

Spacechips (c) 2019

Testing Satellite Payloads

Module 1

- 1.1 Introduction to Payload Testing
- 1.2 Component-Level Testing of Satellite Avionics
- 1.3 Automation, Standards, Interfaces and Remote Control

Module 2

- 2.1 Antenna and RF Frequency-Conversion Testing
- 2.2 Fundamentals of VNAs and Spectrum Analysers
- 2.3 Post-Launch, In-Orbit Link Verification

Module 3

- 3.1 Analogue, Digital and Mixed-Signal High-Throughput Payload Testing
- 3.2 Fundamentals of Signal Generators and AWGs
- 3.3 Understanding the Impact of Phase Noise and Jitter
- 3.4 Fundamentals of Signal Analysers, BER and EVM

Module 4

- 4.1 Small-Satellite Testing
- 4.2 Affordable Test Solutions
- 4.3 Launch-Site Test Challenges & Fundamentals of TDRs
- 4.4 Vacuum-Chamber Test Challenges
- 4.5 Care of Test Equipment