## Tohoku University STEM Summer Program (TSSP) 2022 (tentative)

WE	EK 1						
	Sun	Mon	Tue	Wed	Thu	Fri	Sat
	19-Jun	20-Jun	21-Jun	22-Jun	23-Jun	24-Jun	25-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 (3 min PPT x 30=-90 min) Campus Tour  Aoba Memorial Hall (C03) Room No. 501, School of Engineering (工学研究科青葉記念会館501室)  Aobayama Campus	9:00-12:00 Lecture 1 The 2011 Tohoku Earthquake Prof. Matsuzawa Research Center for Prediction of Earthquakes and Volcanic Eruption, Lecture room 1 (Building A (B32), Room No. 205) 地震・噴火予知研究観測センター 第一講義室(A棟 (B32) 205号室)	9:00-9:30 Introduction to Quntum Theory Prof. Kasukabe 9:30-11:30 Challenging Experiments for Quantum Theory (1) Prof. Kasukabe Student Laboratories (A06) Kawauchi Campus	8:50-11:30 Lecture and Lab Visit 2 Introduction to aircraft design Prof. Nakamura Conference Room, 2nd Floor, 1st Building (C09) Institute of Fluid Science (流体科学研究所、第1棟2階会議 室) Katahira Campus	9:00-12:00 Paper Aircraft Competition 2 Prof. Moriya, Prof. Watanabe & Prof. Koike Creative Engineering Center (D02) 創造工学研修センター Aobayama Campus	
	Arrive in	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	Sendai	13:00-16:00 Interactive Japanese Language Instructors: Ms. Backley & Ms. Mikoda Self-introduction in Japanese  Aobayama Commons (J41) Lecture Room No. 3 & 10, School of Agricultural Science (農学研究科青葉山コモンズ 第3及び第10講義室) Aobayama Campus	13:30-16:30 Japanese Culture 1 Ikebana (Flower arrangement) Prof. Chen Education and Student Support Center (A01), 4F Main Conference Room (教育学生総合支援センター 4階 大会議室) Kawauchi Campus	Prof. Kasukabe 14:30-16:00 Group Work of Challenging Experiments for	13:00-16:00  Paper Aircraft Competition 1 Prof. Moriya  Creative Engineering Center (D02) 創造工学研修センター Aobayama Campus	13:00-16:00 <u>Paper Aircraft Group Work</u> Prof. Moriya, Prof. Watanabe & Prof. Koike Creative Engineering Center (D02) 創造工学研修センター Aobayama Campus	

WE	EK 2						
	Sun	Mon	Tue	Wed	Thu	Fri	Sat
	26-Jun	27-Jun	28-Jun	29-Jun	30-Jun	1-Jul	2-Jul
AM 9:00 - 12:00		9:00-12:00 Special Lecture 1 Material Science and Japanese Sword Smith Prof. Ohuchi Aoba Memorial Hall (C03) Room No. 501, School of Engineering (工学研究科青葉記念会館 501 室)		9:00-12:00 <u>Japanese Culture 2</u> <u>Rinnouji Temple and</u> <u>Experience in Zen Meditation</u> Prof. Ohuchi & Prof. Kasukabe Rinnouji Temple (輸王寺)	7:45-18:00 Field Trip (Ichinoseki and Toyota)	9:00-12:00 Lecture and Lab Visit 4 Structural Metallic Materials for Industry Innovation Prof. Yoshimi  Materials Science and Engineering (B01) Lecture room 2 (Room No. 102) (工学研究科材料科学棟(B01) 講義室2(102室)) Aobayama Campus	
PM 13:00 - 16:00	-	Lunch (with TU students)  13:00-16:00  Interactive Japanese Language Instructors: Ms. Backley & Ms. Mikoda Introducing Culture  Aobayama Commons (J41) Lecture Room No. 3 & 10, School of Agricultural Science (農学研究科青葉山コモンズ第3及び第10講義室) Aobayama Campus		Lunch (with TU students)  13:00-16:00 Lecture and Lab Visit 3 Symmetry Breaking Create Nature Prof. Tanaka  Lecture Room (2nd floor of Molecular Imaging Building(612)), Cyclotron and Radioisotope Center (CYRIC) (分子イメージング棟(612) 2階講義室、サイクロトロン・ラジオャイソトーブセンター、北青葉山キャンパス) Aobayama Campus		Lunch (with TU students)  13:00-16:00 Lecture and Lab Visit 5 Robotics for Space Exploration Prof. Yoshida  Lecture Room Building-M.E (A02) in Aobayama campus, Lecture Room no.4 (機械系講義棟(青葉山キャンパ スA02)第四講義室)  Aobayama Campus	

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## Tohoku University STEM Summer Program (TSSP) 2022 (tentative)

WE	EK 3						
	Sun	Mon	Tue	Wed	Thu	Fri	Sat
	3-Jul	4-Jul	5-Jul	6-Jul	7-Jul	8-Jul	9-Jul
AM 9:00 - 12:00		9:00-12:00 Lecture and Lab Visit 6 Historical and Social Approaches to Disaster Profs. Ebina and Boret 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) Aobayama Campus	9:00-12:00 Lecture 7 Origin of Life: The early Earth made the first life Prof. Kakegawa Earth Science Research Bldg. (H12) Room 513, 503, School of Science (理学研究科地球科学513室、 503室) Aobayama Campus		9:00-12:00 Lecture and Lab Visit 9 Interactive "Content" Design Prof. Kitamura M531, RIEC Main building (G10), Katahira Campus (電気通信研究所本館S階 M531 セミナー室、片平キャンパス) Katahira Campus	8:30-19:00	
	1	Lunch (with TU students)	Lunch (with TU students)	Field Work	Lunch (with TU students)	Research Facility Tour (Japan Proton Accelerator	
PM 13:00 - 16:00	-	13:00-16:00 Japanese Culture3 Calligraphy Prof. Watanabe International Exchange Building (A12) Room R115 (国際交流棟 (A12) R115室) Kawauchi Campus	13:00-16:00 Lecture and Lab Visit 8 Japanese second sample return mission: Hayabusa2 Prof. Nakamura Earth Science Research Bldg. (H12) Room 503, School of Science (理学研究科地球科学 503室) Aobayama Campus	Prof. Kakegawa  (Disaster-affected area: Minamisannriku, Arahama, etc.)	13:00-16:00 Lecture 10 Introduction to Advanced Research with Accelerator Prof. Koike Aoba Memorial Hall (C03) Room No. 501, School of Engineering (工学研究科青葉記念会館 501 室) Aobayama Campus	Research Complex: J-PARC in Tokai-mura, Ibaraki)	

WE	EK 4						
	Sun	Mon	Tue	Wed	Thu	Fri	Sat
	10-Jul	11-Jul	12-Jul	13-Jul	14-Jul	15-Jul	16-Jul
AM 9:00 - 12:00		9:00-12:00 Lecture and Lab Visit 11 Introduction to Spintronics President, Prof. Ohno Laboratory for Nanoelectronics and Spintronics (E04) (ナノ・スピン実験施設) A401 Katahira Campus	9:00-12:00 <u>Fastest Paper Clip Motor</u> <u>Competition 1</u> Prof. Moriya Creative Engineering Center (D02) 創造工学研修センター Aobayama Campus	9:00-12:00 Lecture 12 Introduction to Renewable Energy Systems: Engineering and Constructing a Solar Power Plant Dr. Jan Martin WARZECHA & Ms. Shivani MEHTA  Aoba Memorial Hall (C03) Room No. 501, School of Engineering (工学研究科青葉記念会館 501 室)  Aobayama Campus	9:00-12:00 Group Work Session (Preparation for Experimental Reports and/or Wrap-up Presentation)  Aoba Memorial Hall (C03) Room No. 501, School of Engineering (工学研究科青葉記念会館 501 室)  Aobayama Campus	9:00-12:00 Wrap-up Presentation of TSSP 2021 Aoba Memorial Hall (C03) Room No. 501, School of Engineering (工学研究科青葉記念会館 501 室) Aobayama Campus	
	Ī	Lunch (with TU students)	Lunch (with TU students)	Lunch (with TU students)	Lunch (with TU students)	Lunch (with TU students)	Depart from Sendai
PM 13:00 - 16:00		13:00-16:00 <u>Japanese Culture 4</u> <u>Aikido</u> Prof. Fujino Kawauchi Sub Arena, 3rd Floor (B05) (川内サブアリーナ棟3F) Kawauchi Campus	13:00-16:00 <u>Fastest Paper Clip Motor</u> <u>Competition 2</u> Prof. Moriya Creative Engineering Center (D02) 創造工学研修センター Aobayama Campus	13:00-17:00  Field Work :Introduction to Renewable Energy Systems: Engineering and Constructing a Solar Power Plant Dr. Jan Martin WARZECHA & Ms. Shivani MEHTA  ( Kurokawa (Solar) photovoltaic power plant)	13:00-16:00 Group Work Session (Preparation for Experimental Reports and/or Wrap-up Presentation)  Aoba Memorial Hall (C03) Room No. 501, School of Engineering (工学研究科青葉記念会館 501 室)  Aobayama Campus	13:30-15:30  Wrap-up Presentation of TSSP 2021  Aoba Memorial Hall (C03) Room No. 501, School of Engineering (工学研究科青葉記念会館 501 室)  Aobayama Campus  16:00-16:45 Closing Ceremony 17:00-18:30 Farewell Party  Aoba Memorial Hall (C03) Room No. 501, School of Engineering (工学研究科青葉記念会館 501 室)	