**Lesson 2: Introduction to Digital Image Processing**

Description:  
This lesson explains how digital images are formed, represented, and manipulated. You’ll learn about pixel structure, color models, and basic image types used in processing.

**What is Digital Image Processing?**  
Digital Image Processing involves manipulating digital images using algorithms. It focuses on enhancing image quality or extracting useful information.

**Image Representation**  
Learn how images are stored as matrices of pixel values, including grayscale (single-channel) and RGB (three-channel) formats.

**Color Models**  
Discover the most common color models like RGB, HSV, and CMYK, and understand when and why each is used.

**Types of Images**  
Understand the differences between binary, grayscale, and color images. This section also introduces indexed and multispectral images.

**Outro**  
A quick wrap-up of key terms and ideas in digital image processing, preparing you for hands-on processing techniques in upcoming lessons.