

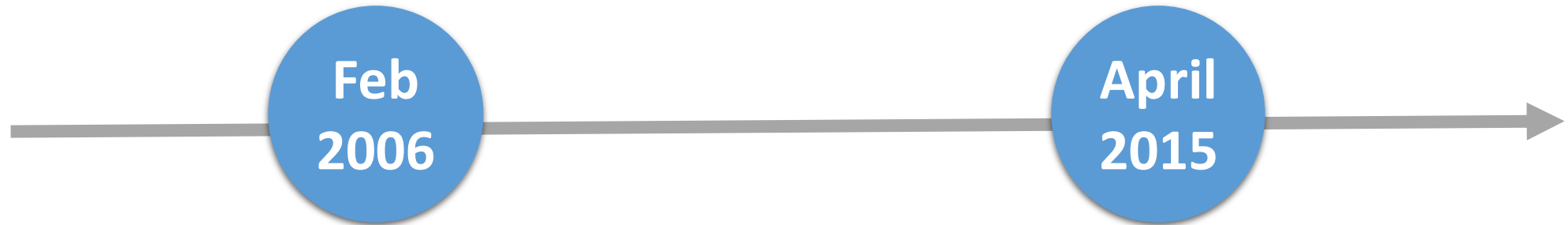


مركز محمد بن راشد
للفضاء

MOHAMMED BIN RASHID SPACE CENTRE



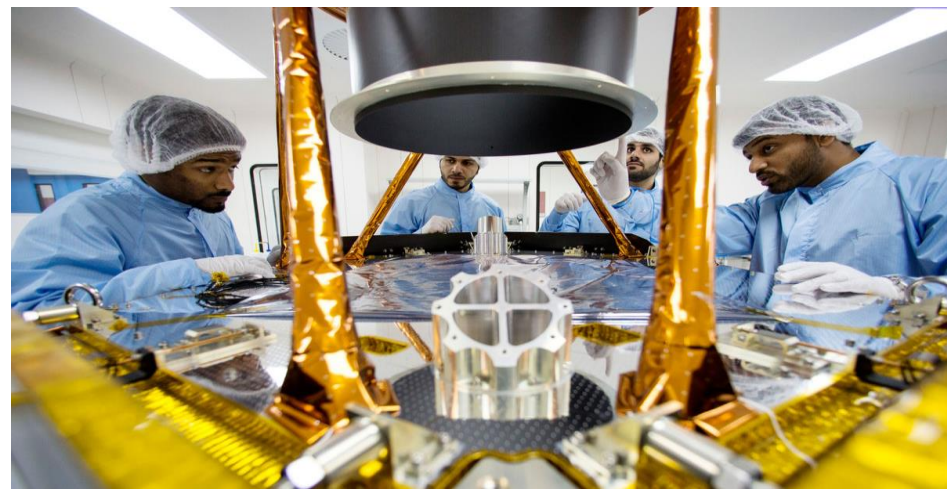
Introduction to MBRSC:



Emirates Institution for Advance
Science and Technology (EIAST)

A decree has been issued to incorporate
EIAST in the newly established
Mohammed Bin Rashid Space Centre





Vision:

“To be recognized globally as a center of excellence in the field of space science and technological innovation.”

Mission:

“To build a sustainable Science and Technology sector that contributes to the national knowledge based economy, through the launch and implementation of advanced space projects, and prepare a generation of Emirati scientists, to take our country towards a brighter future.”



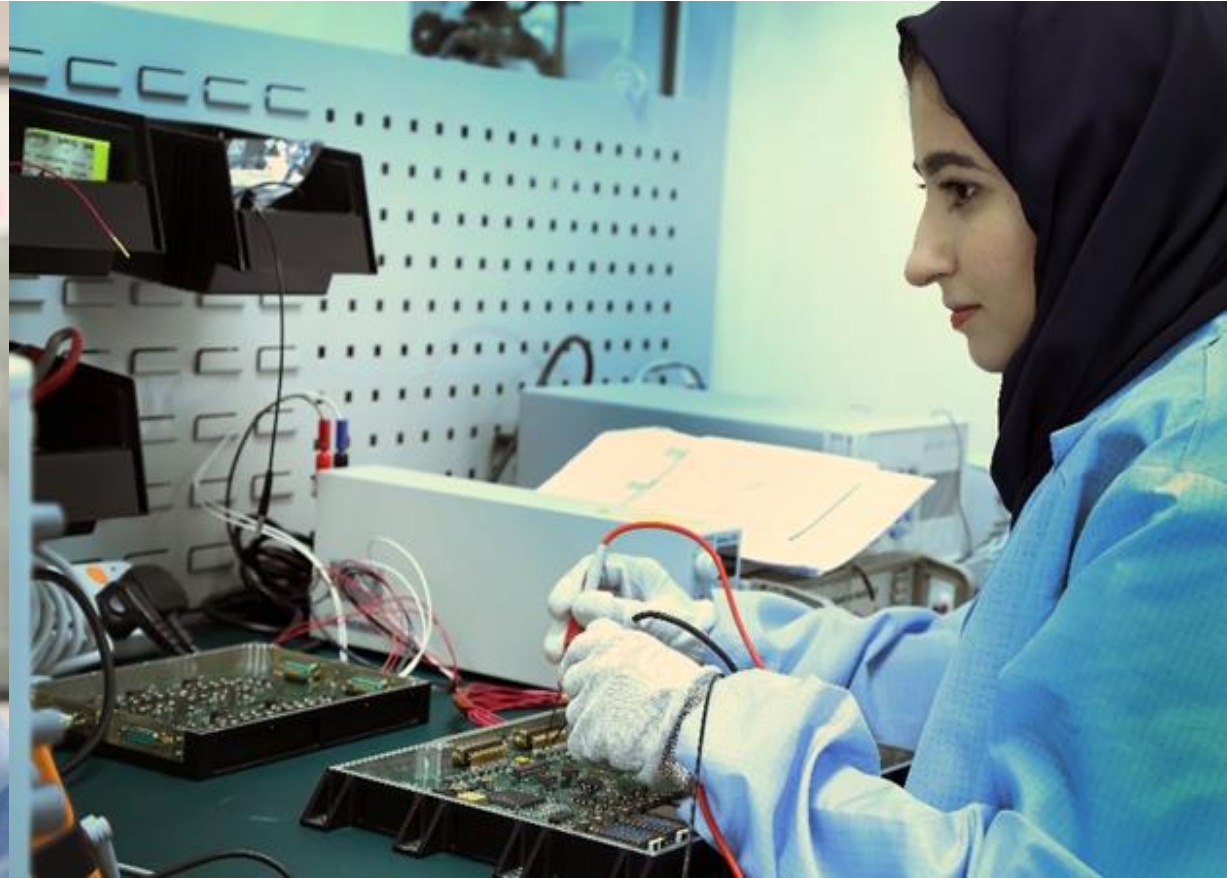
MBRSC Team:



200 Employees



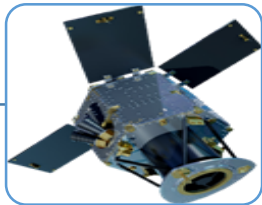
**Average Age:
27 Years old**



Female participation: 40%

The UAE National Space Programme

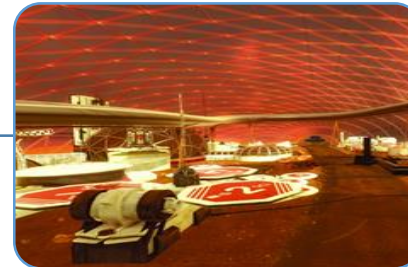
Satellite Development Programme



Emirates Mars Mission



Mars 2117



UAE Astronaut Programme





Satellite Development Programme

DubaiSat-1 & DubaiSat-2

Tech & Know-How
Transfer

Manpower
Development

Meet the continuous
need of spatial
information



	DubaiSat-1	DubaiSat-2
Altitude (km)	680	600
Mass	~ 200 kg	< 300 Kg
Spatial Resolution	PAN 2.5m, MS 5m	PAN 1M, MS 4m
Mass Storage	64 Gbits	256 Gbits
Imaging Modes	Single Strip	Single Strip, Fast Multi-Strip Single Pass Stereo
Data Download Speed	30Mbps	160Mbps
Swath Width (km)	20	12
Launch date	29 th July 2009	21 st Nov 2013

The announcement of Khalifa Sat

حكومة دبي
GOVERNMENT OF DUBAI

مركز محمد بن راشد
للفضاء

مركز محمد بن راشد
للفضاء
MOHAMMED BIN RASHID SPACE CENTRE



KhalifaSat

3rd Earth
Observation
Satellite

100% Emirati

Began in 2013

Launch with
MHI

0.7 m
resolution

29 Oct 2018



The launch of Khalifa Sat & receiving the first signal



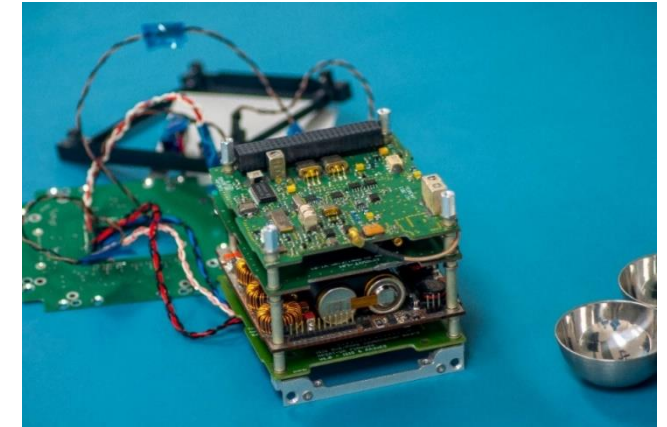
Nayif-1 CubeSat Mission

UAE's 1st CubeSat Mission

Partnership with AUS

Offers hands-on experience

Mission	Amateur Radio
Satellite Class	CubeSat 1U
Dimensions	10x10x11.35 cm ³
Mass	1.32 kg
Power	Max ~2.35W
Communication Footprint	~5000 km
Orbit	Elliptical 400 to 750 km
Launch	Feb 2017 on PSLV-C37



DMSat-1

The first environmental Nano-Satellite in the Arab world devoted to aid the protection of the environment



بلدية دبي
DUBAI MUNICIPALITY



Monitoring and measuring
Aerosols in the atmosphere



Provides data on Green House Gases



Finding solutions to the challenges of
urban pollution and climate change





Emirates Mars Mission (Al-Amal Probe)

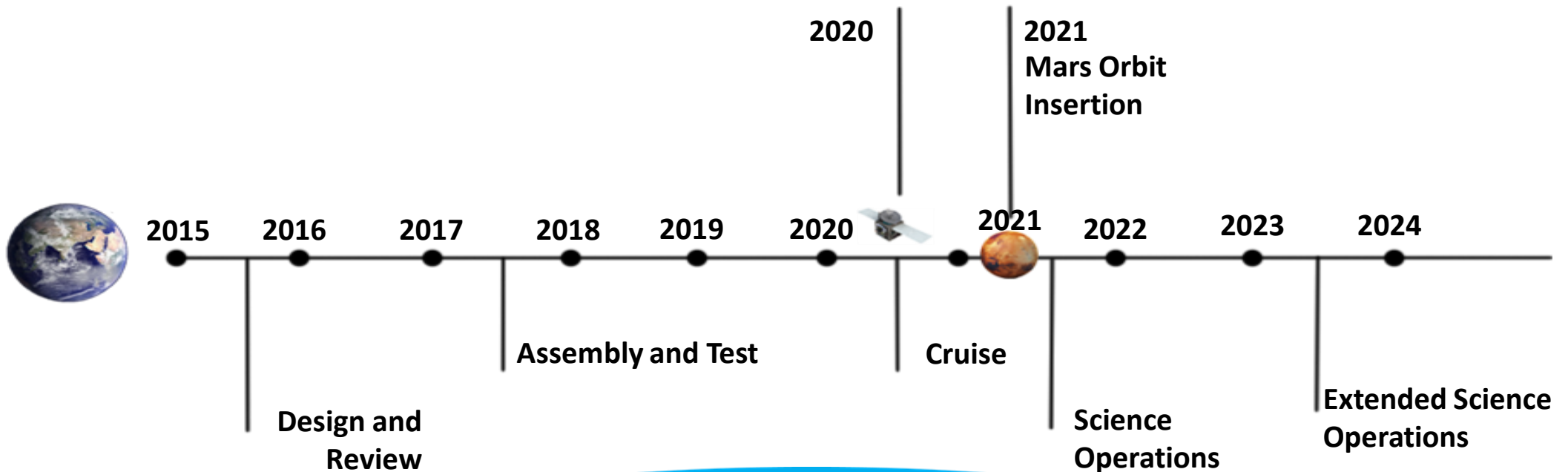
UAE Space Agency and MBRSC signed
an agreement on 20th Oct 2014

The first Arabic-Islamic Mars Space
Probe

To build Emirati technical capabilities
in the fields of space exploration



Mission Timeline





Mars 2117 Programme

المریخ 2117
MARS 2117

Mission:

To establish a lasting colony on Mars by 2117.

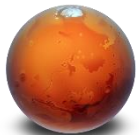
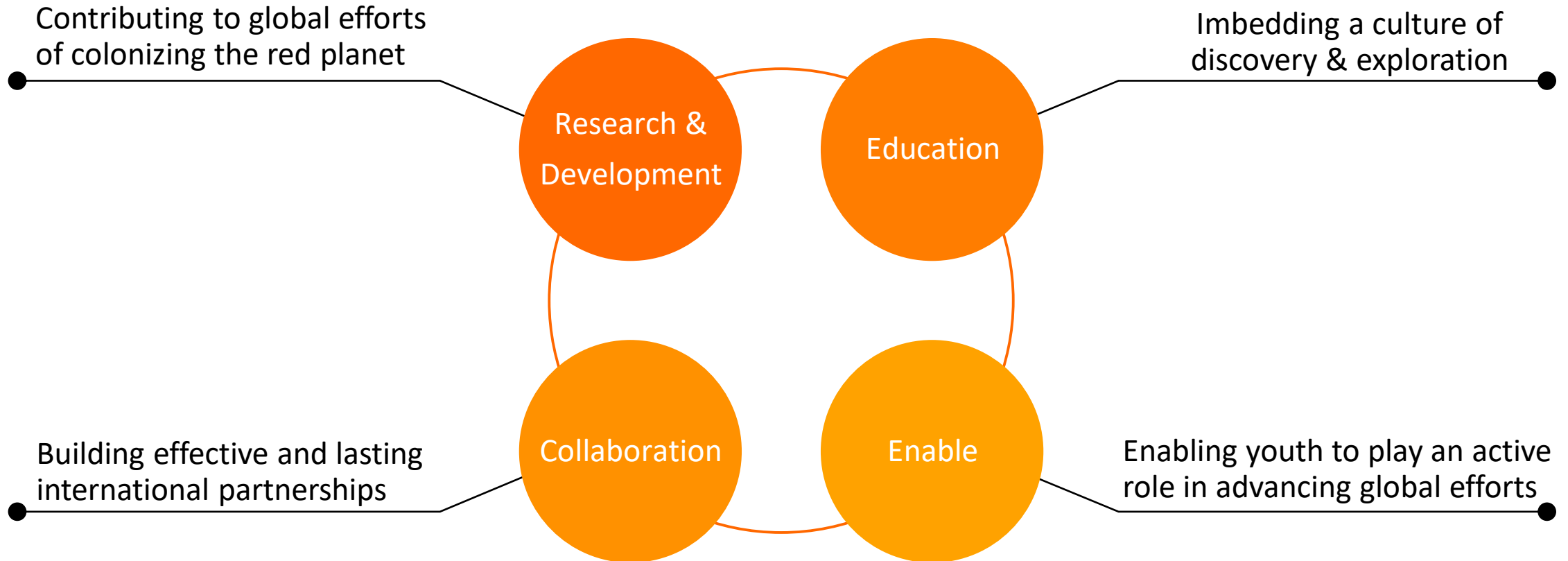


Vision:

To enable the UAE to contribute to humanity's interplanetary endeavors.



Pillars of Mars 2117



A futuristic Mars Science City is depicted on a desert landscape. The scene features two large, geodesic domes constructed from a complex network of white structural beams and translucent panels. The domes are situated on a sandy, reddish-brown terrain. The sky is a deep, dark blue, suggesting a clear night or a high-altitude environment. The lighting is soft and directional, casting long, dark shadows from the domes onto the sand. The overall atmosphere is one of a remote, advanced settlement in a harsh, alien environment.

Mars Science City

Focus of the Mars Science City

التعليم
Education



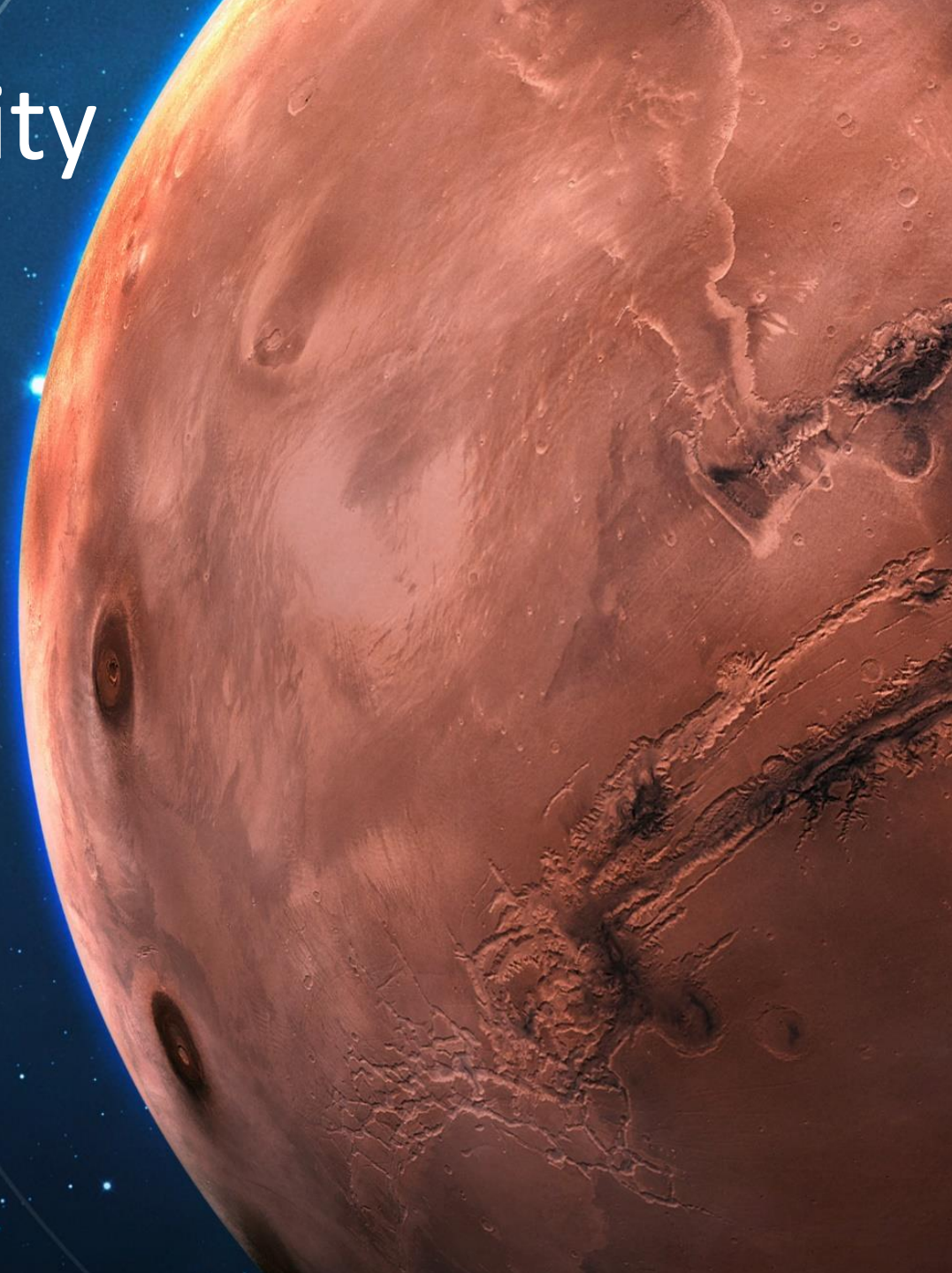
علوم الغذاء والمياه والطاقة
Science of Food, Water, and Energy



مختبرات للبحوث
Laboratories for research



متحف
Museum



Mars Science City Project

Part of Mars 2117
strategy

1.9 million ft²

Largest space
simulation city

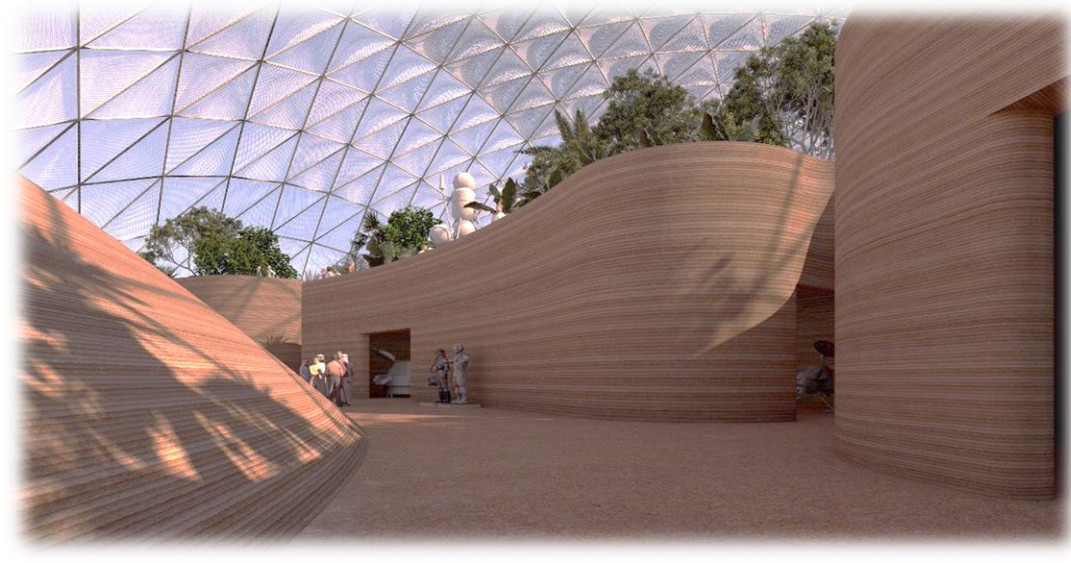
Energy, Water, Food



Team living for 1 year

Museum with 3D printed walls

Display humanity's greatest
space achievements





UAE Astronaut Programme

Programme Objectives:

Developing the first Emirati astronaut corps

Sending astronauts to space on scientific mission

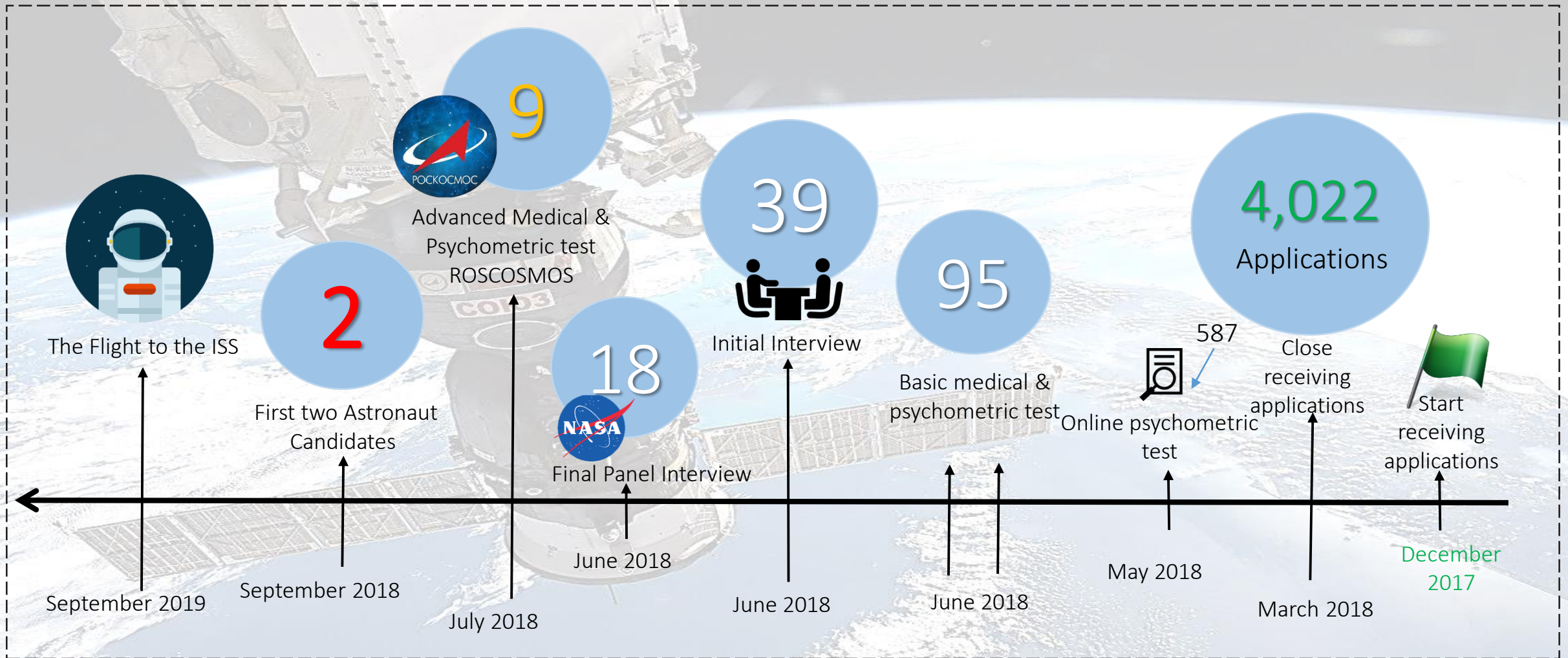
Inspiring new generations

Positioning the UAE as an internationally recognized participant in human space flight

Support UAE's vision of a future depend on knowledge based economy



The selection process:



Astronauts candidates



Hazza Ali Abdan Khalfan Al Mansouri
Nationality: United Arab Emirates
Age: 34
Status: Married
Number of children: 4
Place of birth: Abu Dhabi

هزاع علي عبدان خلفان المنصوري
الجنسية: دولة الإمارات
العمر: 34
الحالة الاجتماعية: متزوج
عدد الأبناء: 4
مكان الميلاد: أبوظبي

A holder of Bachelor degree in Aviation Science (Fixed Wing Pilot) from Khalifa bin Zayed Air College, Hazza graduated in 2004. Since then, he's been working as a military pilot on the F16-

He took on a number of training courses such as the water survival course, GYRO LAP Course up to 9G's, Spatial Disorientation course, and the RED Flag Exercise in US, Las Vegas. He is an F16-B60 instructor pilot and a demo pilot, SOLO Demonstration pilot in F16-B60 since 2016. He's currently under qualification to become a Functional Check Flight (FCF) Pilot F16-B60.

He has participated in a number of events in the UAE and abroad; some of these events include: the Dubai Air Show 50th anniversary of UAE Force, UAE National Day 2017, the 50th anniversary of UAE Air Force 2018

حاصل على البكالوريوس في علوم الطيران تخصص (طيار عسكري) من كلية خليفة بن زايد الجوية ولديه خبرة تفوق الاربعة عشر عاماً في الطيران الحربي (أف F-16) خضع هزاع لمجموعة برامج تدريبية في الدولة وخارجها منها: دورة في النجاة من الغرق وتدريب على الدوران وقوة التسارع تصل إلى 9 جي وعلى مناورات العلم الأحمر في لاس فيغاس، الولايات المتحدة الأمريكية، و حالياً يقوم بالتأهل ليكون طيار لرحلات اختبار وظائف الطائرة. منذ عام 2016، استطاع هزاع أن يصبح طياراً تجريبياً منفرداً على F-16B60.

شارك في فعاليات عدة منها معرض دبي للطيران في الذكرى الحسين للقوات المسلحة الإماراتية، واليوم الوطني الإماراتي في عام 2017، وإحتفالات اليوميل الذهبي لتأسيس القوات المسلحة الإماراتية



Hazzaa AlMansoori & Sultan AlNeyadi



Sultan Saif Miftah Hamad Al Neyadi
Nationality: United Arab Emirates
Age: 37
Status: Married
Number of children: 4
Place of Birth: Al Ain

سلطان سيف مفتاح حمد النيادي
الجنسية: دولة الإمارات
العمر: 37
الحالة الاجتماعية: متزوج
عدد الأبناء: 4
مكان الميلاد: العين

Sultan is a holder of a PHD in Information Technology (Data Leak age Prevention) from Griffith University, Australia. In 2008, he earned his Masters degree in IT from the same university. Prior to that, he studied his Bachelor degree of Science in Electronics and Communications Engineering from the University of Brighton in the UK. A graduate of Um Ghafa Secondary School in the UAE, in 2001 Sultan underwent a General Education Programme in Information Technology from the David Game College, Bath Academy in the UK.

He has a vast experience working as Network Security Engineer for the UAE Armed Forces since 1999.

Sultan is a member of ISACA UAE since 2009, and a regular participant in IT-related workshops and conferences (RSA, GITEK, Interop, CeBIT, InfoSecurity, ISS World, Gartner). He's also a regular speaker at the Abu Dhabi Council. He's been awarded the Zayed Military College Cadet of the year Award 2005, the Griffith University Award for Excellent Performance in 2008, and the Sheikh Rashid bin Saeed Al Maktoum Award of Scientific Achievements 2017. He's a member of the UAE volunteering Platform (volunteerae).

Sultan is an avid reader and has acquired good knowledge of financial, scientific and political events.

حاصل على الدكتوراه في تكنولوجيا المعلومات (منع تسرب البيانات) من جامعة Griffith University في أستراليا عام 2016 وبكالوريوس في هندسة الإلكترونيات والاتصالات من جامعة Brighting University في المملكة المتحدة وأتم برنامج التعليم العام في تكنولوجيا المعلومات من David Game College, Bath Academy المملكة المتحدة عام 2001. وفي عام 1999 تخرج من الثانوية العامة من مدرسة أم غافة الثانوية في دولة الإمارات العربية المتحدة.

عمل منذ عام 1999 حتى اليوم في هندسة أمن الشبكات لدى القوات المسلحة الإماراتية.

حصل سلطان جوتنز عدة منها جائزة كلية زايد الثاني العسكرية لعام 2005، وجائزة جامعة Griffith للأداء المتميز لعام 2008، وجائزة الشيخ راشد بن سعيد آل مكتوم للإنجازات العلمية لعام 2017.

شارك في ورش عمل في مجال تكنولوجيا المعلومات في مؤتمرات عالمية داخل وخارج الدولة مثل RSA, GITEK, Interop, CeBIT, InfoSecurity, ISSWorld, Gartner. هو متحدث منتظم في مجلس أبوظبي وعضو في جمعية الإمارات للتطوع، كما أنه عضو في SACA UAE منذ عام 2009. لديه شغف للاطلاع المستمر على الأحداث المالية والعلمية والسياسية.

UAE Astronauts candidates training in Parabolic flight

A photograph of Earth from space, showing the curvature of the planet and a bright sun rising over the horizon, creating a golden glow. The text "Thank you!" is overlaid in white.

Thank you!