

# New Chinese space laboratory

China is preparing for a new round of manned space missions with the launch of its second orbital laboratory, named Tiangong-2. The module will serve as a testbed for China's future permanently-manned space station

## TIANGONG-2 ("Heavenly Palace")

Expected to be similar in size to Tiangong-1, launched in 2011. Will enable crews to stay in orbit for 30 days

## Experiment module

Improved living conditions. Used to conduct relatively large scale experiments compared to China's previous efforts

**Shenzhou:** Manned craft will rendezvous to verify docking technology

## Resource module

Solar panels, engines and other equipment

Robot arm

## Long March 2F-T2

Tiangong launch vehicle  
Height: 52m  
Payload: 8.6 tonnes to low Earth orbit

**Banxing:** Micro satellite accompanies Tiangong as technology demonstrator

**LAUNCH SCHEDULE**  
Sep 2016  
Tiangong-2

**Apr 2017:** First Tianzhou automated cargo ship.  
In-orbit fuel transfer test

**2018:** Core cabin module (CCM)

**Oct 2016**  
Shenzhou-11  
(further Shenzhou launches 2017-22)

**2020-22**  
Two laboratory cabin modules (LCM1, LCM2)

## FUTURE SPACE STATION

**Crew:** 3  
**Weight:** 60 tonnes

Tianzhou  
CCM  
LCM1  
LCM2  
Shenzhou