

Introduction to Systematic Reuse

Every software project practices some kind of reuse as a common sense practice. Very often, practitioners use parts of code, documents and experiences from previous projects as a personal initiative. Of course, this kind of reuse brings some benefits to the company. However, it is generally performed in isolation from other projects, depends on the individual's initiative and has very limited impact.

Systematic Software Reuse is the capability of an organization to obtain maximum profit from the experiences acquired in former projects by identifying the reuse opportunities a priori and establishing the appropriate organizational, managerial and budgetary support. Software Reuse reduces development costs and time by avoiding the duplication of work.

The course will address: the technical and organisational concepts of reuse; the impact of a reuse based SPI programme on the software processes within a software development unit and throughout the organisation; and the ingredients of a successful reuse-based SPI programme. The course will also demonstrate the benefits of reuse, including increased predictability in the software process, the opening of new business opportunities and a reduction of costs and time-to-market. Through participation in lectures, exercises and case studies, the attendees will have the opportunity to practice the concepts of systematic reuse in real world scenarios and receive support in transferring these practices to their own organisation. Attendees will be able to identify the potential of systematic reuse in their own working environment and will understand the process, methods and technical knowledge required to implement Information a successful reuse-based strategy.

Topics covered in this course include:

- Introduction to the Concepts of Systematic Reuse
- The Benefits of Reuse
- Reuse-Based SPI
- Reuse Metrics
- Definition and development of a Systematic Reuse Strategy
- Software Development and Reuse - a case study approach
- Reuse in an organisational context
- State of Practice in implementing reuse

Duration : Two Days

Audience : Managers, Technical Leads, Software Developers, Software Analysts, Software Architects.

Pre-requisites: basic knowledge of software engineering

Material : is certified by the ESI (European Software Engineering Institute)