

TABIP Summer Science Academy (TSA)

About TABIP Summer Science Academy

The TABIP Summer Science Academy is a program for undergraduate and graduate students from all over the world; who are interested in natural and applied sciences and would like to get a practical insight into the working areas of prestigious companies of Turkey from various sectors.

Within the framework of the TSA, every summer up to 20 students from all over the world particularly talented in natural and applied sciences are offered the possibility of gaining first insights into the world of science and technology during 3 - 4 weeks of practical training under the supervision of scientists and, at the same time, get to know Turkey.

The idea behind the TABIP Summer Science Academy is to promote the globalization of science and knowledge by connecting the international students with prestigious Turkish companies. Within the scope of this program, while the companies find the opportunity to discover new talents from all over the world, the students will have the chance to attend the training sessions and get to know the leading companies of Turkey.

22 July – 4 August 2019: TSA – Aviation Technology

Description and Concept of TSA – Aviation Technology

Yunus Emre Institute is planning to organize the first TABIP Summer Science Academy between 22 July – 4 August 2019, in close cooperation with a number of prestigious companies and universities of Turkey operating in space and aviation sector. The TSA will be held in the three main cities of Turkey: İstanbul, Ankara, Kayseri.

The aim of the TSA – Aviation Technology is to awaken the participant students' enthusiasm for science and research. Starting from the 22nd of July until the 4th of August, about 20 students from all over the world will meet for a qualified science program. In the framework of the TSA, the students will attend specific seminars and training programs of the companies and the universities, they will be introduced to scientific routines in genuine research labs of the partner companies and universities, they will take part in working group activities and at the end of their stay, and they are expected to write a brief research report.

The social program of the TSA offers the participants weekend outings to other parts of Turkey, including a trip to Beypazarı / Cappadocia / Safranbolu with a guided tour of the city, historical tour in İstanbul.

The Yunus Emre Institute will cover all of the expenses regarding the accommodation and transportation of the participants within the program. Breakfast, lunch and dinner will also be included within the program.



TSA – Aviation Technology Program

<u>1st Week - İstanbul</u>

July 20, 2019 - İstanbul

- All Day Meeting the participants at İstanbul, Lorem Ipsum Hotel
- 19:00 Welcome Dinner at *Lorem Ipsum Hotel*

July 21, 2019 - İstanbul

- 10:00 17:00 Guided City Tour
- 19:00 Traditional Dinner

July 22, 2019 – İstanbul Technical University (ITU) Faculty of Aeronautics and Astronautics, İstanbul

- 09:00 15:00 Automatic Control, Flight Stability and Control, Matlab / Simulink Workshop 1
- 15:00 17:00 Experiment 1: Inverted Pendulum Parameter Estimation, Closed Loop Control and Bode Freq. Test Measurements
- July 23, 2019 İstanbul Technical University (ITU) Faculty of Aeronautics and Astronautics, İstanbul
- 09:00 12:00 Visit to Altınay Aerospace & Advanced Technologies Inc.
- 13:00 15:00 Experiment 2: Lead Lag Compensator Design for a Moving Cart Mechanism
- 15:00 17:00 Experiment 3: Bode Response Frequency Response Analysis
- July 24, 2019 İstanbul Technical University (ITU) Faculty of Aeronautics and Astronautics, İstanbul
- 09:00 12:00 Matlab / Simulink Workshop 2
- 14:00 17:00 Visit to Aviation Museum, Bakırköy

July 25, 2019 – İstanbul Technical University (ITU) Faculty of Aeronautics and Astronautics, İstanbul

- 09:00 15:00 Experiment 4: Inverted Pendulum and 2-DoF Helicopter Presentation of Mambo Quadrotor Systems
- 15:00 17:00 Presentation of GmbH Turkey Bureau and FEV Autonomy Systems

July 26, 2019 – İstanbul Technical University (ITU) Faculty of Aeronautics and Astronautics, İstanbul

- 09:00 15:00 Evaluation of Experiment Results of Matlab Workshop 2 and Mambo Flight Control Tests and Flights
- 15:00 17:00 Presentation of TAI İstanbul's Activities
- 18:00 Meeting at the Hotel Lobby for the Next Trip to Kayseri (flight details: 21:20)



2nd Week – Kayseri

July 27, 2019 – Erciyes University, Kayseri

09:00 – 17:00 Briefing on Model Aircraft at the Conference Hall, Permission Issues on SHGM, Selection of Model Aircraft Supplies, Tricks on Designing Model Aircraft, Amateur Model Aircraft

July 28, 2019 – Ürgüp, Nevşehir

09:00 20:00 Trip to Cappadocia

July 29, 2019 – Erciyes University, Kayseri

09:00 – 17:00 Beginning of Telemaster Model Aircraft Production, Outer Hood Creation and Stepby-Step Manufacturing

July 30, 2019 – Erciyes University, Kayseri

09:00 – 17:00 Mounting of Telemaster Power Group and Being Ready for Flight & Telemaster Flight Experience

3rd Week – Ankara and İstanbul

July 31, 2019 - Ankara

- 07:00 Trip to Ankara (by bus)
- 13:00 Visit to TAI, Ankara

August 1, 2019 – Ankara

- 09:00 17:00 Lectures and Workshops at ODTU
- 21:30 Flight to İstanbul

August 2, 2019 – İstanbul

- All Day Free Time
- 19:00 Farewell Dinner and Certificate Ceremony

August 3 - 4, 2019 –İstanbul

All Day Flights



Application Requirements

- Currently be an undergraduate or graduate student / researcher in a university in the fields of Space and Aviation, Mechanical Engineering, Electrical Engineering, Control Systems Engineering or related fields
- 2. Fluency in English language (Please note that all courses will be held in English)
- 3. Currently living in a country other than the Republic of Turkey
- 4. Be a young researcher, ages 18 35
- 5. At least GPA of 3.00 / 4.00

Application and Selection Procedure

Applicants should provide the following required documents via e-mail.

- Detailed Curriculum Vitae
- Motivation / Cover Letter (.pdf document, max. 2 pages)
- Your Research Outline, if any
- Complete List of Publications, if any
- At Least One Article / Publication as a Sample (.pdf document, max. 10 MB)
- A Reference Letter
- English Language Proficiency
- Copy of ID or Passport (.png or .pdf, max. 10 MB)
- Certificates, if any (max. 5)

It is the applicant's responsibility to ensure that he or she has submitted all the necessary documents.

All of the above-mentioned documents must be sent by e-mail: apply@tabipacademy.com

We will confirm your application by e-mail once received.

After the applications has been checked to ensure that it meets the formal requirements, applicants will be notified about the selection. If required, our responsible team may need to make an online audition.

Please note that only short-listed applicants will be contacted.



Partner Companies and Universities

- Turkish Aircraft Industries Corporation (TAI)
- Middle East Technical University (ODTU)
- İstanbul Technical University (ITU)
- Erciyes University
- Altınay Aerospace & Advanced Technologies Inc.
- FEV (Forschungsgesellschaft für Energietechnik und Verbrennungsmotoren)