**Day 1: Introduction and Fundamentals**

* **Introduction to Visual C++**
  + Overview of Visual C++
  + Setting up the development environment
  + Basic syntax and structure of a C++ program
  + Understanding the Visual C++ IDE
* **Advanced C++ Programming**
  + Pointers and references
  + Dynamic memory allocation
  + Templates and the Standard Template Library (STL)
  + Exception handling
  + File I/O operations
* **Topics related to MFC**
  + Overview of Microsoft Foundation Classes (MFC)
  + MFC Application structure
  + Event-driven programming in MFC
  + Creating simple MFC applications

**Day 2: Multithreading and Interprocess Communication (MFC, Win32)**

* **Introduction to Multithreading in Visual C++**
  + Creating and managing threads
  + Synchronization techniques (mutex, semaphore, critical sections)
  + Thread safety and best practices
* **Interprocess Communication (IPC) in Visual C++**
  + Named pipes and anonymous pipes
  + Shared memory techniques
  + Message queues and socket communication
* **Multithreading in MFC and Win32 API**
  + Implementing worker threads in MFC
  + Handling concurrency issues
  + Practical hands-on session for IPC and multithreading

**Day 3: DLL Development and Practical Hands-On**

* **Introduction to Dynamic Link Libraries (DLLs)**
  + What is a DLL, and how does it work?
  + Difference between static and dynamic linking
  + Types of DLLs (Regular DLLs, Extension DLLs, COM DLLs)
* **Creating and Using DLLs in Visual C++**
  + Writing a simple DLL
  + Exporting and importing functions
  + Debugging DLLs
* **Practical Hands-On Session**
  + Developing and integrating DLLs
  + Testing and debugging DLL-related applications
  + Implementing IPC and multithreading concepts in a real-world scenario

**Day 4: Topics related to COM and MMC**

* **Introduction to COM (Component Object Model)**
  + Overview of COM and its architecture
  + COM interfaces and classes
  + Creating and using COM objects
  + Reference counting and managing COM object lifetime
* **Developing COM Components in Visual C++**
  + Implementing COM interfaces
  + Using ATL (Active Template Library) to create COM objects
  + Registering and deploying COM components
* **Introduction to MMC (Microsoft Management Console)**
  + Overview of MMC and its architecture
  + Understanding MMC Snap-ins
  + Creating and registering MMC Snap-ins

**Day 5: Practical Hands-On with COM and MMC**

* **Developing and Debugging MMC Snap-ins**
  + Creating a basic MMC Snap-in
  + Extending existing Snap-ins
  + Implementing MMC Snap-in interfaces
  + Handling Snap-in events
  + Developing property pages and dialog boxes
* **Testing and Debugging COM and MMC Components**
  + Debugging COM objects
  + Troubleshooting common issues
  + Using Visual C++ debugging tools
* **Deployment and Maintenance**
  + Packaging and deploying MMC Snap-ins and COM components
  + Versioning and updating COM components
  + Best practices for maintenance and support