**ARCGIS Pro Developer Syllabus**

**Duration : 40 hrs**

| **Topics** | **Subtopics** | **Duration (hrs)** |
| --- | --- | --- |
| **1. Introduction to ArcGIS Pro development** | **1.1** Overview of ArcGIS Pro and its architecture | **2** |
| **1.2** Differences between ArcGIS Pro and ArcMap development |
| **1.3** Overview of ArcGIS Pro SDK and its components |
| **2. Getting started with ArcGIS Pro SDK** | **2.1** Setting up development environment | **4** |
| **2.2** Creating a new ArcGIS Pro add-in project |
| **2.3** Understanding the project structure and files |
| **2.4** Overview of the ArcGIS Pro API and SDK documentation |
| **3. Working with the ArcGIS Pro API** | **3.1** Overview of the ArcGIS Pro API | **6** |
| **3.2** Understanding the core concepts of the API |
| **3.3** Working with maps and layers |
| **3.4** Querying and manipulating spatial data |
| **3.5** Working with symbology and rendering |
| **4. Creating add-ins in ArcGIS Pro** | **4.1** Understanding the ArcGIS Pro add-in pattern | **12** |
| **4.2** Creating custom UI components, such as buttons, dockpanes, and tools |
| **4.3** Interacting with ArcGIS Pro using events and commands |
| **4.4** Creating custom geoprocessing tools and scripts |
| **4.5** Working with third-party libraries and APIs |
| **5. Building custom tools and extensions** | **5.1**  Understanding the ArcGIS Pro extensibility model | **4** |
| **5.2** Creating custom geoprocessing tools and scripts |
| **5.3** Working with the ArcGIS Pro SDK for .NET |
| **6. Debugging and troubleshooting ArcGIS Pro development** | **6.1** Debugging add-ins and extensions | **2** |
| **6.2** Diagnosing and resolving common errors |
| **6.3** Using log files to troubleshoot issues |
| **7. Deploying and sharing ArcGIS Pro add-ins and configurations** | **7.1** Creating installer packages for add-ins and extensions | **6** |
| **7.2** Sharing add-ins and extensions through ArcGIS Online or Portal |
| **7.3** Managing and updating add-ins and extensions |
| **8. Best practices for ArcGIS Pro development** | **8.1** Following coding conventions and guidelines | **4** |
| **8.2** Ensuring compatibility with future releases of ArcGIS Pro |
| **8.3** Writing efficient and optimized code |
| **8.4**  Creating documentation and user guides for add-ins and extensions |