# **INTERNATIONAL SUMMER SCHOOL**

### INTELLIGENT CIVIL ENGINEERING AND INTELLIGENT CONSTRUCTION

Jun 26th - Jul 9th, 2023

Harbin Institute of Technology, Harbin, P.R. China

#### GENERAL INFORMATION

The development of information technology and artificial intelligence (AI) endows civil engineering with a new connotation. Traditional civil engineering is developing toward an advanced orientation characterized by big data and AI. Supporting the transformation and upgrading of the infrastructure has become a remarkable national demand by implementing big data and AI technology. The in-depth research on significant scientific issues related to intelligent civil engineering could contribute to solve the problems of human survival and development.

Therefore, due to the focus on the original theories and key technologies of civil engineering, the following topics will be involved in this summer school:

- (1) Urban and Engineering Structure Resilience Theory
- (2)Implementation of Computer Vision and Deep Learning in Civil Engineering
- (3) Application of Intelligent Materials in Civil Engineering
- (4)Polar and Cold Region Ice Disaster Prevention and Control Theory, Frozen Soil Disaster Prevention and Control Theory

#### **PROGRAM DATES AND TIMES**

• All the lectures and classes in the summer school will be given in English

	Week 1						Week 2							
	Mon	Tue	Wed	Thur	Fri	Sat	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Sun
8:00 - 11:30	Opening			Class		Samina	Innovation competition	Cla	ss	Lecture	Class	Samina	Sem	inar
14:00 - 17:30	Lecture		Seminar	Lecture	Seminar	Tour and social activities		Semina	ur	Lecture	Seminar	Tour and social activities	Closing	

# **COURSES AND LECTURES**

### Lectures

Lecturer	Institution	Lecturer	Institution		
	Swiss Federal Laboratories for				
Urs Meier	Materials Science and	LLJun	Curtin University		
Ors Meier	Technology/Swiss Federal	LIJUII			
	Institute of Technology in Zurich				
Cubbamar			Institute of Statistical		
Subhamoy	University of Surrey	Stephen Wu	Mathematics/The Graduate		
Bhattacharya			University for Advanced Studies		
CAI Hubo	Purdue University	LI Jian	University of Kansas		
Pingbo Tang	Carnegie Mellon University	FENG Chen	New York University		

# Seminars

Speaker	Title	Speaker	Title		
SHEN Shizhao	Academician of the	XIE Lili	Academician of the		
SHEN SIIIZIIAO	Engineering Academy	AIE LIII	Engineering Academy		
LI Hui	Professor	CHEN Wenli	Professor		
WANG Yuyin	Professor	XIAN Guijun	Professor		
TANG Liang	Professor	BAO Yuequan	Professor		
HUANG Yong	Professor				

# ATTENDANCE REQUIREMENT

We plan to recruit about 10 outstanding undergraduates from overseas universities

# • REQUIREMENT:

- Civil engineering or related science or engineering majors
- Sophomore or above

# **CONTACT INFORMATION**

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