



湖北大学曼城联合学院
Manchester Metropolitan Joint
Institute, Hubei University



智汇长江·灰水新生： 智慧循环引领可持续未来

Smart Yangtze·Greywater Reborn:
Intelligent Recycling for a Sustainable Future



June 15-July 11, 2026

- 学校及项目简介 Brief Introduction to HUBU and the Program
- 日程安排 Agenda
- 生活提示 Life Tips
- 文化体验 Cultural Trips



CONTENT

Dear All,

On behalf of Manchester Metropolitan Joint Institute, Hubei University, I am delighted to extend our warmest welcome to each of you as you embark on this exciting “Greywater Renewal Project” Summer School.

This programme represents a unique fusion of sustainability, technological innovation and international collaboration. Together with students from our Joint Institute, you will explore practical solutions to contemporary environmental challenges through projects centred on greywater treatment and reuse, intelligent water management, artificial intelligence, robotics, Internet of Things (IoT) technologies and digital manufacturing. Whether developing smart water-saving systems, designing AI-powered companion robots, creating ecological aquaculture solutions or applying 3D design and printing technologies, you will work on innovative ideas that contribute to a more sustainable future. Through these experiences, we hope to inspire creative thinking, interdisciplinary learning and a shared commitment to environmental responsibility.

Equally significant is our focus on Chinese culture and history. Through language courses and cultural field visits to explore local customs and heritage, we hope to foster a deeper understanding of China’s rich cultural tapestry. These experiences will not only enrich your global perspective but also inspire cross - cultural creativity in your academic pursuits. Every moment here is an opportunity to learn, grow, and forge lasting connections.

We encourage you to embrace this adventure with an open mind and curious spirit. The knowledge you gain, the relationships you build, and the stories you create will be yours to carry long after the camp concludes.

Welcome again to this journey of innovation and discovery and may your time at Hubei University be both enriching and memorable. We look forward to witnessing your growth in knowledge, friendship, and cross-cultural understanding during your stay.

Sincerely,

Professor Gao Yun

Dean

Manchester Metropolitan University Joint Institute, Hubei University

Profile

95

Years of history

3

Campuses

1700+

Faculty members

Top1% ESI Disciplines



73

Bachelor programs

Materials Science

材料科学

Chemistry

化学

Engineering

工程学

Botany and Zoology

植物学与动物学

Environment/Ecology

环境/生态学

Biology and Biochemistry

生物学与生物化学

Geoscience

地球科学

Social Sciences

社会科学

58

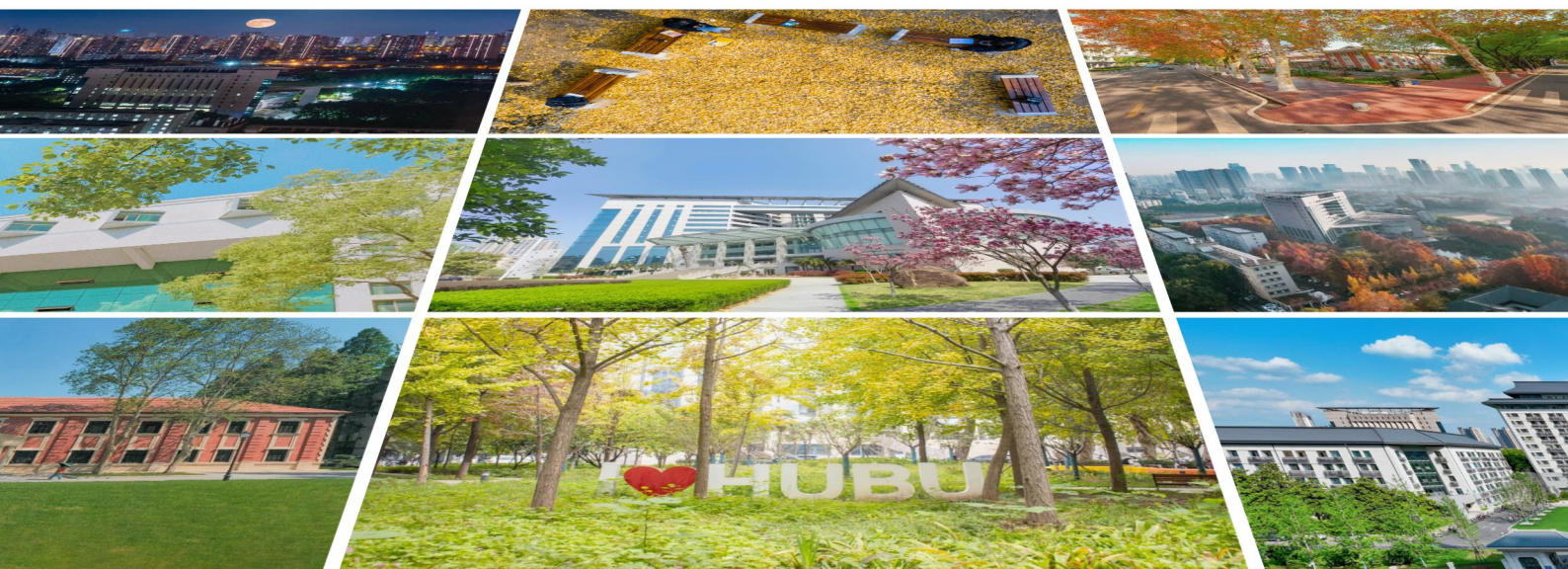
Master programs

11

Doctoral programs

8

Post-doctoral programs



INTRODUCTION

200+

70+

高校、科研机构

Overseas partners

国家和地区

in over 70 countries and regions

1

中外合作办学机构 Manchester Metropolitan Joint Institute,
Hubei University

本次夏令营为期四周，我们精心设计了丰富多样的活动内容：

学术实践：中英学生将共同参与灰水新生项目，在工程实践中碰撞思维火花

语言文化：开设"长江文化"主题汉语课程，涵盖日常会话、文化词汇等实用内容

实地考察：将参观黄鹤楼、湖北省博物馆等标志性文化场所

深度体验：安排茶艺、龙舟、篆刻等传统文化工作坊

This summer camp, lasting for four weeks, features a wide range of carefully designed activities:

Academic Practice: Chinese and British students will collaborate on Greywater Renewal Project, engaging in engineering practices and sparking creative thinking.

Language & Culture: A "Yangtze River Culture" themed Chinese language course will be offered, covering practical topics such as daily conversations and cultural vocabulary.

Field Trips: Participants will visit iconic cultural sites including the Yellow Crane Tower and Hubei Provincial Museum.

In-Depth Experiences: Traditional cultural workshops in tea art, dragon boat and seal cutting will be arranged.

第一周 Week 1

6 月 13-15 日 Saturday-Monday 13-15 June 2026		抵汉+入学适应（生活环境） Arrival and Settle down
6 月 15 日 Monday 15 June 2026	14:30-15:30	学前培训 Orientation (Mr Jacob Nicholas James, Room 303, JEI building)
	15:30-16:30	破冰活动 Ice-breaking activity (Room 401, Chinese cultural experience centre, JEI building)
	16:30-17:30	招待冷餐会 Buffet (Room 402, JEI building)
6 月 16 日 Tuesday 16 June 2026	9:00-10:20	校园参观（联合学院、实验室） Campus Tour: JEI building, JEL lab, by student assistants
	10:30-11:10	欢迎仪式议程 Welcome Ceremony Agenda 1. 湖北大学副校长张冬卉教授致辞 Remarks by Professor Zhang Donghui, Vice President, Hubei University 2. 曼城大协理副校长 Mike Watkinson 教授致辞 Remarks by Professor Mike Watkinson, Deputy Pro-Vice-Chancellor of Manchester Met 3. 英国驻武汉总领事麦多明先生致辞 Remarks by Mr Dominic McAllister, Consul General, British Consulate General Wuhan 4. 教师代表张婷婷老师发言 Remarks by Dr. Zhang Tingting, Hubei University 5. 曼城大学生代表 Umar Hussain 发言 Remarks by Manchester Met student representative Mr Umar Hussain 6. 中方学生代表潘荣欣发言 Remarks by JEI student representative Ms Pan Rongxin 7. Mike Watkinson 教授客座教授聘任仪式 Guest Professor Appointment Ceremony for Prof Mike Watkinson 地点：曼城联合学院 303 报告厅 Venue: Room 303, JEI building
	14:30-16:00	讲座：荆楚龙凤（李祥坤） Lecture: Jingchu Loong and Phoenix (Prof Li Xiangkun, Room 203, JEI building)
	16:15-17:15	汉语课：自我介绍(王若萱) Chinese Language: Self-introduction (Ms Wang Ruoxuan, Room 203, JEI building)
	09:00-10:00	汉语课：你好，长江（王若萱） Chinese Language Course: Hello, Yangtze River (Ms Wang Ruoxuan, Room 303, JEI building)
6 月 17 日 Wednesday 17 June 2026	10:30-11:30	文化体验课：中国茶艺（王若萱） Chinese tea ceremony (Ms Wang Ruoxuan, Room 401, Chinese cultural experience centre, JEI building)
	14:00-17:00	参观湖北省博物馆 Visit to Hubei Provincial Museum
	09:00-11:30	参观黄鹤楼 Visit to the Yellow Crane Tower
6 月 18 日 Thursday 18 June 2026	14:30-17:30	讲座：长江文明的前世与今生（张敏） Lecture: Yangtze River Civilisation: From Ancient Origins of Modern Legacy (Prof Zhang Min, Room 203, JEI building)
	09:00-10:00	汉语课：端午节（王若萱） Chinese Language Course: The Dragon Boat Festival (Ms Wang Ruoxuan, Room 203, JEI building)
6 月 19 日 Friday 19 June 2026	10:00-11:00	讲座：端午节习俗 Lecture: Dragon Boat Festival customs (Room 401, Chinese cultural experience centre, JEI building)
	14:30-16:00	端午节文化体验（香囊、五彩绳、艾锤制作） Dragon Boat Festival Cultural Experience (Room 401, Chinese cultural experience centre, JEI building)
	16:15-17:30	舞龙舞狮 Dragon and Lion Dance (Ma Feilong, Gym 3)

6 月 20 日 Saturday 20 June 2026	All Day	Ezhou: Enjoy the Dragon Boat Race
6 月 21 日 Sunday 21 June 2026	All Day	自由安排 Open Session

第二周 Week2		
6 月 22 日 Monday, 22 June 2026	09:00-10:00	学生项目汇报及组队 Student project presentation and team grouping
	10:15-11:30	灰水新生项目实践 Greywater Renewal Project Practice
	14:30-17:30	灰水新生项目实践 Greywater Renewal Project Practice
6 月 23 日 Tuesday 23 June 2026	09:00-11:30	灰水新生项目实践 Greywater Renewal Project Practice
	14:30-17:30	灰水新生项目实践 Greywater Renewal Project Practice
6 月 24 日 Wednesday 24 June 2026	09:00-12:00	参访武汉水务公司 Visit Wuhan Water Group Co., Ltd.
	14:30-17:30	灰水新生项目实践 Greywater Renewal Project Practice
6 月 25 日 Thursday 25 June 2026	09:00-10:00	汉语课：过早（王若萱） Chinese Language Course: Wuhan Local Breakfast (Ms Wang Ruoxuan, Room 203, JEI building)
	10:30-11:30	灰水新生项目实践 Greywater Renewal Project Practice
	14:30-17:30	灰水新生项目实践 Greywater Renewal Project Practice
6 月 26 日 Friday 26 June 2026	09:00-11:30	灰水新生项目实践 Greywater Renewal Project Practice
	14:30-15:30	灰水新生项目实践 Greywater Renewal Project Practice
	16:00-17:30	东湖生态治理（张劲） East Lake Ecological Governance (Prof Zhang Jin, Room 203, JEI building)
6 月 27 日 Saturday	09:30-11:30	汉语课：AI 帮我学汉语（王若萱） Chinese Language Course: AI helps me study Chinese (Ms Wang Ruoxuan, Room 203, JEI building)

27 June 2026	14:30-17:30	文化体验：篆刻（刘志祥） Chinese seal cutting (Mr Liu Zhixiang, Room 402, JEI building)
6 月 28 日 Sunday 28 June 2026	All Day	自由安排 Open Session

第三周 Week3		
6 月 29 日 Monday 29 June 2026	09:00-11:30	灰水新生项目实践 Greywater Renewal Project Practice
	14:30-17:30	灰水新生项目实践 Greywater Renewal Project Practice
6 月 30 日 Tuesday 30 June 2026	09:00-11:30	灰水新生项目实践 Greywater Renewal Project Practice
	14:30-17:30	高铁驾驶模拟体验（武汉铁路职业技术学院） High-speed Rail Driving Simulation Experience (Wuhan Railway Vocational Technical College)
7 月 01 日 Wednesday 01 July 2026	09:00-11:30	灰水新生项目实践 Greywater Renewal Project Practice
	14:30-17:30	参观湖北人形机器人创新中心 Visit Hubei Humanoid Robot Innovation Center
7 月 02 日 Thursday 02 July 2026	9:00-11:30	灰水新生项目实践 Greywater Renewal Project Practice
	14:30-17:30	灰水新生项目实践 Greywater Renewal Project Practice
7 月 03 日 Friday 03 July 2026	09:00-11:30	灰水新生项目实践 Greywater Renewal Project Practice
	14:30-17:30	灰水新生项目成果汇报 Greywater Renewal Project Outcomes Presentation
7 月 04-09 日 Saturday-Thursday 04-09 July 2026	All Day	恩施-宣恩-宜昌文化体验 Travel to Enshi, Xuan En and Yichang

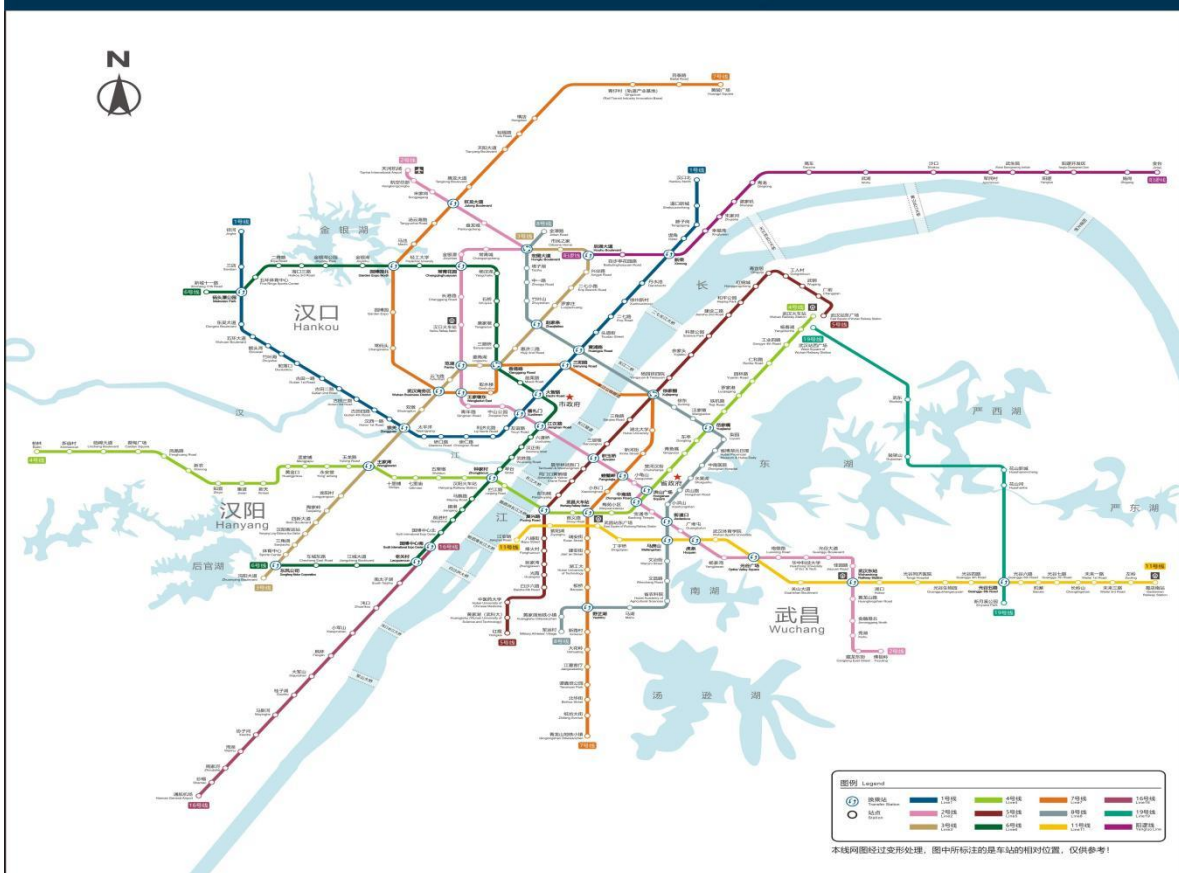
第四周 Week 4

7 月 04-09 日 Saturday-Thursday 04-09 July 2026	All Day	恩施-宣恩-宜昌文化体验 Travel to Enshi, Xuan En and Yichang
7 月 10 日 Friday 10 July 2026	All Day	准备结营仪式 Prepare for tomorrow's presentation
7 月 11 日 Saturday 11 July 2026	All Day	中英青年对话：家住长江边； 结营仪式（PPT 展示汇报） China - UK Youth Dialogue: Living by the Yangtze River (Closing ceremony, PPT Presentation) (Room 401, Chinese cultural centre, JEI building)
7 月 12&13 日 Sunday&Monday 12&13 July 2026	All Day	自由安排&返程 Open Session&Departure



生活提示 Life Tip

武汉轨道交通线网图 Route Map



网络支付 Online Payment

第一步下载、安装注册支付宝和微信。

第二步绑定一张主流的境外银行卡组织发行的银行卡，如 Visa、Master card、Diners Club、Discover 等。

The first step is to download, install and register Alipay and WeChat.

The second step is to add an overseas bank card issued by mainstream overseas bank card organizations, such as Visa, Master card, Diners Club, Discover, etc.

“食、住、行、游、购、娱、医、学”等线上线下全场景覆盖，主扫、被扫、In-App 支付均开通支持。

The full coverage of online and offline scenes for "eating, living, traveling, sightseeing, shopping, entertainment, medical care, and education," with support for both main scanning and being scanned, as well as In-App payment.

绑卡流程简单，输入卡号、有效期等银行卡信息，通过发卡行校验后即可快速完成银联卡的绑定。

The binding process is simple. Just input the card number, validity period, etc. of the bank card, and the binding can be completed quickly after passing the verification by the issuing bank.

文化体验 Culture Trips

黄鹤楼 Yellow Crane Tower



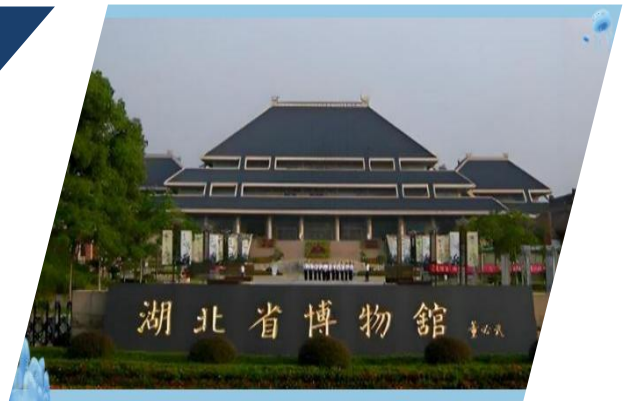
黄鹤楼是位于武汉的一座中国传统地标建筑。现存建筑建于1981年，该楼始建于公元223年间。黄鹤楼盘踞蛇山上，距离原址一公里处，地处武昌江边。塔顶可以俯瞰周围的景色和长江。黄鹤楼被认为是中国四大塔之一。

Yellow Crane Tower is a traditional Chinese landmark building located in Wuhan. The current structure was built in 1981. Construction of the tower originally began around 223 AD. Perched atop Snake Hill, the tower stands beside the Yangtze River in Wuchang District, approximately one kilometer from its original site. The top floor offers panoramic views of the surrounding scenery and the Yangtze River. Yellow Crane Tower is recognized as one of the "Four Great Towers of China."

湖北省博物馆 Hubei Provincial Museum

另一个了解湖北的窗口便是湖北省博物馆。自1953年以来，省博收藏了20多万件文物，包括陶器、瓷器、玉器、青铜器、古代武器和古代乐器。在这些文物中，812件被列为中国一级文物，16件被认为是国宝。

Another window to understanding Hubei is the Hubei Provincial Museum. Since 1953, the museum has collected over 200,000 artifacts, including ceramics, porcelain, jade objects, bronze ware, ancient weapons, and ancient musical instruments. Among these artifacts, 812 are classified as first-class cultural relics, and 16 are considered national treasures.



人形机器人创新中心 Humanoid Robot Innovation Center

湖北人形机器人创新中心成立于2025年6月4日，位于武汉光谷数字经济产业园，总面积近7000平方米，孵化器投用后总规模达12000平方米，是全国面积最大、场景最丰富的人形机器人创新平台。

Established on June 4, 2025, the Hubei Humanoid Robot Innovation Center is located in the Optics Valley Digital Economy Industrial Park in Wuhan. The Center currently spans nearly 7,000 square meters, with its incubator expanding the total area to 12,000 square meters, making it China's largest and most diverse humanoid robot innovation platform.



宜昌（两坝一峡）Two DAMS and One Gorge



两坝一峡是宜昌三个景点的总称，分别是中国第一坝——葛洲坝，世界第一坝——三峡大坝，长江三峡西陵峡。通过游览，可以感受到长江三峡原汁原味的自然风光风貌。

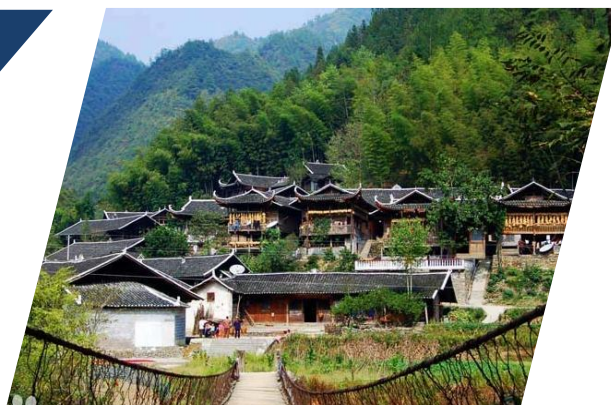
The term "Two Dams and One Gorge" refers to three famous attractions in Yichang. They are Gezhouba Dam, known as the first dam in China, the Three Gorges Dam, recognized as the largest dam in the world, and the Xiling Gorge of the Yangtze River. Visiting these sites allows you to experience the authentic natural landscapes and scenery of the Yangtze River Gorges.

宣恩 Xuan En

宣恩彭家寨 Xuan'en Pengjiazhai (Pengjia Village)

彭家寨保存着 21 栋木结构穿斗式吊脚楼建筑和 1 座凉亭桥，是现存规模最大、保存最为完整的一处吊脚楼式建筑群落。彭家寨吊脚楼的建筑样式丰富多样，有单吊式、双吊式等多种形态，展现了土家百姓适应与改造环境的智慧。

Pengjiazhai preserves 21 wooden diaojiaolou (stilt houses) built in the traditional chuandou timber-frame style, together with a covered pavilion bridge. It is the largest and best-preserved traditional diaojiaolou settlement in China. The diaojiaolou of Pengjiazhai display a rich variety of architectural forms and structural designs, showcasing the Tujia people's ingenuity in adapting to and shaping their mountainous environment.



宣恩仙山贡水

景区以穿城而过的贡水河为中心，河边有“六渡八楼十二桥”等特色景观，可以散步、看水、赏桥。最出名的是文澜桥，一座侗族风格的风雨桥，晚上亮灯后特别漂亮，灯笼倒映在水面上，像画一样。河上的音乐喷泉会随着音乐变换造型和水幕灯光，很受游客欢迎。

Centred on the Gongshui River that flows through the town, the scenic area features a collection of distinctive landmarks known as the "Six Ferries, Eight Towers and Twelve Bridges", making it an ideal place for a leisurely stroll while enjoying the river scenery. The most iconic attraction is Wenlan Bridge, a Dong-style covered bridge. At night, warm lantern lights illuminate the bridge and reflect on the river below, creating a picturesque scene. The musical fountain on the river performs in sync with music, combining dynamic water displays with colourful lighting effects, and is particularly popular among visitors.

恩施 En Shi

恩施土家族苗族自治州坐落于湖北省西南部的武陵山区，是中国唯一一个土家族苗族聚居的自治州，也是中国最年轻的少数民族自治州之一。恩施有土家族、苗族、侗族、汉族等 29 个民族，少数民族人口占总人口的 54%。这里四季分明、冬无严寒夏无酷暑，是全国闻名的天然氧吧和避暑胜地。

恩施土家女儿城

女儿城以土家族传统节俗文化“女儿会”命名，相传约 280 年前土家青年男女以歌为媒、因会定情，因此得名“天下女儿第一城”。你可以在这里品尝正宗的土家农家美食、体验摔碗酒的热情豪爽，沉浸式感受浓郁的土家风情。

恩施腾龙洞

腾龙洞位于利川市，属超大型洞穴系统，已探明长度达 59.8 公里，洞内面积超过 200 万平方米，容积总量居世界前列，被国际洞穴协会专家称为“世界上最壮观的地下河洞穴之一”。腾龙洞世界地质公园以岩溶地貌及喀斯特地貌为特色，被联合国教科文组织专家誉为“立体岩溶博物馆”。

恩施大峡谷

恩施大峡谷位于神秘的北纬 30 度，峡谷全长 108 公里，总面积超过 300 平方公里，是全球最长的峡谷之一，也是世界罕见的集峰林、峰丛、地缝、天坑等于一体的复合型喀斯特地貌“天然博物馆”。



Nestled in the Wuling Mountain region of southwestern Hubei Province, Enshi Tujia and Miao Autonomous Prefecture is China's only autonomous prefecture jointly inhabited by the Tujia and Miao ethnic groups and one of the country's youngest ethnic autonomous prefectures. Enshi is home to 29 ethnic groups, including the Tujia, Miao, Dong, and Han peoples, with ethnic minorities accounting for 54% of the total population. With four distinct seasons and a mild climate throughout the year, Enshi is renowned for its exceptional air quality and is widely regarded as a premier summer retreat.

Enshi Tujia Daughter City

The city is named after the traditional Tujia folk custom known as the “Daughter's Fair”, which originated around 280 years ago. According to local tradition, young Tujia men and women met through singing and courtship during the fair, giving rise to its name. It is often referred to as the “First Daughter City under Heaven”, a title deeply rooted in Tujia cultural heritage. Here, visitors can enjoy authentic Tujia farmhouse cuisine, experience the lively tradition of the “Smashing Bowl Wine” ceremony, and immerse themselves in the rich customs and traditions of the Tujia people.

Enshi Tenglong Cave (Tenglongdong)

Located in Lichuan City, Tenglong Cave is an enormous cave system with an explored length of 59.8 kilometres and an interior area exceeding two million square metres, ranking among the world's largest caves by volume. Experts from the International Union of Speleology have described it as “one of the world's most spectacular underground river cave systems”. Renowned for its remarkable karst landscape, the Tenglong Cave Geopark has been praised by UNESCO experts as a “three-dimensional karst museum”.

Enshi Grand Canyon

Enshi Grand Canyon is located within the famed 30° north latitude belt, a region known for its remarkable natural landscapes. Stretching 108 kilometres and covering more than 300 square kilometres, it is one of China's most spectacular canyon landscapes. The canyon is a rare natural museum of composite karst landforms, where stone peak forests, clustered peaks, ground fissures, sinkholes, and other geological wonders coexist within a single landscape.

Delegation Name Lists

No.	First name	Last name	Chinese Name	Chinese Pinyin
1	Fatima Abuagla Elamin	Abuagla	方 婷	Fang Ting
2	Abukar	Ahmed	安 海	An Hai
3	Zacaria	Ali	张 恺	Zhang Kai
4	Hamna Zeeb	Awan Nazir	何 娜	He Na
5	Lewis	Burgess	刘 威	Liu Wei
6	Fatima Tu Zahra	Chaudhry Iftikhar	陈芳蕊	Chen Fangrui
7	Lucy Anne	Fentem	陆希恬	Lu Xitian
8	Muhammad Umar	Hussain	胡思安	Hu Sian
9	Dua	Kaleem	卡 琳	Ka Lin
10	Zara	Khan	张 苒	Zhang Ran
11	Ayza	Khan Basharat	白诗云	Bai Shiyun
12	Amanda	Koka	孔 佳	Kong Jia
13	Toma-Andrei	Marin	马 林	Ma Lin
14	Atikur	Masud	马 烁	Ma Shuo
15	Haythem	Mohsin	莫思行	Mo Sixing
16	Isabella	Torres	易沙白	Yi Shabai

Group Members

序号 Number	项目名称 Program	组长 Group Leader	组员 Group Members
1	灰水过滤处理 Greywater filtration treatment	潘荣欣 Pan Rongxin	徐铭蔚、张天泽、熊京禾、艾文婧、 郭静昊、何文萱、王柯豪 Xu Mingwei, Zhang Tianze, Xiong Jinghe, Ai Wenjing, Guo Jinghao, He Wenxuan, Wang Kehao
2	曼智造—coglet 外观设计和 3D 打印 Man Zhizao—coglet Exterior Design and 3D Printing	杨硕 Yang Shuo	陈卓飞 张语嫣 苏孜耕 何文萱 王 雅祺 徐德智 孙浩然 Chen Zhuofei, Zhang Yuyan, Su Zigeng, He Wenxuan, Wang Yaqi, Xu Dezhi, Sun Haoran
3	曼制造-Yolo V11 赋能 coglet 智能陪伴机器人 Manzhizao YOLOV11 Empowered Coglet Intelligent Companion Robot	祁冀 Qi Ji	许文翰、王庭悦、赵烨庆、柳斯晨、 苏天明、张益辉 Xu Wenhan,Wang Tingyue, Zhao Yeqing, Liu Sichen,Su Tianming,Zhang Yihui
4	灰水家居软件 Gray Water Home Management Software	陶嘉成 Tao Jiacheng	李政、王晨曦、许博岩、曹川博、 胡骏玮、闫迈兮、陈富成 Li Zheng、Wang Chenxi、Xu Boyan、 Cao Chuanbo、Hu Junwei、Yan Maixi、Chen Fucheng
5	灰水多参数检测与分级回用系统 Gray water multi-parameter detection and graded reuse system	邱 宇 Qiu Yu	付泽堃、石子鑫、刘元泽 Fu Zekun, Shi Zixin,Liu Yuanze
6	AquaClaw: 面向智能生态鱼缸的水质净化与 全自动养殖控 AquaClaw: A Water Quality Purification and Fully Automatic Aquaculture Control System for Intelligent Ecological Fish Tanks	林振昕 Lin Zhenxin	宋佳桐、张熙媛、徐胜寒、杜嘉懿、 王家硕、刘俊言、肖皓文 Song Jiatong, Zhang Xiyuan,Xu Shenghan, Du Jiayi,Wang Jiashuo,Liu Junyan,Xiao Haowen
7	智能灰水检测 IoT 系统及 AI 节水助手 Smart Gray Water Detection IoT System and AI Water-Saving Assistant	薛锦宜 Xue Jinyi	朱菲诺、赵怡雯、徐铭蔚、陈怡萱 Zhu Feinuo, Zhao Yiwen, Xu Mingwei,Chen Yixuan
	Coglet-中英交流暖心伙伴 Coglet: An Offline AI Companion for Sino-British Communication	寇天弈 Kou Tianyi	秦天、刘苏伟 Qin Tian,Liu Suwei