## Tohoku University STEM Summer Program (TSSP) 2019 (tentative)

### WEEK 1

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<td><strong>AM 9:00 - 12:00</strong>&lt;br&gt;Opening Ceremony &amp; Orientation&lt;br&gt;Welcome Speech&lt;br&gt;(Vice President, Prof. Yamaguchi)&lt;br&gt;Introduction to Tohoku University (Prof. Kasukabe)&lt;br&gt;Orientation for Tohoku University STEM Summer Program (Profs. Watanabe, Koike and Ohuchi)&lt;br&gt;Self-introduction (5 min PPT x 30~90 min)&lt;br&gt;Campus Tour&lt;br&gt;Aoba Memorial Hall (C03)&lt;br&gt;Room No. 702, School of Engineering&lt;br&gt;(工学研究科青葉記念会館702室)&lt;br&gt;Aobayama Campus</td>
<td><strong>9:00 - 12:00</strong>&lt;br&gt;Interactive Japanese Language&lt;br&gt;Instructor: Ms. Takahashi &amp; Ms. Shimasaki&lt;br&gt;Introducing Culture&lt;br&gt;Aoba Memorial Hall (C03)&lt;br&gt;Room No. 702 &amp; 501, School of Engineering&lt;br&gt;(工学研究科青葉記念会館702, 501室)&lt;br&gt;Aobayama Campus</td>
<td><strong>9:00 - 9:30</strong>&lt;br&gt;Introduction to Quantum Theory&lt;br&gt;Prof. Kasukabe</td>
<td><strong>8:50 - 11:30</strong>&lt;br&gt;Lecture and Lab Visit 1&lt;br&gt;Introduction to aircraft design&lt;br&gt;Prof. Nakamura&lt;br&gt;Conference Room, 2nd Floor, 1st Building (C09)&lt;br&gt;Institute of Fluid Science (流体科学研究所, 第1棟2階会議室)&lt;br&gt;Katahira Campus&lt;br&gt;(片平キャンパス)</td>
<td><strong>9:00 - 12:00</strong>&lt;br&gt;Paper Aircraft Competition 2&lt;br&gt;Prof. Moriya, Prof. Watanabe &amp; Prof. Koike&lt;br&gt;Creative Engineering Center (D02)&lt;br&gt;創造工学研修センター&lt;br&gt;Aobayama Campus</td>
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<td>Lunch (with TU students)</td>
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**PM 13:00 - 16:00**<br>Self-introduction in Japanese<br>Aoba Memorial Hall (C03)<br>Room No. 702 & 501, School of Engineering<br>(工学研究科青葉記念会館702, 501室)<br>Aobayama Campus | **13:00-16:30**<br>Japanese Culture 1<br>Ikebana (Flower arrangement)<br>Prof. Chen<br>Aoba Memorial Hall (C03)<br>Room No. 702, School of Engineering<br>(工学研究科青葉記念会館702室)<br>Aobayama Campus | **12:30-14:30**<br>Challenging Experiments for Quantum Theory (1)<br>Prof. Kasukabe | **13:00-16:00**<br>Paper Aircraft Competition 1<br>Prof. Moriya<br>Creative Engineering Center (D02)<br>創造工学研修センター<br>Aobayama Campus | **13:00-16:00**<br>Paper Aircraft Group Work<br>Prof. Moriya, Prof. Watanabe & Prof. Koike<br>Creative Engineering Center (D02)<br>創造工学研修センター<br>Aobayama Campus |

### WEEK 2

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<td><strong>AM 9:00 - 12:00</strong>&lt;br&gt;Special Lecture 1&lt;br&gt;Material Science and Japanese Sword Smith&lt;br&gt;Prof. Ohuchi&lt;br&gt;Aoba Memorial Hall (C03)&lt;br&gt;Room No. 702, School of Engineering&lt;br&gt;(工学研究科青葉記念会館702室)&lt;br&gt;Aobayama Campus</td>
<td><strong>9:00 - 12:00</strong>&lt;br&gt;Japanese Culture 2&lt;br&gt;Rinnou Temple and Experience in Zen Meditation&lt;br&gt;Prof. Ohuchi &amp; Prof. Kasukabe&lt;br&gt;Rinnou Temple (輪王寺)&lt;br&gt;Aoba Memorial Hall (C03)&lt;br&gt;Room No. 702, School of Engineering&lt;br&gt;(工学研究科青葉記念会館702室)&lt;br&gt;Aobayama Campus</td>
<td><strong>9:00 - 12:00</strong>&lt;br&gt;Lecture 2&lt;br&gt;The 2011 Tohoku Earthquake&lt;br&gt;Lecture 2&lt;br&gt;Prof. Matuzawa&lt;br&gt;Aoba Memorial Hall (C03)&lt;br&gt;Room No. 702, School of Engineering&lt;br&gt;(工学研究科青葉記念会館702室)&lt;br&gt;Aobayama Campus</td>
<td><strong>13:00-16:00</strong>&lt;br&gt;Field Trip&lt;br&gt;(Shiroishi (Castle) and Sward Smith)&lt;br&gt;Lunch (with TU students)</td>
<td><strong>13:00-16:00</strong>&lt;br&gt;Interactive Japanese Language&lt;br&gt;Instructor: Ms. Takahashi &amp; Ms. Backley&lt;br&gt;Restaurant&lt;br&gt;Aoba Memorial Hall (C03)&lt;br&gt;Room No. 702 &amp; 501, School of Engineering&lt;br&gt;(工学研究科青葉記念会館702, 501室)&lt;br&gt;Aobayama Campus</td>
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<td><strong>PM 13:00 - 16:00</strong>&lt;br&gt;Interactive Japanese Language&lt;br&gt;Instructor: Ms. Takahashi &amp; Ms. Backley&lt;br&gt;Restaurant&lt;br&gt;Aoba Memorial Hall (C03)&lt;br&gt;Room No. 702 &amp; 501, School of Engineering&lt;br&gt;(工学研究科青葉記念会館702, 501室)&lt;br&gt;Aobayama Campus</td>
<td><strong>13:00-16:00</strong>&lt;br&gt;Japanese Culture 3&lt;br&gt;Calligraphy&lt;br&gt;Prof. Watanabe&lt;br&gt;Aoba Memorial Hall (C03)&lt;br&gt;Room No. 702, School of Engineering&lt;br&gt;(工学研究科青葉記念会館702室)&lt;br&gt;Aobayama Campus</td>
<td><strong>13:00-16:00</strong>&lt;br&gt;Lecture and Lab Visit 3&lt;br&gt;Robotics for Space Exploration&lt;br&gt;Prof. Yoshida&lt;br&gt;Lecture Room Building M.E (A02) in Aobayama campus, Lecture Room No.1&lt;br&gt;(納具高校キャンパス機械系講義棟(A02)第一講義室)&lt;br&gt;Aobayama Campus</td>
<td>Lunch (with TU students)</td>
<td><strong>13:00-16:00</strong>&lt;br&gt;Interactive Japanese Language&lt;br&gt;Instructor: Ms. Takahashi &amp; Ms. Backley&lt;br&gt;Interview in Japanese&lt;br&gt;Aoba Memorial Hall (C03)&lt;br&gt;Room No. 702 &amp; 501, School of Engineering&lt;br&gt;(工学研究科青葉記念会館702, 501室)&lt;br&gt;Aobayama Campus</td>
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### Field Work
- **Floral Field Work**
  - Disasters area: Minamisanriku, Arahama, etc.
  - **8:30-18:00**
**Tohoku University STEM Summer Program (TSSP) 2019 (tentative)**

### WEEK 3

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| **AM 9:00 - 12:00** | 9:00-12:00 Lecture and Lab Visit 5  
**Introduction to Spintronics**  
President, Prof. Ohno  
Laboratory for Nanoelectronics and Spintronics (E04)  
(Tanaka, Kato)  
Kawauchi Sub Arena, 3rd Floor  
Kawauchi Campus | 9:00-12:00  
**Fastest Paper Clip Motor Competition 1**  
Prof. Moriya  
Creative Engineering Center (D02)  
創造工学研究センター  
Aobayama Campus | 9:00-12:00  
**Lecture and Lab Visit 8**  
Biomolecular Design and Robotics  
Prof. Murata  
Mechanical Engineering Bldg.2 (A03), Room No. 203  
(青葉山キャンパス, 機械系2号館 203号舎)  
Aobayama Campus | 12:00-16:00  
Lunch (with TU students)  
Ichinoseki and Toyota | 13:00 - 16:00  
**Symmetry Breaking Create**  
Prof. Tanaka  
Lecture Room (2nd floor of Molecular Imaging Building), Cyclotron and Radioscope Center (CYIRC)  
(分子イメージング棟2階講義室, サイクロトロン・ラジオアイソトープセンター, 北青葉山キャンパス)  
Aobayama Campus | 13:00 - 16:00  
**Introduction to Advanced Research with Accelerator**  
Prof. Kida  
Acoba Memorial Hall (C03)  
Room No. 702, School of Engineering  
(工学研究科青葉記念会館 702室)  
Aobayama Campus | 13:00 - 16:00  
**Fastest Paper Clip Motor Competition 2**  
Prof. Moriya  
Creative Engineering Center (D02)  
創造工学研究センター  
Aobayama Campus | 7:45-18:00  
Field Trip  
(ICHINOSEKI AND TOYOTA) | Lunch (with TU students) | Lunch (with TU students) | Lunch (with TU students) | 7:45-19:00  
**Research Facility Tour**  
(Japan Proton Accelerator Research Complex: J-PARC in Tokai-mura, Ibaraki) |

### WEEK 4

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| **AM 9:00 - 12:00** | 9:00-12:00  
**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, 北青葉山キャンパス)  
Aobayama Campus | 9:00-12:00  
**Human Information Systems**  
Prof. Akamura  
MS31, RIEC Main building (G10), Katahira Campus  
(電気通信研究所本館G10, 創造工学研究センター)  
Katahira Campus | 9:00-12:00  
**Group Work Session**  
(Association for Experimental Reports and/or Wrap-up Presentation)  
Aoba Memorial Hall (C03)  
Room No. 702, School of Engineering  
(工学研究科青葉記念会館 702室)  
Aobayama Campus | 12:00-16:00  
Wrap-up Presentation of TSSP 2018  
Aoba Memorial Hall (C03)  
Room No. 702, School of Engineering  
(工学研究科青葉記念会館 702室)  
Aobayama Campus | 13:30-15:30  
Wrap-up Presentation of TSSP 2018  
Aoba Memorial Hall (C03)  
Room No. 702, School of Engineering  
(工学研究科青葉記念会館 702室)  
Aobayama Campus | Depart from Sendai |
| **PM 13:00 - 16:00** | 13:00-16:00  
**Japanese Culture 4 Aikido**  
Prof. Fujino  
Kawachi Sub Arena, 3rd Floor (B05)  
(川内サブアリーナ棟3F)  
Kawachi Campus | 13:00-16:00  
**Fastest Paper Clip Motor Group Work**  
Prof. Moriya  
Creative Engineering Center (D02)  
創造工学研究センター  
Aobayama Campus | 13:00-16:00  
**Special Lecture 2**  
Advanced Tutorial in Materials Science and Engineering  
Prof. Ohuchi  
Lecture Hall (B03), Materials Science and Engineering, School of Engineering  
(工学研究科材料系大講義室)  
Aobayama Campus | 16:00-16:45  
Closing Ceremony  
17:00-18:30  
Farewell Party  
Aoba Memorial Hall (C03)  
Room No. 702, School of Engineering  
(工学研究科青葉記念会館 702室)  
Aobayama Campus |