



### AIRCRAFT CERTIFICATION SERVICE

### FAA21030: Software Fundamentals

#### PURPOSE AND CONTENT

This course presents an overview of basic software concepts and principles needed by engineers as an educational foundation. This course is not procedures training. It will not provide information on how to perform the job.

Course content includes three major areas: Overview of the System Life Cycle; the Software Life Cycle; and the Software Development Process. The general role of the FAA in each of these areas is discussed.

This course also includes basic information on DO-178B, the guidance used by the FAA to evaluate an applicant's software development.

#### TARGET AUDIENCE

The target audience for this training includes

- FAA Aerospace engineers, DERs, and HQ/Directorate staff who are involved in the review of airborne software
- International certification authorities

This course is optional for Aviation Safety Inspectors.

#### COURSE OUTCOMES

Participants will learn about:

- Software terms and their relationship to an applicant's software products and services
- Applicant's activities during the software life cycle with emphasis on the software development process
- RTCA/DO-178 guidance as a basis for carrying out FAA responsibilities during the software life cycle.

#### PREREQUISITES

FAA attendees have taken the following initial string courses:

- FAA21016: Part 21
- FAA21017: Core Job Functions
- FAA27936: AIR Indoctrination Basics
- FAA21936: AIR Indoctrination Applications

NOTE: Individuals may request a formal waiver through their local AIR Training Manager (ATM) manager if they wish to

- take this course out of sequence from the initial string courses (FAA employees) or
- waive this course as a prerequisite for FAA21045 (Software Job Functions) when possessing a degree in computer science or software engineering

#### DELIVERY METHOD

This course is delivered as instructor-led training.

#### ENROLLMENT INFO

- FAA Employees: Contact your division or directorate AIR Training Manager (ATM).
- Non-FAA Employees: Contact the Course Manager, Gerald Pilj, at (405) 954-0570 for enrollment and tuition costs.
- Attendees requiring disability accommodations: Contact the Course Manager, Gerald Pilj, at (405) 954-0570

#### LOCATION & DATES

- FAA Academy, Oklahoma City, Oklahoma
- March 22 – 26, 2010
- August 2 – 6, 2010