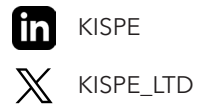




Hands-on Introduction to Space and Satellites



Course Description

A extended version of the Introduction to Space and Satellites course using the Satellite Learning Lab to provide hands on experimentation to enhance understanding of the spacecraft system and the components and sub systems within it.

Aimed at a non-technical audience and those new to the subject. The course provides a basic understanding of our uses and applications of space, space science, orbits, the purposes of satellites and how they work.

We will explore, what inspires us to look to space and the many and varied uses of space today and in the future. We will examine what a satellite is. We will explore the space environment from our presence in the solar system, the Earths gravity and magnetic field and the vacuum of space. We will examine how we get into space, learn how aircraft and balloons use lift to counter gravity, rockets use thrust to getting into space and how satellites use gravity to remain in orbit around the Earth.

We will explore what satellites do, what a payload is and what types there are. What is the platform and what functions it performs. We will perform experiments using Satellite Learning Laboratory to explore how satellites and the sub systems function.

Finally we look at how a satellite fits within a space system.

Course Topics

Space in our lives

- The inspiration of space
- Space in our daily lives
- Why we go to space
- Applications and Services

Space Science

- The solar system
- Earths orbital motion
- Earths magnetic field
- Gravity
- Vacuum
- Electromagnetic Spectrum
- Getting into Space
- Orbits



Satellites

- What is a satellite
- Payloads and satellite bus
- Types of payloads
- Satellite sub systems
- What makes up a space system

Satellite Experiments

- Perform experiments relating to power, communications, command and control, thermal and payload operation.

Who Should Attend

Non-technical employees within the space sector, or those wishing to move into space sector. The course provides a non-technical introduction to space and satellites, from why we use space, what makes space different to what are satellites.

Course Materials

Each participant will receive:

- A copy of Introduction to Space and Satellites
- A complete electronic set of course notes with copies of the slides used in the presentation

Course Objectives

Gain and understanding how space fits into our daily lives

- Understand the range and diversity of space applications

Gain and understanding of the basics of the space environment

- How solar environment, earths magnetic field, gravity, vacuum influence satellites

Gain a basic understanding of what is an orbit

- Learn about the most commonly used orbits

Gain an understanding what satellites do, what the main parts are and their function

- Learn about payloads and satellite bus
- Learn what are the different sub systems of a satellite

Gain an overview of how satellites fit into a space system

Gain familiarity of language and terms used with-in the industry.

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Contact: info@kispe.co.uk | Courses: www.kispe.shop