



emirates
aviation
university

WINTER CAMP

2019-20





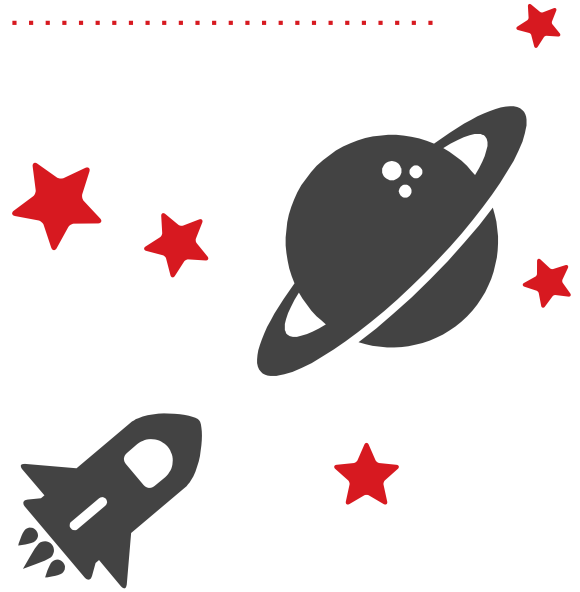
What is a **Winter Camp**?

The Winter Camp will be a program designed for high school students in order to educate them about the Aviation Industry and the possibilities as an Aeronautical / Aerospace / Avionics Engineer.



Aim

To provide academic and application based activities related to the aviation engineering industry to high school students.





Objective for the Students

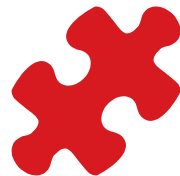
- To have a basic understanding of aeronautical / avionics engineering subjects.
- To have conducted basic mechanical, electrical experiments.
- To have applied classroom knowledge to educational activities.



Eligibility

- High school students in year 11 onwards.
- Students with STEM background
- Basic knowledge and understanding of Physics and Mathematics





Winter Camp Details

Weekly Plan

Each session will run for 1 week

[5 days]

Winter Camp will run for 4 sessions,

[4 weeks]

Sessions

Session 1

- 9 AM to 3:30 PM

Session 2

- 8 AM to 3:30 PM
(Jan 01st is off)

Session 3 and 4

- 4 PM to 7:30 PM

Camp Details

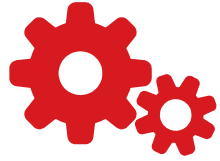
Camp schedule and activities are the same for each session, i.e. it is repeated for 4 weeks

Per School

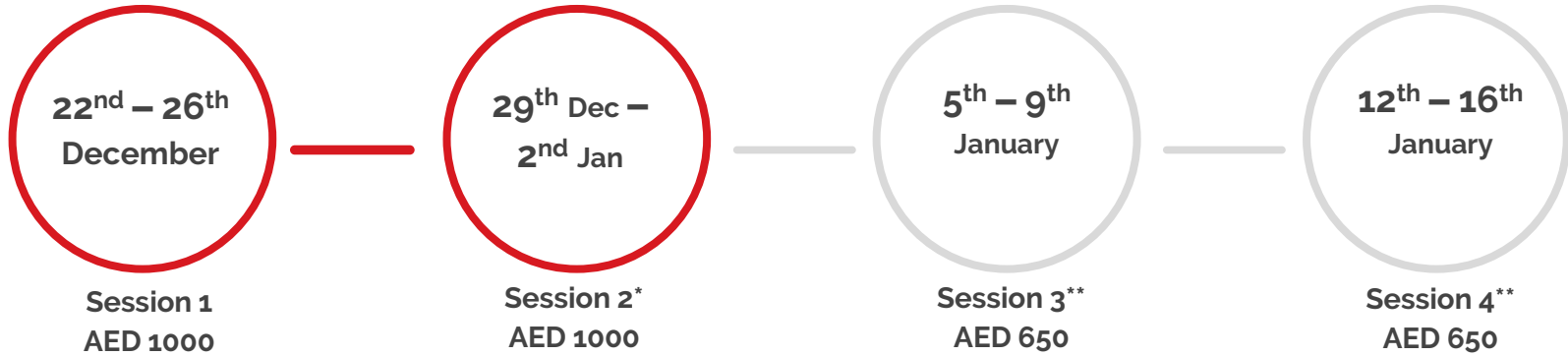
A total of 3-5 students per school may register



When And Where



Winter Camp will run from 22nd December 2019 to 2nd January 2020.



***NOTE: Wednesday, January 01st 2020 is a public holiday. Winter Camp will be off for the day.**

****NOTE: Session 3 and 4 will run in the evening from 4 PM to 7:30 PM.**

All camp sessions and activities will be held within the Emirates Aviation University campus.



Academic Subjects



Aerodynamics /
Flight Mechanics

Flight
Instruments

Robotics
Workshop

Hydraulic Systems /
Engine Repair



Experiments

- Wind tunnel experiment to study aerodynamics of an aircraft
- Design a 3D printable component
- Apply design mechanics using CNC machine



Activities

- Drone Systems
- Line Following Robot
- Mobile Controlled Paper Plane
- Water Rocket
- Flight Simulator
- Glider Competition



Registration



- Deadline for registration is **15:00 on 30th November 2019**.
- Winter Camp is limited to students of grade 11 & 12.
- Per school, we can have a maximum of five students only.
- Registration is first come first basis and limited to 25 slots per session.
- Registration fees:
 - **AED 1000** per participant for Session 1 and Session 2
 - **AED 650** per participant for Session 3 and Session 4
- To register please complete the registration form and send it to aviationcamp@eau.ac.ae





Contact Us

For more information, please contact Ms. Anadika Baghel
(preferably via email)-

- Telephone: **04 605 0142**
- Email: **aviationcamp@eau.ac.ae**
- Location: **Emirates Aviation University,
Academic City, Dubai**



EAU Winter Camp Schedule 2019-20 [SESSION I]

	09:00	09:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00
	09:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30
SUNDAY			Introduction and Campus Tour		Break / Refreshments / Socializing			Drone Systems Lecture		Drone Building			
			Auditorium					G-30					
MONDAY	Aerodynamics & Flight Mechanics		Wind Tunnel & Hydraulics Experiment		Break / Refreshments / Socializing			Mobile Controlled Paper Plane		Drone Calibration			
	G-30		Aero & Mat W/S					Avionics W/S					
TUESDAY	Glider Competition				Break / Refreshments / Socializing			3D Printing		Engine Activity / Flight Simulator			
	Avionics Workshop							Lab 02					
WEDNESDAY	Drone Flying				Break / Refreshments / Socializing			Drone Racing Competition		Water Rocket Construction			
	Field							Exam Hall					
THURSDAY	Water Rocket Launching		Line following Robotic Workshop				Break / Refreshments / Socializing			Closing Ceremony			
	Field		Avionics W/S							Auditorium			



EAU Winter Camp Schedule 2019-20 [SESSION II]

	08:00	08:30	09:00	09:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00
	08:30	09:00	09:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30
SUNDAY			Introduction and Campus Tour		Break / Refreshments / Socializing			Aerodynamics & Flight Mechanics		Wind Tunnel & Hydraulics Experiment		Glider Competition			
			Auditorium					G-30		Aero & Mat W/S		Avionics W/S			
MONDAY	Drone Systems Lecture		Drone Building			Break / Refreshments / Socializing			Drone Calibration			Mobile Controlled Paper Plane			
	G-30		Avionics W/S						Avionics W/S			Avionics W/S			
TUESDAY	Engine Activity / Flight Simulator				Break / Refreshments / Socializing			Drone Flying		Drone Race		Water Rocket Construction			
	Engine & Digital W/S							Field		Exam Hall		Avionics W/S			
WEDNESDAY	January 01, 2020 - New Year's Day Holiday														
THURSDAY	Water Rocket Launching			Line following Robotic Workshop				Break / Refreshments / Socializing			3D Printing		Closing Ceremony		
	Field			Avionics W/S							Lab 02		Auditorium		



EAU Winter Camp Schedule 2019-20 [SESSION III & SESSION IV]

	16:00	16:30	17:00	17:30	18:00	18:30	19:00
	16:30	17:00	17:30	18:00	18:30	19:00	19:30
SUNDAY	Introduction and Campus Tour	Aerodynamics & Flight Mechanics		Wind Tunnel & Hydraulics Experiment		3D Printing	
	Auditorium	G-30		Aero & Mat W/S		Lab 02	
MONDAY	Drone Systems Lecture		Drone Building		Drone Calibration		
	G-30		Avionics W/S		Avionics W/S		
TUESDAY	Glider Competition			Drone Touch-Ups	Engine Activity / Flight Simulator		
	Avionics Workshop			Avionics W/S	Engine & Digital Lab		
WEDNESDAY	Drone Flying			Drone Racing Competition		Water Rocket Construction	
	Field			Exam Hall		Avionics W/S	
THURSDAY	Water Rocket Launching		Line following Robotic Workshop				Closing Ceremony
	Field		Avionics W/S				Auditorium

