

2025 China-Spain Engineering Competency Enhancement Training Program for Engineers

(draft as of July 4, 2025)

In line with the Memorandum of Understanding(MoU) between the Chinese Society of Engineers (CSE) and Instituto de la Ingenieria de España (IIE), the 2025 China-Spain Engineering Competency Enhancement Training Program for Engineers will be held in September, 2025 in Qingdao, Shandong Province, China. It aims to build a platform for mutual learning between Chinese and Spain engineers, enhancing engineering competencies.

I. Title and Theme

Title: 2025 China-Spain Engineering Competency Enhancement Training Program for Engineers

Theme: Bridging Engineers from China and Spain Through Engineering, Boosting the Enhancement of Engineering Competency

Engineering Technology Fields: Coastal engineering, Marine equipment manufacturing, Marine environmental monitoring, Port construction and management, Subsea tunnels, Seawater desalination, Hydropower and dams.

II. Time and Venue

Time: September (TBC), 2025 (7 days, including arrival and departure)

Venue: Qingdao, Shandong Province

III. Organizers

Host: Chinese Society of Engineers (CSE)

Co-Organizers:

Shandong Association for Science and Technology (SDAST)

Chinese National Committee on Large Dams (CHINCOLD)

Shandong Young Scientists Association

Support: Qingdao Association for Science and Technology

IV. Participants

It is planned to invite 20 engineers from Spain and 25 engineers from China to participate in the program. The organizers will cover all expenses from the day when you register the program to the day when the program ended, including accommodation, food, and technical visit, domestic transportation during the program (including arrival and departure). Candidates applying for the program should meet the following requirements:

- Under 45 years old
- Bachelor degree or above
- Work in the fields above with at least 5 years
- Fluency in English

***Please send the application attached before July 31, 2025.**

V. Schedule:

Date	Time	Activity
Day 1	All day	Registration
	Evening	Ice-breaking
Day 2	Morning	Opening ceremony
		Presentation: <i>"Engineering Talent Development & International Cooperation"</i> – Ling Wen (Academician, Chinese Academy of Engineering; Chairman, SDAST)
		Presentation: <i>"Innovative Practices in Engineer Capacity Building"</i> – Introduction to CEC's engineering standards, international recognition, and industry collaboration
		Presentation: <i>"Engineer Training & International Qualification Mutual Recognition"</i> – Foreign engineering representatives share their national standards and mutual recognition progress
	Afternoon	Technical Visit & Exchange: Haier COSMOPlat Industrial Internet Platform – Case studies on smart manufacturing and digital transformation

Date	Time	Activity
Day 3	Morning	Technical Visit & Exchange: East Asia Marine Expo & Qingdao Port Automated Container Terminal – Exhibits on marine materials, offshore equipment, and emergency response; insights into automated port operations
	Afternoon	Workshop: 1. Visit China Ocean University's School of Excellence in Engineering 2. Presentation: <i>"Engineering Applications of Offshore Wind Farm Construction & Safety Technologies"</i> – Prof. Chen Xuguang (National Outstanding Young Scholar) 3. Presentations from Spain 4. Discussion
Day 4	Morning	Presentation: 1. <i>"Marine Science Innovation & Global Ocean Governance"</i> – Qiao Fangli (Chief Engineer, First Institute of Oceanography, European Academy of Sciences) 2. <i>"Global Youth Talent in Sci-Tech Innovation & Leadership"</i> – Morten Ugelvig Andersen (CEO, Danish University Alliance)
	Afternoon	Technical Visit & Exchange: Qingdao Bafang Seawater Desalination Plant – Advanced desalination processes and their societal impact
Day 5	Morning	Workshop: 1. Visit Qilu University of Technology (Shandong Academy of Sciences Marine Instrumentation Institute) 2. Presentation: <i>"Engineering Applications of Marine</i>

Date	Time	Activity
		<i>Eco-Monitoring & Remote Sensing</i> " – Liu Yan (Deputy Director) 3. Interactive Discussion
	Afternoon	Special Activity: Visit Qingdao Science & Technology Museum (Theme: " <i>Ocean • Science • Humanity</i> ") – Promoting marine science awareness and international collaboration in ocean conservation
Day 6	Morning	Technical Visit & Exchange: Jiaozhou Bay Bridge & Subsea Tunnel – Insights into mega marine infrastructure projects
	Afternoon	Closing Ceremony
Day 7	All day	Departure

Appendix: Key Site (Specific description pending)

1. China Ocean University School of Engineering – A leading marine-focused engineering institute with eight undergraduate programs and key provincial labs.
2. Qingdao Port Automated Container Terminal – A world-leading "Hydrogen + 5G" smart port with record efficiency.
3. Haier COSMO Plat – A globally replicated industrial internet platform enabling mass customization.
4. Qingdao Bafang Seawater Desalination – China's largest membrane-based municipal desalination project.
5. Qilu University of Technology (Marine Instrumentation Institute) – A national hub for marine monitoring tech R&D.
6. Qingdao Science & Technology Museum – A major public science hub with ocean-themed exhibits.
- Jiaozhou Bay Bridge – Formerly the world's longest cross-sea bridge (36 km).
7. Jiaozhou Bay Second Subsea Tunnel – The world's largest undersea road tunnel under construction.