

## Fundamentals of COBOL

**Level:** foundation

**Length:** 35 - 40 hours

**Course Objective:** a solid introduction to the COBOL programming language, learn the way it sees and solve the problems

### What You Will Learn

- The COBOL way of solving problems
- How the programs are organized, the using of each part
- How the information is organized in external files, how they are used in programs
- How to implement algorithms to process data

**Who Can Attend:** programmers who want to have an excellent start in learning the COBOL programming language

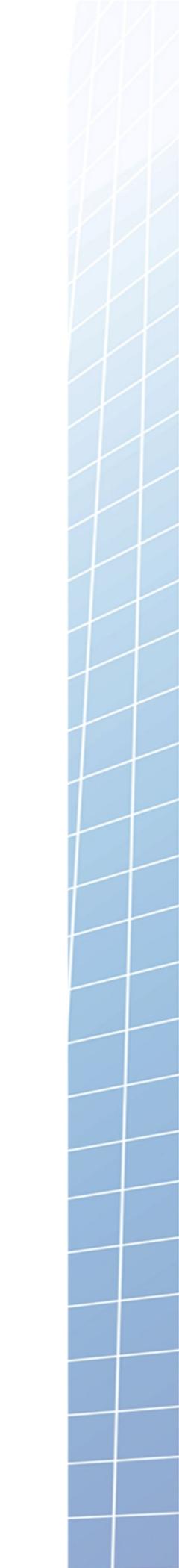
**Prerequisites:** attendees have to have the knowledge of computer fundamentals, basics of the programming principles and constructs, have to be familiar with a procedural programming language (like C for example)

**Required facilities:** VGA projector, white board, workstation, development environment: Micro Focus – Visual COBOL for Eclipse

### Description

Despite the fact that COBOL is a very old programming language it is still used in industry by very large systems in banking, insurance and defense. There are still very large organizations which operates huge systems written in COBOL. This code has to be maintained, has to be used by modern technologies.

This course teaches the theory needed to understand and write COBOL code, and exercise the language for solving typical problems. The major part of the time budget is dedicated to writing COBOL code, to learn its particularities and stereotypes, the practical aspects of using it.



## Contents

1. Introduction to COBOL: history, general features, source code format, coding rules, program structure, data names & identifiers, literals
2. Divisions: identification, environment, data, procedure
3. Data definition: file section, working storage section, data levels, picture clause, type encoding, data groups, data initialization
4. Procedure division & basic verbs: structure, move, arithmetic verbs, control verbs, I/O verbs, conditional verbs
5. Sequential files: file-control, file description, statements for sequential files
6. Indexed files
7. Relative files
8. Sorting and merging files
9. Tables - OCCURS clause, multidimensional tables, indexed tables, indexing, set verb, search
10. Strings – basic operations
11. Subprograms – calling other programs, CALL & COPY verbs
12. Intrinsic functions