

# Machine Vision

## Spring 2025 Draft Schedule

### Week of:

1. 1/22      1. Introduction to Machine Vision  
              2. Commercial Vision Systems  
              3. Digital Images
2. 1/27      4. MATLAB Basics  
              5. MATLAB Image and Vision Toolboxes
3. 2/3        6. Image Histograms  
              7. Arithmetic Operations
4. 2/10      8. Geometric Operations
5. 2/17      9. Color Images
6. 2/24      10. Image Formation  
              10.1. Cameras  
              10.2. Perspective Projection Model
7. 3/3        10.3. Homography  
              10.4. Stereo Cameras  
              10.5. Active 3D Sensors
8. 3/10      11. Neighborhood (Spatial) Processing  
              **Mid-Term Exam**
- 3/17 – Spring Break
9. 3/24      12. Morphology
10. 3/31     13. Segmentation
11. 4/7      14. Image Features
12. 4/14     Finding Objects Project
13. 4/21     15. Edge Detection
14. 4/28     16. Visual Servoing  
              17. Frequency Domain Filtering
15. 5/5      Finish Projects / Review

16. 5/12 **Final Exam Week**