ATSEP Qualification, DPR-DP

Course aim

The ATSEP DPR-DP course is designed for technicians and engineers who need to understand the infrastructure used in Air Traffic Management (ATM) for data processing systems. It gives learners a thorough understanding of how data systems are used for surveillance and flight data processing within ATM. It also prepares them for System Equipment Rating Training, which is the next step in becoming an ATSEP.

How you will learn

The course is offered in three ways depending on the flexibility needed for our learners. The standard access is 90 days, and we estimate that 8 commitment days are needed to complete the course.

EPN on demand
EPN on demand provides learners with complete flexibility and control over their learning experience. It's a self-paced course, allowing the learners to access digital materials such as reading resources, videos, quizzes and interactive content whenever it suits their schedule. The learner automatically receives a certification upon completion.

EPN live guidance
In EPN live guidance, we combine the flexibility of on-demand learning with the added benefits of real-time instructor split up into 3 scheduled half days. Here, we deep-dive into topics, discuss real-world examples and share knowledge. We also offer 1:1 sessions that the learners can book with the instructor on their own initiative. The learner automatically receives a certification upon completion.

During the scheduled period of live sessions, learners can engage and communicate with their peers and the instructor.

EPN onsite
Onsite training is offered upon request. The onsite course can be delivered at customer site or any EPN site.

What you will learn

Functional Safety (DPR-FST)
Software Integrity and Security.

Data Processing Systems (DPR-DPS)

User requirements: controller requirements, trajectories, ground safety nets, decision support.
System components: data processing systems, flight data processing systems, surveillance processing systems.

Process (DPR-PRO)
Software process: middleware, operating systems, configuration control, software development process.
Hardware platform: equipment upgrade, COTS, interdependence, maintainability.
Testing: different methodologies for testing systems, application software, adaptation data.
Virtualisation.

Data (DPR-DAT)
Data essential features: data significance, data configuration control, data standards.
ATM data – detailed structure: systems area, characteristic points, aircraft performances, screen manager, auto-coordination messages, configuration control data, physical configuration data, relevant meteorological data, alert and error messages to ATSEPs, alert and error messages to ATCOs.

Com Data (COM-DAT)
Introduction to networks: types, networks, external network services, measuring tools.
Protocols: fundamental theory, general protocols.
National networks.
Global Networks.

Primary Radar (SUR-PSR)
ATC surveillance: use of PSR for ATS.

Secondary Radar (SUR-SSR)
SSR and MSSR: use of SSR for ATS.
Mode S: introduction to Mode S.
Multilateration: MLAT principles.

Surveillance HMI (SUR-HMI)
ATCO HMI, ATSEP HMI, system displays.

Surveillance Data Transmission (SUR-SDT)
Technology and protocols.

Prerequisites

To become an ATSEP, learners need to complete the ATSEP Basic course, the ATSEP Shared course, and at least one ATSEP Qualification course. This Initial Training can be completed in two different orders:

- ATSEP Basic > ATSEP Shared > ATSEP Qualification, or
- ATSEP Basic > ATSEP Qualification > ATSEP Shared

This means that the only prerequisite for starting this Qualification course is to have completed the ATSEP Basic course. However, to become an ATSEP, learners will need to either complete an ATSEP Shared course before taking the Qualification course, or complete an ATSEP Shared course after they completed the Qualification course.

Compliance with regulations

- Commission Regulation (EU) 2017/373 Annex XIII, subpart A.
- EASA ANNEX XIII – Part-PERS requirements for service providers concerning personnel training and competence assessment Subpart A – Air Traffic Safety Electronic Personnel. Appendix 4a Qualification training – Streams Data – Data Processing.