spring/Autumn	3	compulsory, available in both semesters
专业学位课 Degree Course	2050136	环境系统与可持续发展	Environmental System and Sustainable Development	Spring	2	compulsory
	2050143	环境科学概论	Environmental Science	Autumn	2	compulsory only for non- environmental background
	2050199	生态经济学	Ecological Economics	Spring	2	compulsory
	2050147	环境管理与政策	Environmental Management and Policy	Autumn	2	
(6 courses to be taken)	2050186	固体废物处置与资源化	Intergrated Solid Waste Management and Reuse	Spring	2	
	2050188	污水处理的原理与技术	Wastewater Treatment: Principles and Technology	Autumn	2	
	2050189	给排水工程的原理与技 术	Water Supply: Principles and Technology	Spring	2	
	2050149	大气科学与气候变化	Atmospheric Science and Climate Change	Spring	2	
专业非学位 课 Non-degree Course (4 courses to be taken)	2050141	环境伦理学	Environmental Ethics	Autumn	2	compulsory
	2050211	文献检索与科技论文写 作	Literature Search and Scientific Writing	Autumn	2	compulsory
	2050224	水资源管理	Water resource managenment	Autumn	2	
	2050191	水环境化学	Aquatic Environmental Chemistry	Spring	2	
	2050194	环境分子微生物学	Environmental Molecular Microbiology	Spring	2	
	2050150	环境信息学	Environmental Informatics	Spring	2	
	2050210	通用试验原则与数据逐 层分析	Common Experiment Principles and Step-by-Step Data Processing	Autumn	2	compulsory only for experimental research students, pls confirm with your mentor
	2050196	环境系统分析	Environment System Analysis	Autumn	2	
必修环节 Compulsory Section	2900012	公共讲座	Lectures	To be completed before the mid-term assessment.	2	compulsory, at least 16 lectures, online registration+summary for each;
	2050231	实验室环境健康与安全	Safety and Health in the Lab	compulsory	1	compulsory
	2900011	学术行为规范	Conduct norm	To be completed before the end of the 1st semester.	1	compulsory
	2900002	开题报告	Research Proposal	To be completed at the beginning of the 2nd semester.	1	compulsory
	2900013	中期考核	mid-term assessment	To be completed at the beginning of the 3rd semester.	0	compulsory, at least 2 months after the submission of the research proposal
	Λ	预答辩	Pre-Defense	To be completed before the end of the 3rd semester.	0	compulsory
	1	答辩	Defense	To be completed before the end of the 4th semester.	0	compulsory, at least 6 months after the submission of mid-term assessment
	١	学位论文	Degree Thesis	To be completed before the end of the 4th semester.	0	compulsory
	1	学术小论文	Academic Publication	To be completed/published before the end of the 4th semester.	0	compulsory

#### **Dissertation, Defense and Publication**

Students are required to finish all the academic and non-academic courses within the first year (Academic Master 31 credits), complete the master degree dissertation (65-70 pages) independently and pass the dissertation defence in the second academic year be fore applying for the certificate of graduation of Tongji University. Only academic paper with issue number published, the student could apply for Master Degree Certificate.

For detailed dissertation and defence requirements, please check Tongji relevant regulations at https://gs.tongji.edu.cn/info/1053/1714.htm.

## **Certificates**

Certificate	Requirement for certificate application
Certificate of Graduation	<ul> <li>Complete all the courses as required</li> <li>Finish the final dissertation</li> <li>Success in the final Defense</li> </ul>
Certificate of Degree	One paper published in academic journal or academic conference (with ISSN number)



# 3. How to Apply

## Qualification

To be eligible, applicants must:

- be a citizen of a developing country other than the People's Republic of China, and under the age of 45
- 2. be healthy physically and mentally with a physical examination report issued by a local public hospital, and not having any disease or situation listed below:
  - Diseases prohibited by Chinese Entry-Exit Inspection and Quarantine Laws and Regulations
  - Other severe chronic diseases like high blood pressure, cardio-cerebrovascular disease, diabetes; psychological

- diseases; or other infectious diseases which may harm public health
- In recovery period after major surgery or acute disease attacks
- Severe physically challenged
- Pregnancy
- be a Bachelor's degree holder when applying for the Master Program
- be proficient in oral and written English (with certain English proficiency certificate, including IELTS or TOEFL IBT Score, Certificate of English Courses, Certificate of English Scores or any other certificate that presents applicant's language level)
- 5. be with the potential of professional development, and is committed to promoting the friendly exchanges and cooperation between the host country and China

## **Application**

### **Program Application**

- Register in Tongji online application system at http://study-info.tongji.edu.cn/, then start the application by clicking on "Online application".
- 2. Choose "Commerce Ministry Scholarship" as your program as the picture shows, and select "Environment Science" as "Research Field".



- Fill in the application form online and upload all the scanned copies of application documents. MOFCOM Scholarship application form should also be uploaded as one of the application documents.
- After submission, send the scanned copies of application documents to the following email address: unep\_tongji@ tongji.edu.cn.

#### **Scholarship Application**

- Please visit the offical webiste of the Chinese Scholarship
  Council (CSC) at https://www.campuschina.org/ (or directly
  visit the registration page of its online application system
  at https://studyinchina.csc.edu.cn/#/login), register for an
  account and fill in the application form.
- Select the program "Chinese Government Scholarship" –
   Category B, fill in all the required information and submit the form.

## Reminder

- The code of Tongji University is 10247; the discipline is Engneering; the major is Environmental Science.
- The CSC number in your form would be used for Chinese study visa application.
- The scholarship form is required for program application.

## **Submission**

For application, the applicant need:

- 1. A recommendation letter from current employer
- 2. Two academic recommendation letters by 2 professors
- 3. Scanned copy of Bachelor's degree diploma
- 4. Scanned copy of undergraduate academic transcripts
- 5. Research plan
- 6. Personal resume
- 7. Scanned copy of passport (do not use diplomatic or service passport)
- Scanned copy of English proficiency certificate (e.g. IELTS or TOEFL IBT Score, Certificate of English Courses, Certificate of English Scores or any other certificate that presents applicant's language level)
- 9. Scanned copy of ID photo
- 10. Copy of the Foreigner Physical Examination Form within 6 months

## **Tips**

Before submission, the applicant need to note that:

- The applicant shall obtain the recommendation from the employer or relevant department of local government of host country before applying for this scholarship. Afterwards, the applicant can submit application according to the requirements of above department.
- If the local government allows the applicant to submit the individual application directly to the Chinese Embassy, the applicant shall submit the relevant documents to the Economic and Commercial Counsellor's Office (ECCO) of Chinese Embassy in host country. The scanned copies of documents are required as well. For contact information of ECCO, please visit <a href="http://www.china-aibo.cn">http://www.china-aibo.cn</a>.

- The department of local government shall send a written request to the ECCO of Chinese Embassy for an official recommendation letter for the applicant. This request shall clearly state:
  - Whether the applicant considers a similar program at other universities if not accepted by the applied program.
  - Other special requests if any.

## **Deadline**

20 May, 2022

## **Contact**

Contact person: Yu CHEN

**Tel:** 0086-21-65982119

**Fax:** 0086-21-65987790

Email: chenyu\_429@tongji.edu.cn

unep\_tongji@tongji.edu.cn

Website: http://unep-iesd.tongji.edu.cn/

Address: Room 903 Zonghe Building, Tongji University, No.1239

Siping Road, Shanghai, China

## **Important Notices**

- All submitted documents should be in Chinese or English. Otherwise, a notarized copy in Chinese or English is required.
- The original document of your degrees, transcripts and language certificates must be presented for ECCO's on-site verification. Once verification is done, you should send all scanned copies to Tongji University at unep\_tongji@tongji.edu.cn.
- You can get back all the hard-copy materials, both original materials and copies after verification. If admitted, you should bring the documents to Tongji University for submission.
- No explanation will be given on the enrollment result.
- Applications without the recommendation from the ECCO of Chinese Embassy will not be considered.
- Application materials will not be returned regardless of the result of application.
- Chinese government will not comment on the result of application.
- The visiting fee of your spouse or children is not provided.
- Specification on procedures of how to come to China will be attached in the admission files.



# 4. About Us

## **About Tongji University**

Tongji University is one of the leading universities in China under direct administration of Ministry of Education, listed on "Project 985" and "Project 211". With a history of over a century, Tongji has valued the balanced development of four functions, namely education, research, outreach, and culture inheritance and innovation.

The history of Tongji can be traced back to 1907 when German Medical School was founded by Erich Paulun, a German doctor in Shanghai. After being renamed Tongji German Medical School in the following year, it was formally established as a university in 1923. It became National Tongji University in 1927,

one of the seven earliest national universities of China. Around 1949, Tongji already boasted five colleges of natural sciences, engineering, medical science, liberal arts and law, and enjoyed a fine reputation as a comprehensive university both home and abroad. Following a nationwide campaign of restructuring universities in 1952, Tongji became an engineering-intensive university with top-notch strength in civil engineering and architecture, which is second to none in terms of scale and number of disciplines. Since 1978, "two transforms" were launched, namely, the transforming to an international university by restoring links to Germany, and the transforming from a university focusing mainly on civil engineering to multidisciplinary engineering university. In 1995, Tongji declared to be jointly built by the Ministry of Education and the Shanghai Municipal Government. By 2007 when it was celebrating its centennial, Tongji had become a comprehensive, international, research-oriented university with distinct features and global influence. In 2013, the university proposed its vision of "a sustainability-oriented, world-class university".



Aiming to grow with China and serve the world with science and technology, the University has long focused on unleashing the spillover effect of its flagship disciplines for the greater public good, and actively contributing to the economic and social

development at the national and regional level. The University has always taken an active role in expanding international cooperation. With close historical ties with Germany, it partners mainly with European universities but is also actively expanding its influence to North America, Asia, and Africa. So far, it has established 12 international cooperation platforms in partnership with Germany, France, Italy, Finland, Spain, and United Nations agencies. The University has also signed a memorandum of understanding with over 200 international universities and co-founded research centers with Volkswagen, Siemens, Bayer, IBM, and many other multinational enterprises. The University initiated the "China Green University Network (CGUN)" and the "International Green Campus Alliance (IGCA)", and acted as the first President. It was also elected as the League President of Global Universities Partnership on Environment for











Sustainability (GUPES) under the United Nations Environment Programme and became the first Asian university to win the "Excellence in Campus Award" at the meeting organized by International Sustainable Campus Network.

## **About CESE and IESD**

The College of Environmental Science and Engineering (CESE) at Tongji University was one of the earliest established colleges dedicated to environmental education and research in China. Its predecessor was the Department of Health Engineering established in 1952 and later the Department of Environmental Engineering established in 1978. Currently, CESE comprises three specialty branches: Environmental Engineering, Municipal Engineering (Water Supply and Sewerage Engineering), and













Environmental Science, all with undergraduate, master, doctoral, and postdoctoral programs. In order to promote the research and education in the field of global environment issues and sustainable development, the United Nations Environment Programme-Tongji Institute of Environment for Sustainable Development (IESD) was co-established by UN Environment and Tongji University in 2002. The close affiliation of IESD with CESE committed the active involvement of CESE in international environmental education and scientific research.

UN Environment-Tongji Institute of Environment for Sustainable Development (IESD) was jointly established by UN Environment and Tongji University on May 9, 2002 upon the signing of the Letter of Agreement between Dr. Klaus Töpfer, then UN Under-Secretary-General and UN Environment Executive Director, and Prof. Qidi Wu, then President of Tongji University, in the College of Environmental Science and Engineering. At the 2014 IESD Board Meeting, the Board decided to elevate IESD to its next level, as a global think-tank for UN Environment in promoting sustainable development education and capacity building, research on the environmental and urban development issues.

IESD achievements over 2015 are based on the guidance and support of UN Environment, Chinese relevant Ministries, Shanghai Government, international and domestic organizations. IESD mobilizes resources from its stakeholders and is leading efforts for a sustainability-oriented university at Tongji University, with a green campus, inter-disciplinary education and integrating sustainable development into higher education and social service. From 2004 to 2021, IESD has organized around 50 international and domestic training programs, seminars and trainings, attracting 5,000+ participants from all over the world. IESD have recruited 595 students from 96 countries and regeions (including China) since 2006.

In 2012, the Global Universities Partnership on Environment and Sustainability (GUPES) was launched at IESD in the lead up to the Rio+20 Summit. Professor WU Jiang, Vice President of Tongji University and Dean of IESD, was elected as the Chair of GUPES. GUPES provides a global platform for Universities to mainstream environment and sustainable development into higher education, to incorporate sustainable development concepts and best practices in higher education, and to train technical and management personnel, particularly for developing countries. It also provides Universities the opportunity to benefit for UN Environment's knowledge base on environmental and sustainability issues. Over 560 Universities are currently part of the growing GUPES network.

IESD also conducts interdisciplinary research and promotes know-how transfer to developing countries through technology cooperation. Working together with UN Environment, IESD implemented the Chongming Eco-island Evaluation Report and assisted UN Environment's assessment of Shanghai's efforts















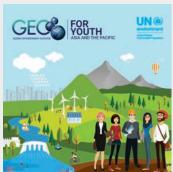
to organize an environmentally-friendly Expo 2010. IESD also launched the Chinese version of UN Environment's Green Economy Report. Since 2012, IESD translated a series of UN Environment's flagship publications into Chinese.

In collaboration with UN-Habitat, Tongji launched the publication of Net Zero Carbon Village Planning Guidelines for the Yangtze River Delta Region in China in the first UN HABITAT Assembly and Making Cities Sustainable through Rehabilitating through Polluted Urban Rivers during the fourth United Nations Environment Assembly (UNEA-4). IESD also participated in drafting the UNEP flagship report Global Environmental Outlook for Youth, Asia and Pacific.











The China Meteorological Administration (CMA) and Tongji University signed an agreement to initiate overall collaboration on capacity building, disciplinary development, research, talent cultivation on climate change, technology transfer and resources sharing. Key Laboratory of Cities' Mitigation and Adaptation to Climate Change in Shanghai, China Meteorological Administration was launched by the end of 2014 with the support of CMA and Shanghai Meteorological Bureau.































# 5. Life in Shanghai

## **Campus Service**

Tongji University has established 29 schools/colleges, 11 affiliated hospitals, and 13 affiliated primary and secondary schools. Tongji's four campuses of Siping, Jiading, Huxi, and Hubei cover a total area of 2.56 square kilometers, with a floor area of about 1.84 million square meters. The University Library houses 4.55 million books in its collection. The Program would be mainly conducted at Siping Campus. The students can easily access to swimming pool, tennis ground, gym, shops, etc. on campus.

In terms of food and drinks, the University proudly enjoys the reputation for gastronomy, with canteens serving a whole range

of tasty and healthy foods at minimal prices. There is even a Muslim canteen right beside the international student dormitory buildings serving authentic Halal food.

The University offers single rooms for the candidates either at Siping Campus or other campus.

For more information about Tongji campus life, please see: https://en.tongji.edu.cn/Campus\_life.htm













## Metropolis

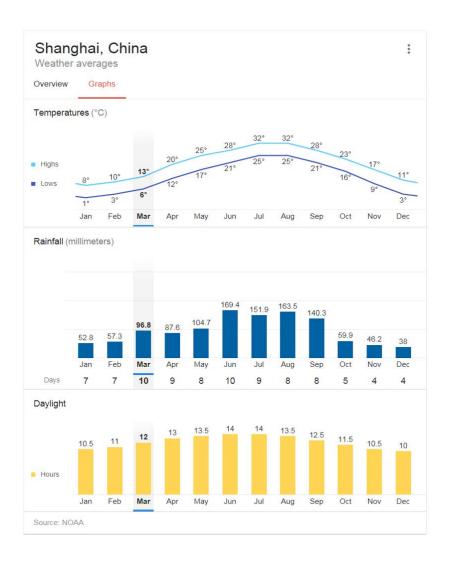
Life in Shanghai is rich, safe and convenient. Shanghai is a metropolis of eastern and western culture, traditional and modern China. You have a variety of options when it comes to exhibitions, concerts, shows and entertainments. Shanghai is one of the safest and convenient city in China. Public resources and facilities are readily available and accessible.

Shanghai is one of the most international cities in China. Most young people understand and speak basic English. However, you may find it difficult to communicate with local taxi drivers, cashiers in stores, or middle-aged and senior people. Therefore, it is helpful if you can learn how to say the address for the residence hall and campus in Chinese, or other basic Mandarin before you come, such as asking for road, asking for help, etc. Keep a copy of the address card we prepared for you in your purse or wallet in case the driver cannot understand you.









While you study in Shanghai, take advantage of the opportunities you have to speak as much Chinese as you can at all times, and do not be afraid to speak. You will find that locals are very encouraging to new speakers and will always compliment you on your speaking.

Shanghai has a typical climate of subtropical monsoon, with four distinct seasons, full sunshine and abundant rainfall. The climate is mild and humid, with short spring (April-May) and autumn (October-November), long winter (December-March) and summer (June-September). Shanghai's rain season is from May to September. From July to August, it is humid and hot. On average, there are 8.7 days when the highest temperature exceeds 35 degrees Celsius. The coldest season of the year is from mid-January to early February.

















# Tongji University International Master's Degree Program in Environmental Management and Sustainable Development 2022

