

Travel Course Syllabus
“STEM and High Tech in China”
Travel Course (Winter 2019/2020)
Travel dates: January 4 – January 18, 2020

Faculty Leaders

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Department of Computer Science



Course Registration Information

3 Undergraduate Credits in MATH 355 (Core - CGCL), INTD 345 (Core - CGCL) or contact faculty for options

3 Graduate Credits, please contact faculty leader for options

Course Description

Student will participate in a 2-week firsthand experience in two megalopolitan cities, Beijing and Shanghai, in China. They will explore the role of science, technology, engineering, and mathematics (STEM) and their corresponding applications of High Tech in China, such as the bullet (high speed) train, mobile payment service, bicycle sharing service, take away service by mobile app, restaurant intelligent queuing ordering service, etc. Furthermore, students will learn the teaching and learning culture at the universities in China by receiving lectures from the professors and scholars in the STEM field. They will also visit the high tech companies in both Beijing and Shanghai. Students will utilize their knowledge of computer science, statistics, and big data analytics to analyze the data associated with the High Tech in China. Moreover, students will experience the traditional Chinese culture by visiting the Palace Museum and the Great Wall in Beijing and the modern Chinese culture by attending Shanghai Landmarks, Oriental Pearl, the Oriental Pearl Tower, and the Jinmao Building in Shanghai. They will also learn how to make the traditional Chinese food, dumplings, taste the famous Chinese tea and eat Huoguo (Hot Pot) together. Students will also examine the linguistic (dialects) and culture variations in China and learn through practicing a few days prior to the Chinese Spring Festival (January 25, 2020).



Learning Outcomes

Students will

- connect areas of their major/expertise to STEM and High Tech in China.
- improve their knowledge and experience of the High Tech applications, such as mobile payment system, bullet train, face recognition system, and so on, in China.
- learn the use of mathematics, statistics, data science, and computer science associated with High Tech in China.
- visit high tech companies in China and experience the enterprise company.
- use their background knowledge in their discipline, combined with the information collected through observations, and identify focus areas for analyzing the data collected or searched for on the High Tech in China.
- examine the attributes of the China culture, culture diversity, and culture identity development and experience the two different ancient and modern cultures in China.

Assignments and Grading

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|-------------------------------|-----|
| • In-country Lesson or Talk | 25% |
| • In-country Research Project | 25% |
| • Research Written Report | 20% |
| • Post-travel Presentation | 15% |
| • Professional Dispositions | 15% |

Program Cost

Application fee: \$25.00

Program price range: \$3500.00

The program fee will never exceed the maximum amount advertised and program fee refunds will be issued, if there are savings.

Program Cost Includes

Airfare, accommodations, transportation and guides in China, and admission to museums and parks. Students will be required to bring sufficient funds for most meals (approximately \$350).

Accommodations

Throughout the trip, students should expect their own bed in a double-occupancy single-gender rooms.

Proposed pre-/post-course meetings

There will be 3 mandatory pre-travel course meeting on Mondays at 3:20 - 4:35 pm from November 25, 2019 - December 9, 2019.

There will be a Family Meet & Greet with Q&A on Sunday, December 15, 2019 at 2 - 4 pm.

There will be 1 post-travel presentation on Monday, February 10, 2020 at 3:20 – 4:35 pm.