

## Geomatics Course Outline

<b>Course Title</b>	<b>Course Description</b>	<b>Duration (Days)</b>
<b>ArcSDE Administration for Oracle</b>	<p>This course introduces the fundamentals to configure Oracle to support ArcSDE. It also includes installation and configuration of ArcSDE. Participants will understand how ArcSDE software interacts with Oracle and proposes solid strategies for maintaining and managing an enterprise GIS database. They will also learn to monitor access to their ArcSDE database by using ArcSDE and DBMS tools.</p> <p><i>Objectives: After completion of the course, participants will be able to:</i></p> <ol style="list-style-type: none"> <li>1. Understand the basic architecture of the Oracle RDBMS.</li> <li>2. Understand what is geodatabase.</li> <li>3. Vector and raster data in geodatabase.</li> <li>4. Understand the geodatabase storage structure.</li> <li>5. Understand the basic ArcSDE architectures.</li> <li>6. Understand how data is stored within ArcSDE servers.</li> <li>7. Versioning and multi-user editing in ArcSDE.</li> <li>8. Creating ArcSDE service.</li> <li>9. Understand the use of SDE service and dbinit.sde files.</li> <li>10. Know how to use sdemon command.</li> <li>11. Understand pausing, resuming and shutting down ArcSDE service.</li> <li>12. Display ArcSDE user session information, service status, statistics and lock table information.</li> <li>13. Common startup problems and troubleshooting.</li> </ol> <p><i>Pre-requisite: Introduction to Oracle SQL *Plus &amp; Working with Desktop ArcGIS</i></p> <p>Course Outline:</p> <ul style="list-style-type: none"> <li>Chapter 1: Overview <ul style="list-style-type: none"> <li>▪ Introduction</li> <li>▪ RDBMS and GIS Server Software</li> </ul> </li> <li>Chapter 2: Introduction to Oracle RDBMS <ul style="list-style-type: none"> <li>▪ Oracle Server Overview</li> <li>▪ Oracle Database</li> <li>▪ Oracle Instance</li> <li>▪ Creating Oracle Database</li> </ul> </li> <li>Chapter 3: Geodatabases <ul style="list-style-type: none"> <li>▪ What is Geodatabase?</li> <li>▪ Vector Data</li> <li>▪ Raster Data</li> <li>▪ The Geodatabase Storage</li> <li>▪ Benefits of Working with a Geodatabase</li> </ul> </li> <li>Chapter 4: Introduction to ArcSDE <ul style="list-style-type: none"> <li>▪ What is ArcSDE?</li> <li>▪ Benefits of using ArcSDE</li> <li>▪ ArcSDE Architecture</li> </ul> </li> </ul>	2

## Geomatics Course Outline

<b>Course Title</b>	<b>Course Description</b>	<b>Duration (Days)</b>
	<ul style="list-style-type: none"> <li>▪ Data Storage with ArcSDE</li> <li>▪ Versioning using ArcSDE</li> <li>▪ Using ArcSDE with ArcInfo in Multi-user GIS</li> <li>▪ ArcSDE Users</li> </ul> <p>Chapter 5: Creating ArcSDE Service</p> <ul style="list-style-type: none"> <li>▪ Introduction</li> <li>▪ Installing ArcSDE</li> <li>▪ ArcSDE Home Directory</li> <li>▪ The Database</li> <li>▪ The Administrator Account</li> <li>▪ Register ArcSDE Service in NT</li> <li>▪ Register ArcSDE Service in Unix</li> <li>▪ ArcSDE License</li> <li>▪ Connecting to Oracle from Arc Catalog</li> </ul> <p>Chapter 6: Configuring ArcSDE Service</p> <ul style="list-style-type: none"> <li>▪ Introduction</li> <li>▪ The Service.sde Configuration File</li> <li>▪ Start ArcSDE service using sdemon command</li> <li>▪ ArcSDE Service name in NT</li> <li>▪ Edit ArcSDE Service in NT</li> <li>▪ RDBMS System Environment Variables</li> <li>▪ ArcSDE System Environment Variable</li> <li>▪ ArcSDE Service Initialization Parameters</li> </ul> <p>Chapter 7: Managing ArcSDE Service</p> <ul style="list-style-type: none"> <li>▪ Introduction</li> <li>▪ Starting a local ArcSDE service on Windows NT</li> <li>▪ Starting a remote ArcSDE service on Windows NT</li> <li>▪ Starting local ArcSDE service on Unix platform</li> <li>▪ Start ArcSDE for the first time</li> <li>▪ Pausing the ArcSDE service</li> <li>▪ Resuming the paused ArcSDE service</li> <li>▪ Shutting down ArcSDE service</li> <li>▪ Terminate ArcSDE sessions</li> </ul> <p>Chapter 8: Monitoring ArcSDE Service</p> <ul style="list-style-type: none"> <li>▪ Introduction</li> <li>▪ Display ArcSDE service status</li> <li>▪ Display ArcSDE service locks</li> <li>▪ Display ArcSDE service statistics</li> <li>▪ Display ArcSDE user session information</li> </ul> <p>Chapter 9: Troubleshooting ArcSDE Service</p> <ul style="list-style-type: none"> <li>▪ Introduction</li> <li>▪ When the ArcSDE service start</li> <li>▪ When ArcSDE applications connect to ArcSDE service</li> <li>▪ Common ArcSDE startup problems on Windows NT</li> <li>▪ Common ArcSDE service startup problems on Unix</li> <li>▪ ArcSDE error log files</li> </ul>	

## Geomatics Course Outline

<i>Course Title</i>	<i>Course Description</i>	<i>Duration (Days)</i>
---------------------	---------------------------	----------------------------