

Global Summer School

Precise Measurement, Precise Future

Jul 20–30, 2026

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

1



Contact Information

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General Information

The Summer School offers an intensive program tailored for students and professionals seeking to explore the latest advancements in metrology and instrumentation. Participants will delve into key concepts, including precision sensing techniques, the design of measurement instruments, and the importance of accurate data in scientific research and industrial applications. The curriculum combines theoretical lectures with real-world case studies, focusing on topics such as optical measurement systems, sensor technologies, and calibration methods. Through this program, attendees will gain a deep understanding of the challenges and solutions involved in achieving high-precision measurements, equipping them with valuable skills for careers in engineering, research, and technology development. Additionally, the Summer School provides a unique platform for networking and collaboration with leading experts in the field.

Attendance Requirements

The program is open to undergraduate and graduate students, with backgrounds in engineering, instrumentation science, electrical engineering, mechanical engineering, physics, or related fields. While a strong interest in precision measurement, sensor technologies, and instrumentation is recommended, it is not mandatory. Proficiency in English is required.

Lectures and Talks (Tentative)

The summer school offers academic lectures, courses and practical programs. Lecturers and speakers are invited from top institutions in German, the U.K., and China, including Physikalisch-Technische Bundesanstalt (PTB), University of Bristol, and Harbin Institute of Technology.

Module	Content	Class Hours	Credit
Academic Lectures	Four academic lectures cover sensing, artificial intelligence technology and nanofabrication technology	2*4	—
Course teaching	International cutting-edge technologies in ultra-precision measurement and instrumentation	24	1.5
Practical programs	Design and practice of intelligent sensing systems	8	0.5

Group Research Project

Participants will be divided into several teams, each consisting of 3–5 members, to work on a research project addressing an assigned case study or technical problem. Each team will present their findings in the form of a speech or poster. Teams may choose one of the following research areas:

1. Application of precision measurement technology in future industries
2. Technical challenges and breakthroughs in nano-scale measurement
3. Design and application of new sensors and measuring equipment

Program Dates and Times

	Week 1 (July 20–26)							Week 2 (July 27–30)			
	Mon	Tue	Wed	Thur	Fri	Sat	Sun	Mon	Tue	Wed	Thur
M	Seminar		Lecture		Group Research	Tour	Tour	Lecture		Seminar	Seminar
A	Lecture		Seminar					Group Research		Seminar	
							Group Research				

(Registration: July 19, 2026)



Please note that the program schedule is subject to change based on actual circumstances.