



Tohoku University STEM Summer Program (TSSP) 2025 (tentative)

WEEK 1							
	Sun	Mon	Tue	Wed	Thu	Fri	Sat
	22-Jun	23-Jun	24-Jun	25-Jun	26-Jun	27-Jun	28-Jun
AM 9:00 - 12:00		9:00-12:00 Opening Ceremony & Orientation Welcome Speech (Vice President, Prof. Yamaguchi) Introduction to Tohoku University (Prof. Kasukabe) Orientation for Tohoku University STEM Summer Program (Profs. Watanabe, Koike) Self-introduction (1 min PPT x 30=30 min) 4F Lecture Hall, Aoba Memorial Hall (C03), Engineering (C03) (青葉記念会館 (C03) 4階大会議室) on Aobayama East Campus Aobayama Campus	9:00-12:00 Lecture 2 Sendai's 17th-century mission to the Vatican: Its intent and influence thereof on Japanese culture Prof. Shidara 4F Lecture Hall, Aoba Memorial Hall (C03), Engineering (C03) (青葉記念会館 (C03) 4階大会議室) on Aobayama East Campus Aobayama Campus	9:00-12:00 /13:00-16:00 Challenging Experiments for Quantum Theory (1): Interference effect of light Prof. Kasukabe Student Laboratories (A06) on Kawauchi Campus Kawauchi Campus	8:15-17:00 Field Work Prof. Kakegawa (Earthquake and Tsunami Disaster: Lesson from 3.11 Tohoku Great Earthquake)	9:00-12:00 Lecture and Lab Visit 3 Artemisinin, from potent antimalarial agent to new anti-cancer therapeutics Prof. Sasaki 4F Lecture Hall, Aoba Memorial Hall (C03), Engineering (C03) (青葉記念会館 (C03) 4階大会議室) on Aobayama East Campus Aobayama Campus	
	Arrive in Sendai	Lunch (with TU students)	Lunch (with TU students)	Lunch (with TU students)		Lunch (with TU students)	
PM 13:00 - 16:00		14:00-17:00 Lecture and Lab Visit 1 Tsunami disaster mitigation Prof. Suppasri International Research Institute of Disaster Science (J31) Multi-purpose hall (1st floor) (災害科学国際研究所(J31)1階多目的ホール), on New Aobayama campus Aobayama Campus	13:30-16:30 Japanese Culture 1 Japanese Flower Arrangement (Kado) Prof. Chen Engineering Laboratory Complex Building (C10), Lecture Room 1, Room No.101 School of Engineering (工学研究科総合研究棟講義室 1, 101室) on Aobayama East Campus Aobayama Campus	9:00-12:00 /13:00-16:00 Challenging Experiments for Quantum Theory (2): Vibrational modes of strings and music Prof. Kasukabe Student Laboratories (A06) on Kawauchi Campus Kawauchi Campus		13:00-16:00 Interactive Japanese Language Instructors: Ms. Backley & Ms. Mikoda Introducing yourself and getting to know Japanese people Aobayama Commons (J41) Lecture Room No. 1 & 2, School of Agricultural Science (農学研究科青葉山コモンズ 第1及び第2講義室) on Aobayama New Campus Aobayama Campus	

WEEK 2							
	Sun	Mon	Tue	Wed	Thu	Fri	Sat
	29-Jun	30-Jun	1-Jul	2-Jul	3-Jul	4-Jul	5-Jul
AM 9:00 - 12:00		8:50-11:30 Lecture and Lab Visit 4 Introduction to aircraft design Prof. Abe Conference Room, 5th Floor, 2nd Building (C10), Institute of Fluid Science (流体科学研究所、2号館5階会議室) on Katahira Campus Katahira Campus	9:00-17:10 Field Trip (Shiroishi (Castle) and Sword Smith Workshop)	9:00-12:00 Paper Aircraft Competition 1 Prof. Takahashi Creative Engineering Center (D02) 創造工学研修センター-on Aobayama East Campus Aobayama Campus	9:00-12:00 Lecture and Lab Visit 7 Introduction to Spintronics Former President, Prof. Ohno Laboratory for Nanoelectronics and Spintronics (E04) (ナノ・スピントニクス実験施設) A401 on Katahira Campus Katahira Campus	8:40-12:00 Japanese Culture 2 Rinno-ji (temple) 輪王寺 and Shikan taza 只管打坐 (zazen for its own sake) Prof. Koike & Prof. Kasukabe Rinnouji Temple (輪王寺)	
		Lunch (with TU students)		Lunch (with TU students)	Lunch (with TU students)	Lunch (with TU students)	
PM 13:00 - 16:00		13:00-16:00 Lecture and Lab Visit 5 Secrets of the Japanese swords Prof. Ohuchi 4F Lecture Hall, Aoba Memorial Hall (C03), Engineering (C03) (青葉記念会館 (C03) 4階大会議室) on Aobayama East Campus Aobayama Campus		13:00-16:00 Lecture and Lab Visit 6 Research Expedition in Antarctic Waters Prof. Okoshi Aobayama Commons (J41) Lecture Room No. 1, School of Agricultural Science (農学研究科青葉山コモンズ on Aobayama New Campus Aobayama Campus	13:00-16:00 Paper Aircraft Competition 2 Prof. Takahashi, Prof. Watanabe & Prof. Koike Creative Engineering Center (D02) 創造工学研修センター-on Aobayama East Campus Aobayama Campus	13:00-16:00 Interactive Japanese Language Instructors: Ms. Backley & Ms. Mikoda Shopping and ordering food and drinks Aobayama Commons (J41) Lecture Room No. 1 & 2, School of Agricultural Science (農学研究科青葉山コモンズ 第1及び第2講義室) on Aobayama New Campus Aobayama Campus	



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WEEK 3						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
6-Jul	7-Jul	8-Jul	9-Jul	10-Jul	11-Jul	12-Jul
AM 9:00 - 12:00	9:00-12:00 Lecture 8 (1) Synchrotron Radiation Facility: A Measurement Platform Providing High-Brightness X-rays Prof. Yoshida (2) Using Light Sources to Shine new Light on Chemistry Prof. Yin University House Aobayama (UHA), Interaction Building (L16), 1st Floor, Meeting room, (UH青葉山 (UHA), インタラクショ ン棟 (L16), 1階, 研修室) on Aobayama New Campus Aobayama Campus	9:00-12:00 Lecture and Lab Visit 9 (1) Protein Folding Problem: Efforts to solve the simple but notoriously difficult puzzle are now revolutionizing life sciences. Prof. Takahashi (2) Future Medicine Challenges: Perspectives from the Tohoku Medical Megabank Project Prof. Kinoshita Science Complex A (H02), Room No. 303 (理学合同A棟 303号室) on Aobayama North Campus Aobayama Campus	8:15-16:20 Field Work Prof. Kasukabe & Prof. Watanabe (Chusonji Konjikido (temple) and Toyota Factory)	9:00-12:00 Lecture and Lab Visit 11 Structural Metallic Materials for Industry Innovation Prof. Yoshimi Materials Science and Engineering (B01) Lecture room 1 (Room No. 101) (工学研究科材料科学棟(B01) 講義室1(101室)) on Aobayama East Campus Aobayama Campus	9:00-12:00 Lecture and Lab Visit 13 Nonverbal Information to Enrich Future Telecommunication Prof. Kitamura M531, RIEC Main building (G10) on Katahira Campus (電気通信研究所本館5階 M531 セミナー室、片平キャンパス) Katahira Campus	
	Lunch (with TU students)	Lunch (with TU students)		Lunch (with TU students)	Lunch (with TU students)	
PM 13:00 - 16:00	13:00-16:00 Japanese Culture 3 Japanese Martial Arts (Aikido) Prof. Fujino Kawauchi Sub Arena, 3rd Floor (B05) (川内サブアリーナ棟3F) on Kawauchi Campus Kawauchi Campus	13:00-16:00 Lecture and Lab Visit 10 Origin of Life: The early Earth made the first life Prof. Furukawa Science Complex A (H02), Room No. 303 (理学合同A棟 303号室) on Aobayama North Campus Aobayama Campus		13:00-16:00 Lecture and Lab Visit 12 Discover, Measure, and Innovate Tactile Sensations Prof. Okuyama Engineering Laboratory Complex Building (C10), Lecture Room 1, Room No.101 School of Engineering (工学研究科総合研究棟講義室 1, 101室) on Aobayama East Campus Aobayama Campus	13:00-16:00 Interactive Japanese Language Instructors: Ms. Backley & Ms. Mikoda Introducing your own culture and finding out about Sendai Aobayama Commons (J41) Lecture Room No. 1 & 2, School of Agricultural Science (農学研究科青葉山コモンズ 第1及び第2講義室) on Aobayama New Campus Aobayama Campus	

WEEK 4						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
13-Jul	14-Jul	15-Jul	16-Jul	17-Jul	18-Jul	19-Jul
AM 9:00 - 12:00	9:00-12:00 Lecture and Lab Visit 14 Robotics for Space Exploration Prof. Yoshida Lecture Room no. 1 (Room 101) in Engineering Laboratory Complex Building (C10) (工学研究科総合研究棟 (青葉山キャンパスC10) 第1講義室) on Aobayama East Campus Aobayama Campus	9:00-12:00 Lecture and Lab Activity Environmental Radiation I Prof. Koike Creative Engineering Center (D02), 1st Floor, Meeting room (創造工学研修センター (D02)) on Aobayama East Campus Aobayama Campus	9:00-12:00 Japanese Culture 4 Tea Ceremony (Sado) Prof. Watanabe Lounge of International Exchange Building (A12) on Kawauchi campus, (川内キャンパス: 国際交流棟 (A12)ラウンジ) and Rm 211 of Kawauchi Circle and Club Building (B02) (川内キャンパス: クラブ・サークル棟 (B02)211) on Kawauchi Campus Kawauchi Campus	9:00-12:00 Group Work Session (Preparation for Experimental Reports and/or Wrap-up Presentation) Engineering Laboratory Complex Building (C10), Lecture Room 2, Room No.110, School of Engineering (工学研究科総合研究棟講義室 2, 110室) on Aobayama East Campus Aobayama Campus	9:00-12:00 Wrap-up Presentation of TSSP 2024 Graduate School of Information Sciences (G01), 2nd Floor, Room 207,情報科学研究科 (G01), 2階, 207室) on Aobayama East Campus Aobayama Campus	Depart from Sendai
	Lunch (with TU students)	Lunch (with TU students)	Lunch (with TU students)	Lunch (with TU students)	Lunch (with TU students)	
PM 13:00 - 16:00	13:00-16:00 Lecture and Lab Visit 15 Reaction Engineering for Sustainable Process Prof. Kitakawa Applied Chemistry, Chemical Engineering and Biomolecular Engineering, Lecture Room Building (E04, Room No.710) on Aobayama East Campus, (化学・バイオ系講義棟, 小講義室 (1) (E04, 710号室), 青葉山東キャンパス) Aobayama Campus	13:00-16:00 Lecture and Lab Activity Environmental Radiation II Prof. Koike Creative Engineering Center (D02), 1st Floor, Meeting room (創造工学研修センター (D02)) on Aobayama East Campus Aobayama Campus	13:00-16:00 Interactive Japanese Language Instructors: Ms. Backley & Ms. Mikoda Presentation - Your experience of visiting Sendai Aobayama Commons (J41) Lecture Room No. 1 & 2, School of Agricultural Science (農学研究科青葉山コモンズ 第1及び第2講義室) on Aobayama New Campus Aobayama Campus	13:00-16:00 Lecture and Lab Visit 16 Humanities Approaches to Disasters -Study of Japanese historical disaster and culture- Prof. Ebina International Research Institute of Disaster Science (J31) Seminar room S100 (災害科学国際研究所セミナー室、S100、青葉山キャンパス) on Aobayama New Campus Aobayama Campus	13:30-15:30 Wrap-up Presentation of TSSP 2024 Graduate School of Information Sciences (G01), 2nd Floor, Room 207,情報科学研究科 (G01), 2階, 207室) on Aobayama East Campus Aobayama Campus 16:00-16:45 Closing Ceremony Graduate School of Information Sciences (G01), 2nd Floor, Room 207,情報科学研究科 (G01), 2階, 207室) on Aobayama East Campus 17:30-18:30 Farewell Party Aobayama Campus	