

## When Will the Mars Science City Be Ready?

Back in February 2017, the United Arab Emirates (UAE) unveiled its 100-year plan to colonise Mars, aiming to establish the first human settlement on the Red Planet by 2117. While this ambitious project won't be completed for another 98 years, the team aim to have a prototype simulation city of life on Mars in just "three or four years".

The Mars Science City, which will be built and housed in Dubai, will replicate Martian conditions almost exactly to provide a realistic simulation of how it would be to live on the surface of the Red Planet. This will provide invaluable research, helping the team further develop their work into colonising Mars.

## Life on Mars

With such a short time frame to develop a working, habitable city on the surface of Mars, the prototype city will help speed up the research process by providing an insight into the living conditions in space. <u>Adnan Al Rais</u>, Mars 2117 Programme Manager at the Mohammad Bin Rashid Space Centre (MBRSC), believes the new project is "going to be a long-term plan. It will take three or four years in order to be fully operational".

The space city is expected to cover around 1.9 million square feet of land, making it the largest planned space simulation city to be built. The city will be 3D printed, using materials that are still under development, according to Al Rais. As well as replicating the living conditions on the Red Planet, the space city will have a museum, educational areas and even opportunities for start up businesses.

## The next generation

The space city is not only built to study food, energy and water security on Mars. The research could also benefit Earth today, providing potential solutions to food and water shortages in extreme weather conditions. "For our one-year journey, we believe that any solution that we will be studying and developing at the Mars Science City will serve Earth first and will be improved and implemented for space later on," says Khalifa Al Falasi, Senior Engineer at MBRSC.

Much of the work that is being carried out in the UAE is for the benefit of future generations. According to <u>Rashid Bu Melha</u>, a member of the Mars 2117 team, the research group are aware that they are "working for the next generation". He says,



"we want to ignite the passion among the youth, giving them the opportunity to learn more about space".

Paired with a developing space sector in other countries, <u>like the UK</u>, we could see monumental progress over the coming decades.