

# ECE516

## Personal Cybernetics and Intelligent Imaging Systems

Department of Electrical and Computer Engineering  
Instructor: Prof. Steve Mann

### ECE 516

**ECE516** is aimed primarily at third and fourth year undergraduates, and first year graduate students. 4th year undergraduates often take this course as their "other technical elective" (fourth year elective). It is often also offered as a Professional Development Course for those in industry who are looking for a new, exciting, and relevant field of study. The classes are comprised of lectures and labs (labs have both a tutorial component and a grading component, etc.) starting in January, along with a final exam in April.

<http://wearcam.org/ece516/>

### LightVector Painting

Lightspace image rendering, micro-controller programming, embedded computing, and building new devices.

### iPhone Mediated Reality

iPhone apps for Augmented Reality and Mediated Reality.

See through the iPhone  
Illusory Transparency

### LifeLogging

**Cyborglogging:** a continuous lifelong capture with wearable/mobile devices

such as EyeTap, eyePhone or iPhone

### Augmented Reality

SpaceGlasses



3D Image Processing and 3D Augmented Reality using the latest technology: SpaceGlasses

### EyeTap - Mobile/Wearable Computing

**EyeTap:** eye itself functions both as a display and a camera.

Electric Eyeglasses: download prescription, automatic adaptive prescription...

### Brainwave Control

**EEG (brainwaves):**  
Thought-controlled computing.



### Contact Information

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