

China - Innovation and Automobile Run



7 day- Winter STEM Camp Changzhou, China
9 February 2025- 15 February 2025



Overview

- Provide a cultrulary enriching experience
- Bridge gaps in STEM education
- Cultivate teamworks and leadership skills
- Strengthen portfolio for future university admissions and employability

Curriculum



Project
construction



Fundamental
understanding
and practical
skills



Control and
instrumentation



3D Design and
prototyping



DAY 1 - 9th February 2025

Landing and checking into the hotel



DAY 2 - 10th February 2025

Morning - Project Construction at the Institute

- Design and construction process
- Collaborate and plan for build
- Basic hand tools and machinery
- Electronics and coding

Evening - Mini supermarket run beside school

- Aim: Let the girls practice to use digital payment.
- Shop offer: snacks, drink, personal articles, etc.

Day 3 – 11th February 2025

Morning - Fundamental Understanding and Practical Skills

- Mechanical Engineering
- Circuit Design and Wiring
- Sensors and Actuators
- Flight Dynamics

Evening - Changzhou QingGuoXiang

- Location: Changzhou city
- Aim: To know more about Changzhou culture
- Shop: coffee shops, restaurants, snacks, small product Dinner: Bowl noodles

Qingguoxiang (青果巷)

Qingguoxiang (青果巷) is a well-known historical and cultural street located in Changzhou, Jiangsu Province, China. This area is renowned for its well-preserved ancient architecture, traditional Chinese houses, and rich history. Here's some detailed information about Qingguoxiang and its significance:

- **Ancient Heritage:** Qingguoxiang has a history dating back over a thousand years. It is a place where you can find relics and buildings from various Chinese dynasties.
- **Cultural Hub:** The street has been home to many famous Chinese scholars, poets, and officials, making it a significant cultural and intellectual center in Chinese history.

Architectural Highlights

- **Traditional Chinese Houses:** The buildings in Qingguoxiang showcase traditional Chinese architecture with intricate designs, wooden carvings, and courtyards.
- **Historic Buildings:** Many of the houses and structures in Qingguoxiang have been preserved or restored, maintaining their historical appearance and cultural essence.



Cultural Attractions

- **Museums and Galleries:** Qingguoxiang houses several museums and galleries that display artifacts, artworks, and exhibits related to the local history and culture.
- **Cultural Events:** The street often hosts cultural events, festivals, and exhibitions that highlight traditional Chinese arts, crafts, and performances.

Modern Development

- **Tourism:** Qingguoxiang is a popular tourist destination, attracting visitors with its historical charm, cultural significance, and scenic beauty.
- **Local Businesses:** The street has a vibrant atmosphere with various shops, cafes, and restaurants offering local delicacies and traditional crafts.



Day 4 – 12th February 2025

Morning - Control and Instrumentation

- Embedded systems programming
- Sensor data processing
- Simulations
- Real world testing

Evening - Global Harbour

Changzhou Global Harbor, located in Changzhou, Jiangsu Province, China, is one of the largest urban complexes in the world. This grand commercial and leisure hub integrates shopping, entertainment, dining, culture, and tourism, making it a landmark and popular destination in the city.



Global Harbour

1. Indoor Amusement Park

- **Activities:** Painting classes, DIY crafts, pottery making, and special holiday-themed art sessions.
- **Parental Information:** Parents are welcome to join and create alongside their kids. Workshops are supervised by professional artists who guide the sessions.

2. Rooftop Garden and Light Show:

- **Description:** A beautifully landscaped rooftop garden that provides a serene escape with a panoramic view of the city. The area hosts a stunning nightly light and fountain show.
- **Activities:** Walking paths, photo spots, and the evening light show synchronized with music.
- **Parental Information:** A perfect spot for a leisurely stroll or a family picnic. The light show is a must-see, offering a magical end to a day of excursions.

3. Interactive Digital Playground:

- **Description:** A modern digital playground that uses augmented reality (AR) and projection technology to create an immersive play environment.
- **Activities:** Digital drawing walls, interactive floor games, motion-sensing activities, and themed zones that change regularly.
- **Parental Information:** This playground provides a safe, enclosed environment where kids can explore freely while parents relax nearby.

4. Cultural Shows and Performances:

- **Description:** Regularly scheduled live performances that showcase traditional Chinese culture, music, dance, and international acts.
- **Activities:** Magic shows, puppet theaters, musical performances, and cultural parades.
- **Parental Information:** These performances are family-friendly and provide a great opportunity for cultural enrichment.

Day 5 - 13th February 2025

Morning - 3D Design and Prototyping

- Design, edit and creating prototypes
- State of the art 3D modelling software and printing
- Laser cutting software and laser cutting

Evening - Factory Visit (To be decided)

Day 6 - 14th February 2025

Morning - The Project – FPV Drone

Outcomes

- Practical understanding of STEM concepts
- Enhanced problem-solving abilities
- Technical skills development
- Real world application experience
- Teamwork and collaboration
- Career readiness



Evening - Indoor Sports



Day 7 - 15th February 2025

Morning - Walk Around the Town

- Explore the town and its cuisine

Evening - Checkout of Hotel and go to the Airport