

Advanced Digital Image Processing

EECE 6540 – Fall 2023

Our advanced digital image processing course (3 credits) is designed to provide you with the expertise and practical knowledge to tackle complex image processing challenges with confidence. This course will equip you with cutting-edge techniques and tools to excel in the world of digital imagery.

WHAT YOU WILL LEARN IN THIS COURSE

EECE 6540 as a Graduate-level course covers advanced topics such as object detection, deep learning, cloud and GPU.

- ✓ Image enhancement and image feature extraction
- ✓ Image restoration and Image transformations
- ✓ Image compression and pattern recognition
- ✓ Image segmentation and object detection
- ✓ Deep learning in image processing
- ✓ Image processing by Azure, GCP or AWS
- ✓ Real-world applications and case studies with coding
- ✓ Graphics processing unit (GPU) in image processing

Recommended preparation: To enroll in the digital image processing course, participants should have a solid foundation in the linear algebra and a basic knowledge of programming languages such as Python, MATLAB, or similar. This course briefly covers the important topics from EECE 5520. So, EECE 5520 is not a requirement for this course.

