



#### AVIATION HIGHER

VOCATIONAL SCHOOL

#### **EGE UNIVERSITY**

## AVIATION HIGHER VOCATIONAL SCHOOL

2020





#### AVIATION

HIGHER VOCATIONAL SCHOOL

#### CONTENT

- 1. ESTABLISHMENT of EGE AVIATION HVS
- 2. OUR MISSION, VISION and PRINCIPLES
- 3. DEPARTMENTS
- 4. SELECTION of STUDENTS
- 5. AIMS and TARGETS of DEPARTMENTS
- 6. EDUCATIONAL CONTENTS
- 7. FACILITIES
- 8. ACADEMIC STAFF
- 9. EVENTS
- **10.AFTER GRADUATION**
- 11.SUPPORTERS
- 12. CONTACT INFORMATION



AVIATION
HIGHER
VOCATIONAL
SCHOOL

#### **ESTABLISHMENT**

- <u>Aviation Higher Vocational School (HVS)</u> was established in 2015 and it is one of the ten HVS of Ege University.
- Aviation HVS has two departments;
  - Civil Aviation Management (2013)
  - Aircraft Technology (2010)
- •both were transferred from **EGE HVS**.







## AVIATION HIGHER VOCATIONAL SCHOOL

#### **ESTABLISHMENT**

- •The first ideas for the establishment of an aviation education unit at Ege University started in April-2009.
- •During the establishment phase, demands from the Ege Region and other regions were taken into account, and meetings were held with leading institutions and organizations of the aviation sector.









#### **ESTABLISHMENT**

•After all, taking in consideration that both in Turkey and World aviation sector will keep phase of growth, Aviation HVS establishment realized.

**EGE**UNIVERSITY

AVIATION
HIGHER
VOCATIONAL
SCHOOL





#### EGE

**UNIVERSITY** 

AVIATION
HIGHER
VOCATIONAL
SCHOOL

#### **OUR MISSION, VISION and PRINCIPLES**

- Our mission is to train certified and qualified personnel with aviation discipline, research-oriented, innovative, knowledgeable, initiative and responsible.
- Our vision is to become the leading aviation education and training center in the region and country by contributing to the development of the aviation sector with scientific studies and activities that will shape the aviation sector and by training qualified technical personnel that the aviation sector needs.



## THE WINDS THE STATE OF THE STAT

#### **OUR VISION, MISSION and PRINCIPLES**

**Our policy** is to act in accordance with our country and institutional values, science, universality and justice with academic staff, administrative staff, students and graduates.

**EGE**UNIVERSITY

AVIATION
HIGHER
VOCATIONAL
SCHOOL









#### **DEPARTMENTS**

- Our school has two active departments:
- Civil Aviation Management (CAM)
- Aircraft Technology (ATECH)
- Both departments have compulsory English Prep Class for one year.
   After the English Prep Class there is two years academic education.

**EGE**UNIVERSITY

AVIATION
HIGHER
VOCATIONAL
SCHOOL







## AVIATION HIGHER VOCATIONAL SCHOOL

#### **SELECTION of STUDENTS**

Turkish higher education system is very centralized and there is a central exam for student selection to the undergraduate education. If the student gets enough score from this exam, then can be enrolled to the school.



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
ATECH	30	30	30	30	30	40	50	60	40	40
CAM	-	-	-	30	30	40	50	60	65	65





## AVIATION HIGHER VOCATIONAL SCHOOL

#### **SELECTION of STUDENTS**

According to the data of

"The Measuring, Selection and Placement Center" - 2020;

- The Aircraft Technology is the department that receives students with the highest score (327.51) among state universities.
- The Civil Aviation Management is the department that receives students with the highest score (283.98) among state universities.







#### **DEPARTMENT of AIRCRAFT TECHNOLOGY**

The training plan of ATECH, has been prepared so that students can work both in manufacturing and MRO organizations.

**EGE**UNIVERSITY

AVIATION
HIGHER
VOCATIONAL
SCHOOL

The Education Plan consists of a 1-year compulsory English
Preparatory class, 4-semester academic training, on-the-job
training program and summer internship program.







## AVIATION HIGHER VOCATIONAL SCHOOL

#### **DEPARTMENT of CIVIL AVIATION MANAGEMENT**

The CAM training plan has been prepared in such a way that students can work in relevant organizations as ground handling services, terminal services and flight operations specialists.

The Education Plan consists of a 1-year compulsory English
Preparatory class, 4-semester academic training and
summer internship program.



#### **EDUCATIONAL CONTENTS**

FIRST SEMESTRE				
	Lesson	<u>ECTS</u>		
1	Principles of Ataturk and Recent Turkish History I	2		
2	Turkish Language I	2		
3	Piston Engines	3		
4	Physics	3		
5	Mathematics	3		
6	Computer	2		
7	Electrical and Electronical Fundamentals	4		
8	Technical Drawing	2		
9	Advanced English I	4		
10	Material Science in Aviation	2		
11	Human Factors in Aviation	2		
12	Aviation Fundamentals and Terminology	1		

# **ATECH** Education Plan

SECOND SEMESTRE				
	<u>Lesson</u>	<u>ECTS</u>		
1	Principles of Ataturk and Recent Turkish History II	2		
2	Turkish Language II	2		
3	Aerodynamic	2		
4	Machine Elements	2		
5	Electronic Instrument Systems	3		
6	Aviation Legislation	2		
7	Air Vehicle Structures and Systems I	3		
8	Turbine Engines	5		
9	Advanced English II	4		
10	Propeller	2		
11	Occupational Practices I	1		
12	<ul> <li>Elective Courses</li> <li>Sign Language</li> <li>Entrepreneurship</li> <li>University Life</li> <li>Social Service Applications</li> <li>Speaking</li> <li>Employee Health and Workplace Safety</li> <li>Academic Turkish (For foreign students)</li> </ul>	2		

THIRD SEMESTRE				
	<u>Lesson</u>	<u>ECTS</u>		
1	Machining Techniques	2		
2	Air Vehicle Structures and Systems II	6		
3	Air Vehicle Electrical and Electronical Systems I	2		
4	Occupational Practices II	8		
5	Aviation English I	4		
6	Quality Management Stystems	2		
7	<ul> <li>Elective Courses</li> <li>Computer Aided Design</li></ul>	6		

FOURTH SEMESTRE				
	<u>Lesson</u>	<u>ECTS</u>		
1	Air Vehicle Structures and Systems III	6		
2	Manifacturing Techniques	2		
3	Air Vehicle Electrical and Electronical Systems II	2		
4	Occupational Practices III	8		
5	Aviation English II	4		
6	Model Plane	2		
7	<ul> <li>Elective Courses</li> <li>Computer Aided Manufacturing</li></ul>	6		

FIRST SEMESTRE				
	<u>Lesson</u>	<u>ECTS</u>		
1	Principles of Ataturk and Recent Turkish History I	2		
2	Turkish Language I	2		
3	Introduction to Civil Aviation	4		
4	Passenger Services I	4		
5	Mathematics	3		
6	Computer	3		
7	Business Administration	4		
8	Advanced English I	4		
9	<ul> <li>Vocational Elective</li> <li>Flight Theory</li> <li>Aviation Law</li> <li>Model Aircraft Construction</li> <li>World Cultures and Destinations</li> </ul>	2		
10	<ul> <li>Non-Vocational Elective</li> <li>Basic First Aid</li> <li>Accounting</li> <li>Supply Chain Management</li> <li>Academic Turkish (For foreign students)</li> <li>University Life</li> </ul>	2		

#### **SECOND SEMESTRE ECTS** Lesson 2 1 Principles of Ataturk and Recent Turkish History II 2 Turkish Language II 2 3 Flight Operations 4 Passenger Services II 4 5 Airline Management **Principles of Economics** 6 4 Advanced English II 4 8 Internship I 5 **Vocational Elective Cabin Services** 9 **Logistics Management** Aircraft Maintenance Management **Tourism** Non-Vocational Elective Marketing 10 Employee Health and Workplace Safety **Community Services Innovation Management**

THIRD SEMESTRE				
	<u>Lesson</u>	<u>ECTS</u>		
1	Air Traffic Rules and Services	2		
2	Ramp Services	4		
3	Meteorology	3		
4	Air Cargo Management	2		
5	Operation and Performance I	4		
6	Representation, Supervision and Management	4		
7	Safety Management System (SMS)	3		
8	Aviation English I	4		
9	<ul> <li>Vocational Elective</li> <li>Flight Operations and Dispatch</li> <li>CRS Applications</li> <li>General Aviation</li> <li>Economics of Transportation</li> </ul>	2		
10	<ul> <li>Non-Vocational Elective</li> <li>Sign Language I</li> <li>Entrepreneurship</li> <li>Speaking (English) I</li> <li>Quality Management System</li> </ul>	2		

FOURTH SEMESTRE				
	<u>Lesson</u>	<u>ECTS</u>		
1	Airport Operations and Equipment	3		
2	Communication	2		
3	Aviation Security	2		
4	Terminal Management	3		
5	Operation and Performance II	4		
6	Dangerous Goods and Regulations	3		
7	Internship II	5		
8	Aviation English I	4		
9	<ul> <li>Vocational Elective</li> <li>Cost Management in Aviation</li> <li>Heliport Management</li> <li>UAV Applications</li> <li>Human Factors in Aviation</li> </ul>	2		
10	<ul> <li>Non-Vocational Elective</li> <li>Sign Language II</li> <li>Speaking (English) II</li> <li>Human Resources Management</li> <li>Financial Management</li> </ul>	2		

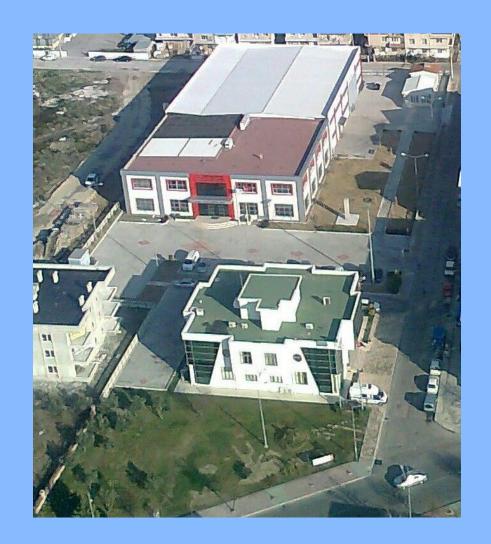




AVIATION
HIGHER
VOCATIONAL

SCHOOL

#### **GENERAL VIEW of the SCHOOL**







#### AVIATION HIGHER VOCATIONAL

**SCHOOL** 

#### **FACILITIES**

- In the Ahmet Eroğlu education facility;
- Hangar
- Tool Warehouse
- Machinery, Structural and Welding Workshop,
- Radiography Laboratory
- Non-Destructive Testing Laboratories,
- Measurement and Control Laboratory,

- Propulsion Systems Workshop,
- Composite Materials Laboratory,
- Avionic Laboratory,
- Computer Laboratory,
- Conference and Seminar Halls,
- Library, Study and Examination Hall,
- Classrooms,
- Offices,
- Canteen and Social Areas.







Hangar has a total area of 1350m<sup>2</sup>, its capacity can accommodate 4 general aviation aircraft.

**EGE**UNIVERSITY

AVIATION
HIGHER
VOCATIONAL
SCHOOL



- Standard 3-phase electricity 220V/380V-50Hz
- 15V-400Hz AC and 28V DC power supply
- Grounding line
- Compressed air line
- Waterline
- Heating, cooling and ventilation systems

















Fluid penetrant, Magnetic particle, Ultrasonic, Vortex currents and Radiography (X-Ray) applications can be performed in Non-Destructive Testing (NDT) and Radiography Laboratories.

**EGE**UNIVERSITY

AVIATION
HIGHER
VOCATIONAL
SCHOOL





The Propulsion Systems Workshop has two Continental IO 520 piston engines, GE J85 CAN-15 jet engine, GE J79 jet engine, Artouste II C turboshaft engine and various piston engines.







**EGE**UNIVERSITY

AVIATION
HIGHER
VOCATIONAL
SCHOOL

In the Composite Laboratory, production and repair can be done by hand-molding and vacuum infusion methods.



















AVIATION
HIGHER
VOCATIONAL
SCHOOL

In the Machine and Structural Workshop, there are pneumatic hand tools, CNC router and various machines.



In addition, our students make design projects with 3D printer.



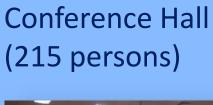




## AVIATION HIGHER VOCATIONAL SCHOOL

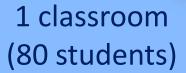
#### **FACILITIES**

SEEEE





3 classrooms (40 students)



1 classroom (100 students)





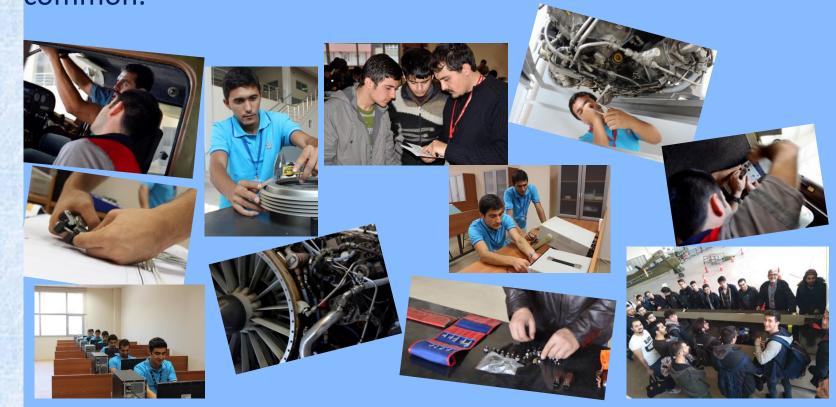




 The facilities of our school, the workshops and laboratories of the Ege Higher Vocational School and the laboratories of the Ege University Faculty of Engineering are used in common.

**EGE**UNIVERSITY

AVIATION
HIGHER
VOCATIONAL
SCHOOL







• In addition, the Air Technical Schools Command Aircraft Maintenance School Command, National Defense University Air Petty Officer Higher Vocational School workshops and laboratories and the 3rd Land Aviation Regiment Command facilities are also used for the education of our school students.

**EGE**UNIVERSITY

AVIATION
HIGHER
VOCATIONAL
SCHOOL







#### AVIATION HIGHER

VOCATIONAL SCHOOL

#### **ACADEMIC STAFF**

- Our school has 5 academic staff.
- In addition, academic staff from Ege Higher Vocational School, Ege University Faculty of Engineering and Air Technical Schools Command, 3rd Army Aviation Regiment Command, and specialized employees from various institutions and organizations related to aviation and the retired aviators are giving lectures in our school.



## AVIATION HIGHER VOCATIONAL SCHOOL

#### STRENGTHS of SCHOOL

- We are the first public university to receive the "Recognized School Authorization Certificate" from the General Directorate of Civil Aviation in all categories A1, A2, A3 and A4, in 2019.
- Advantages of this certificate are various but main of them are;
   Aircraft Technology graduates can be exempted from module exams and the duration of work for authorization is diminished to 2 years.







## AVIATION HIGHER VOCATIONAL SCHOOL

#### **Future Activities of the School**

- All the academic staff of our school have UAV 0 license and are competent to provide UAV 0 training. UAV 0 training is planned to be started.
- In addition, application was made to obtain Heliport Operation Training Authority from the General Directorate of Civil Aviation.





### AVIATION HIGHER VOCATIONAL SCHOOL

#### **EVENTS**

- In addition to the courses in the education plan, the following activities are organized to increase the knowledge and experience of the students.
- HANGAR journal,
- Weekly seminars,
- Scientific meetings and fairs,
- Sector visits,
- Courses,
- Social responsibility projects.





#### AVIATION HIGHER VOCATIONAL

**SCHOOL** 

#### **EVENTS**

- Airex Aviation Fair (October 2010)
- Global Aviation and Space Conference (October 2010)
- Aircraft Maintenance Area Cooperation Meeting (March 2011)
- Idef 2011, Defense Industry Fair (May 2011)
- Maintenance Repair Software Seminar (June 2011)
- Workshop on Advances in Aviation Industry in the World and Turkey (December 2011)
- Airex Aviation Fair (September 2012)

- I. Aviation Technology and Applications National Congress (2012)
- II. Aviation Technology and Applications National Congress (2013)
- III. Aviation Technology and Applications National Congress (2015)
- TÜBİTAK UAV competition (2016)
- IV. Aviation Technology and Applications National Congress (2017)
- TÜBİTAK UAV competition (2017)
- V. Aviation Technology and Applications National Congress (2020)



23-24 EKİM 2015 http://uhat2015.ege.edu.tr

**IZMIR** 

## AVIATION TECHNOLOGY and APPLICATIONS NATIONAL CONGRESS (UHAT) POSTERS







## To ans and Meslek Yüksen

**EGE**UNIVERSITY

#### **AVIATION**

HIGHER VOCATIONAL SCHOOL

## AVIATION TECHNOLOGY and APPLICATIONS NATIONAL CONGRESS (UHAT - 2020)





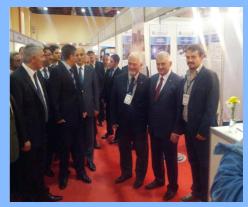




AVIATION
HIGHER
VOCATIONAL
SCHOOL



Airex'10



TÜHESFO'12



UHAT'12



Airex'12



**AVIATION WORKSHOP** 











## AVIATION HIGHER VOCATIONAL SCHOOL

#### **After Graduation**

#### **Aircraft Technology**

- Enterprises engaged in aviation manufacturing,
- Airline companies,
- Aircraft Maintenance,
   Repair and Overhaul
   companies,
- Military Air Supply Maintenance Centers.

#### **Civil Aviation Management**

- Airline companies,
- Terminal management companies,
- Ground handling companies,
- Logistics companies,
- Aircraft Maintenance and Manufacturing companies.
- Both graduates of departments by entering to "Vertical Pass Exam" can enroll to undergraduate departments.





#### AVIATION HIGHER

VOCATIONAL SCHOOL

#### **SUPPORTERS**

 Our school has been supported by many institutions, organizations and businesses since its establishment.

- Types of Supports;
  - Location and Building,
  - Material,
  - Planning,
  - Education,
  - Scholarship,
  - Internship.





AVIATION
HIGHER
VOCATIONAL
SCHOOL

#### **Location and Building;**

- •The location of the Ahmet Eroğlu Education Facility, where education and training activities are carried out, was donated to Ege University by Gaziemir Municipality.
- •In this area, which was granted to the university, Ahmet Eroğlu Education Facility was built by Eroğlu İnşaat company and donated to Ege University on a turn-key basis.







#### **Material Support**;

•Various tools, devices, machines and tools have been donated by Boeing, ACA, TAI, TEI, THY Technic, MY Technic, Air and Land Forces Command to be used in the workshops and laboratories of the Ahmet Eroğlu Education Facility.



AVIATION
HIGHER
VOCATIONAL
SCHOOL





Neslek Y

#### **EGE**UNIVERSITY

## AVIATION HIGHER VOCATIONAL SCHOOL

#### Planning, Education and Scholarship Support

•Aviation Technical Schools Command, 3rd Land Aviation Regiment Command, THY Technic., TAI, Turkish Airlines, Pegasus Airlines, Anadolu University, Erciyes University have supported the determination of the training plan and course contents of our departments.

•The support of companies for internship is provided through the Aerospace Cluster Association (ACA). ACA

gives scholarships to our students.

















#### **AVIATION HIGHER VOCATIONAL**

**SCHOOL** 

#### **Internship Supports**;





#### 



















































#### **AVIATION**

HIGHER VOCATIONAL SCHOOL



#### Adress:

E.U. HAVACILIK MYO Ahmet Eroğlu Eğitim Tesisi 1099. Sokak, No: 114 Sarnıç-Gaziemir / Izmir, TURKEY Phone / Fax: +90 232 281 1450

E-Mail: <a href="mailto:havacilik@mail.ege.edu.tr">havacilik@mail.ege.edu.tr</a>
URL: <a href="mailto:www.havacilik.ege.edu.tr">www.havacilik.ege.edu.tr</a>

#### **CONTACT INFO**

#### **Director**

Prof. Dr. İbrahim Etem SAKLAKOĞLU i.e.saklakoglu@ege.edu.tr

#### **Coordinator**

Assoc. Prof. Dr. Rüstem Barış YEŞİLAY rustem.baris.yesilay@ege.edu.tr

#### **Coordinator**

Inst. Dr. Pınar KÖYMEN ÇAĞAR pinar.koymen.cagar@ege.edu.tr

#### Instructor

Inst. Alperen DOĞRU alperen.dogru@ege.edu.tr

#### **Instructor**

Inst. Volkan YAVAŞ volkan.yavas@ege.edu.tr

#### **Instructor**

Inst. Armagan MACİT <a href="mailto:armagan.macit@ege.edu.tr">armagan.macit@ege.edu.tr</a>