



ERDAS IMAGINE Standard

Hexagon's Geospatial Division

October 8, 2019

Scope

This class is an introduction to the latest ERDAS IMAGINE software. Instructors will lead the attendees from the basics of viewing imagery through more advanced spatial model building. Image classification and change detection are also covered in this 3-day class.

Agenda

General rules:

- Training will start the first day at 10 am
- Training will be conducted from 9 am to 5 pm
- There will be 15-minute breaks during the training
- Trainees need to bring their own laptops

DAY 1	
	Section 1 – Installation and Licensing Process Walkthrough
	Section 2 – ERDAS Imagine Overview In this section attendees will learn the ERDAS Imagine architecture, modules, and high-level main functionalities.
Afternoon	Section 3 – Image Viewer In this section, attendees will use the Viewer to visualize various types of raster and vector data. The focus will be on displaying and manipulating raster data using Viewer tools. This section will also look at other tools available in the ERDAS IMAGINE icon panel and how to customize a workspace by setting preferences. Attendees will also become familiar with the Viewer toolbar and menus while displaying various raster images.
DAY 2	
Morning	Section 4 – Using Band Combinations and Indices In this section, attendees will become familiar with the advantages of using different band combinations. Additionally,

	<p>attendees will look at some basic methods of raster algebra using a near infra-red band and a red band to highlight vegetation differences.</p>
	<p>Section 5 – Customizing the IMAGINE Interface</p> <p>Attendees will learn how to customize IMAGINE to improve usability and productivity.</p>
	<p>Section 6 – Subsetting an Image</p> <p>This section will introduce a multitude of approaches for subsetting. A subset using an active AOI layer on the screen will be used. The steps to create and define shapefile attributes will also be covered. This will provide a starting point to lead into subsetting by shapefile attributes using the MosaicPro Tool.</p>
Lunch Break	
Afternoon	<p>Section 7 – Unsupervised Classification</p> <p>Familiarizes attendees with different methods of unsupervised classification as well as postprocessing steps to categorize and recode different types of landcover.</p>
	<p>Section 8 – Supervised Classification</p> <p>Attendees will first create class type inputs, which are used to “train” the classifier to recognize features with different spectral characteristics. They will then learn how to perform supervised classification by collecting sets of pixels to define spectral signatures and evaluating the accuracy of those signatures for use in classifying an entire image.</p>
DAY 3	
Morning	<p>Section 9 – Spatial Modeler</p> <p>This section will introduce attendees to the ERDAS IMAGINE Spatial Modeler.</p>

	<p>Section 10 – Change Detection</p> <p>This section will introduce attendees to the ERDAS IMAGINE change detection process using visual change identification tools and geoprocessing change detection techniques.</p>
Lunch Break	
Afternoon	<p>Section 11 – Photogrammetry and Point Cloud Processing</p> <p>This session explains the different types of information stored in point cloud data and how to use the ERDAS IMAGINE viewers for visualizing the data and extracting information.</p>

Prerequisites

- Attendees must be proficient in the English language

Hardware requirements:

Supported and Recommended	
CPU	64-bit: Intel 64 (EM64T), AMD 64, or equivalent (multi-core processors are strongly recommended)
Memory/RAM	16 GB or more strongly recommended
Disk Space	4 GB for software 15 GB for example data
Display Properties	24-bit color depth
Graphics Card	NVIDIA Quadro K5200, K4200, K2200, K420, K5000, K4000, K600 or equivalent dedicated graphics card recommended
Peripherals	Mouse or pen for input

Software requirements

Operating system for Java based client (for example)
Windows® 7 SP1 or higher, Professional and Ultimate (64-bit)
Windows® 8 (Standard), Professional and Enterprise (64-bit)
Windows® 8.1 (Standard), Professional and Enterprise (64-bit)
Windows 10 Pro (64-bit)

Disk space requirements

Public Training Schedule

Date	Location	Type

About Hexagon

Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications.

Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous — ensuring a scalable, sustainable future.

Hexagon's Geospatial division creates solutions that deliver a 5D smart digital reality with insight into what was, what is, what could be, what should be, and ultimately, what will be.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 4.3bn USD. Learn more at [hexagon.com](https://www.hexagon.com) and follow us @HexagonAB.

© 2019 Hexagon AB and/or its subsidiaries and affiliates. All rights reserved. Hexagon and the Hexagon logo are registered trademarks of Hexagon AB or its subsidiaries. All other trademarks or service marks used herein are property of their respective owners.