YAMCS Training
Kick-Start Your Team & Your Mission

Overview
Space Applications Services offers YAMCS training courses to kick-start your application and use of YAMCS, the modern scalable and expandable Mission Control System.

The course is offered to any individual or organisation keen to learn in an express, efficient and customisable way, the basics and advanced functions of YAMCS.

Course Content
The course in English is composed of a number of lessons combining knowledge and hands-on exercises, covering topics such as:

- YAMCS overview and installation
- YAMCS Server configuration
- SPPELL* installation and procedures
- YAMCS Mission Database Development
- YAMCS Studio installation
- YAMCS Studio views and displays development
- YAMCS Web interface
- YAMCS API
- Configuration for AIT and EUROSIM integration

Course Customisation
Our professional Instructors and YAMCS experts will customise all aspects of the course to fit your Team, your mission and your need. They will determine with you the most suitable course content, course duration, course planning based on your target audience, application and mission.

Moreover, any course can be combined with on-site consultancy service where our YAMCS experts guide you in applying what you have learned to the specifics of your mission and architecture.

Finally, the course is adapted by the Instructors to fit Trainee skills and learning curve. Additional topics can be built in the course if needed:

- Linux OS
- Networks and communication
- Mission operations

Course Quality & Method
Our courses are prepared and delivered by a Team of professional Instructors with years of experience in astronaut, flight controllers and ground support personnel Training and by YAMCS developers and experts.

Courses are developed, customised and implemented following standard instructional system design methodologies (ADDIE model).

SERVICES AVAILABLE
- Scenarios customisable to specific needs or context.
- Training duration adaptable for specific needs or requirements: shorter, longer, refresher course.

For more information, please visit:
https://spaceapplications.com

or contact us:
Olivier.Lamborelle@spaceapplications.com

*Satellite Procedure Execution Language & Library
Frequently Asked Questions

• How long is the course?
The baseline course is 5 days. However we also provide shorter or longer courses. The training can also be distributed over time to suit your scheduling constraints.

• When is the training?
On-demand.
Please contact us to inquire about planning or joining a planned course.

• Where?
At your location, or in our offices in Brussels (Belgium), Noordwijk (the Netherlands), in Cologne (Germany).

• What is the language of the course?
The course material is in English. Instructors / lecturers can deliver the course is English or French.

• How many Trainees can attend?
We advise a maximum of 8 Trainees per course, to allow Trainees to practice and interact efficiently. However, customisation is possible for different numbers of attendees.

• What is the cost?
Please contact us for inquiry on the cost per seat or per session.

• What is needed for the course?
A computer for each Trainee to perform the hands-on exercises

ABOUT YAMCS
Yamcs Suite is an operational open source solution combining a Checkout and Mission Monitoring & Control System in a single product. More information is available at: www.spaceapplications.com/yamcs/

ABOUT SPACE APPLICATIONS SERVICES
Space Applications Services NV/SA is an independent Belgian company founded in 1987, with a subsidiary in Houston, USA. Our aim is to research and develop innovative systems, solutions and products and provide services to the aerospace and security markets and related industries. Our activities cover manned and unmanned spacecraft, launch/re-entry vehicles, control centres, robotics and a wide range of...
Overview

The Maintenance and Repair Skills Course for University Level is a hands-on course designed for undergraduate, advanced degree students and young professionals who have to perform occasionally maintenance and repair operations, but who do not have the opportunity to build up experience in their daily curricula or professional life.

The course is offered to any individual or organisation keen to learn basic maintenance and repair skills and familiarise with a wide range of tools available and used on the International Space Station, in a pleasant and motivating format, with information and anecdotes about space operations.

The main objective of the course is to provide structured learning opportunity on maintenance, repair and tools usage derived from real examples of maintenance operations in space related environment.

During this 5-day course, trainees learn and practice basic mechanical, electrical, electronic, hydraulic and pneumatic skills, and then put them in practice in integrated maintenance and repair scenarios.

Instructors

The course is delivered by ESA ITC-Certified Instructors with years of experience in Astronaut and Ground Support Personnel Training.

The experience in Astronaut Training, On-Orbit Operational Support and design of Space Products of Space Applications Services is enhanced by the experience of the Dr. Reinold Hagen Foundation in training young professionals in the area of metalworking, plastic working, electrotechnics and pneumatics / hydraulics.

Modules & Skills

The course in English is organised in 4 modules for a total of 25 lessons.

The mechanical module covers topic such as metal working, drilling, threads, nomenclature of tools and fasteners, their utilisation and troubleshooting.

The electrical module covers electrical components and measuring equipment, soldering & de-soldering, basics of harness nomenclature, assembly and troubleshooting.

The hydraulic & pneumatic module features an introduction to hydraulic and pneumatic systems, including safety advices and overview and/or handling of various on-board fittings and connectors.

The integrated module includes scenarios allowing the trainees to activate and practice all the skills acquired in the course, in more realistic, integrated and complex settings.

Instructional System Design

Principles of the Instructional Design System (ISD) approach historically used for training at NASA and ESA were used during the course design and during every training implementation.

From a pedagogical perspective the course has the following features:

Task-Centred Instructions

Basic knowledge might be helpful as a prerequisite, but most of the necessary
knowledge is refreshed or included in each lesson.

Learning Experience
- Real-time instructions and feedback
- From individual practice to group exercises and challenges
- From simple to complex skills
- Foster analysis, problem-solving, attention to details and accuracy.

Course flexibility and personalisation
The course is adapted by the instructors to fit trainee skills and learning curve. See the possible CUSTOMISATION (right) for options.

Frequently Asked Questions
- **How long is the course?**
  5 days.
- **When?**
  On-demand.
  Please contact us to inquire about planning or joining a planned course.
- **Where?**
  In Bonn, Germany.
- **How many trainees can attend?**
  Max 8 trainees per implementation. Customisation is possible for different number.
- **What is the Cost?**
  Please contact us for inquiry on the cost per seat or per session.

What is included in the course?
- Digital Lessons Summaries, a helpful reminder of the best tips explained during the course
- Warm lunch at the premises by professional catering
- A signed certificate.

CUSTOMISATION
- Exercises & scenarios customisable to specific needs or context.
- Course duration adaptable for specific needs or requirements: shorter, longer, refresher course.
- Additional lectures on space operations, space facilities and utilisation can be included on request.

SERVICES AVAILABLE
For more information, please visit: https://www.spaceapplications.com
or contact us: Olivier.Lamborelle@spaceapplications.com

ABOUT SPACE APPLICATIONS SERVICES
Space Applications Services NV/SA is an independent Belgian company founded in 1987, with a subsidiary in Houston, USA.
Our aim is to research and develop innovative systems, solutions and products and provide services to the aerospace and security markets and related industries. Our activities cover manned and unmanned spacecraft, launch/re-entry vehicles, control centres, robotics and a wide range of information systems.