

# Syllabus

## VectorCAST C/C++ Training Class

### ❖ Introduction

- Terminology
- Unit test concepts

### ❖ Building an Environment

- Prerequisites
- Whitebox testing
- Environment building wizard

### ❖ Creating Test Cases

- Specifying input & expected values
- Data types
- Data entry techniques
- Compound tests

### ❖ Code Coverage

- Coverage types
- Coverage options

### ❖ Test Reports

- Execution reports
- Coverage reports
- Management reports

### ❖ Regression Testing

- Creating regression scripts
- Script syntax
- Configuration management
- Change Based Testing
- Command line execution

### ❖ User Code

- Parameter user code
- Test Case user code
- Environment user code
- User code syntax
- User globals
- Harness architecture overview

### ❖ Working with Stubs

- Creating stubs
- Stub-by-function

### ❖ Testing C++ Classes<sup>1</sup>

- Class instances and constructors
- Inheritance & polymorphism
- Testing in-line functions
- Testing abstract classes
- Testing templates

### ❖ Miscellaneous<sup>2</sup>

- MC/DC<sup>3</sup>
- Managing include files
- Control flow testing
- Target testing concepts
- Auto test case generation
- Error scenarios
- Creating tests from CSV data
- Advanced stubbing techniques

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<sup>1</sup> C++ concepts will only be covered for those customers using C++

<sup>2</sup> Due to time constraints, not all Miscellaneous topics may be covered at the discretion of the instructor

<sup>3</sup> The MC/DC Module will only be covered for those customers requesting so beforehand.