

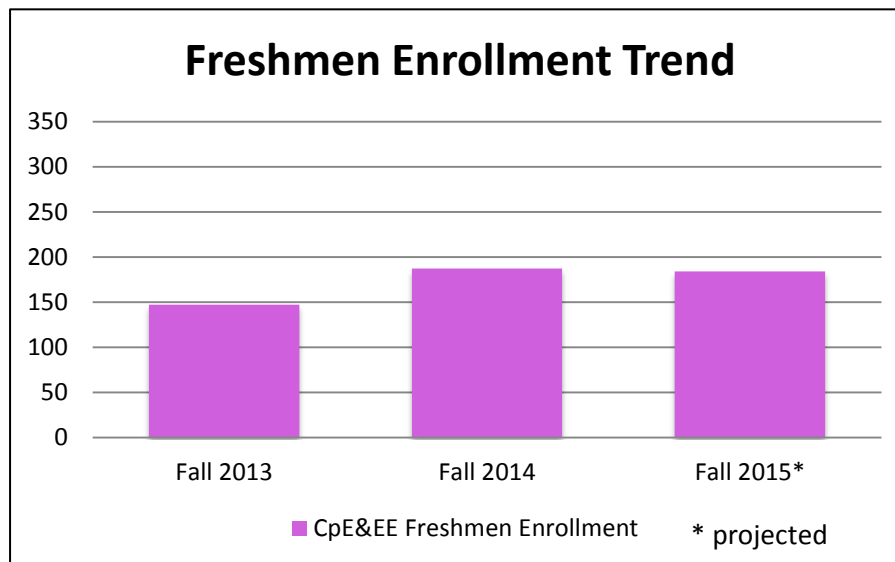
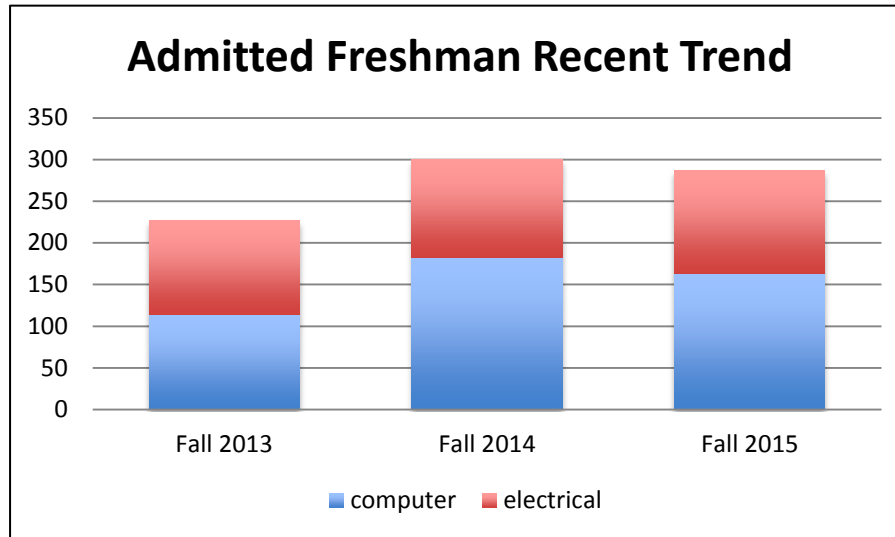


Progress Report to Advisory Board

Undergraduate Education

- Freshmen Admission Enrollment Data
- Graduation Data
- ENEE 101 – What’s Cool in ECE
- UMD-EE at Southern MD
- Friendly Requests

Freshmen Admits & Enrollment





Graduation Data- May 2015

128 students applied for May 2015 graduation

ENEE 101-Update



Laboratory (under construction): Room 1344 (Explore Electronics)

- 600+ sq. ft. floor area
- wrap-around glass window
- 5-6 stations (computers, scopes, instruments, supplies, built-in storage)
- 2-4 students per station
- 2 wide screen monitors
- expected completion (Summer 2015)

Course Details

- Objective: Early exposure to ECE concepts: circuits, computers, communication, controls, E&M, microelectronics, optics, power, signal processing
- 3 credits
- Open to EE/CpE entering freshmen and ENGR undecided (~100/sem)
- Delivery: Lecture, 75mins + Laboratory, 2x 100mins per week

ENEE 101-Update



WEBSITE: ELMS “ENEE101 Development”

MODULES (under development)

- Android/Arduino Programming – Gomez (90% complete)
- Image Processing – Wu
- Optical Fiber Communication – Goldhar/Gomez (70% complete)
- Temperature Feedback Control – Levine/Gomez (50% complete)
- Electroencephalography (Emotiv™) – Babadi (20% complete)
- Renewable Energy (Silicon Lab™)– Khaligh (90% complete)
- Augmented Reality (Oculus™) – Chellappa
- Arduino/MSP40 – Davis
- Model Based Design Software - Bhattacharyya
- Electron Drift Velocity – Melngailis (50% complete)

Each module allotted 1-3 weeks instruction.

Incentive to developers/instructors: 4 offerings = 1 course release

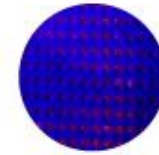
UMD EE-SMD

Start: Fall 2015

Status

- Under review by SMHEC, MHEC
- Fall 2015:
 - adjunct faculty to teach ENEE 303 & 380 at SMHEC
 - regular faculty to teach ENEE 322 & 350 remote-live from Siegel Learning Center
- Spring 2015:
 - adjunct faculty to teach ENEE 313 & 381 at SMHEC
 - NAWCAD adjunct to teach ENEE 307 at SMHEC
 - regular faculty to teach ENEE 324 remote live from Siegel Learning Center
- Fall 2016 – 400 level navalized courses
 - ENEE 490 in the process

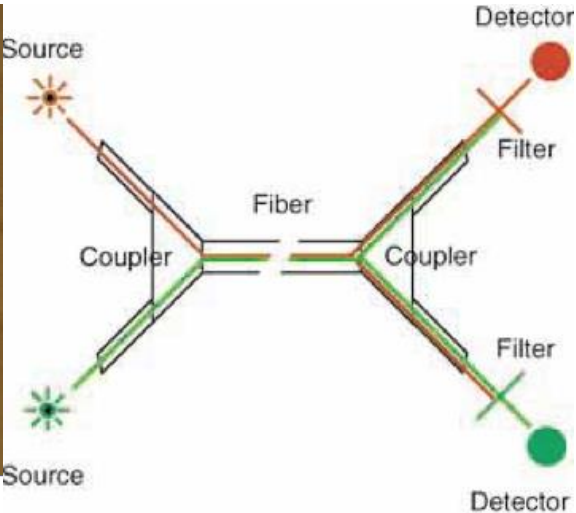
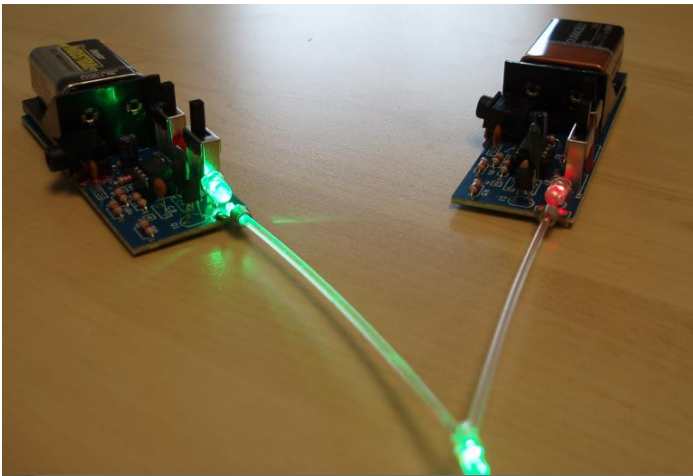
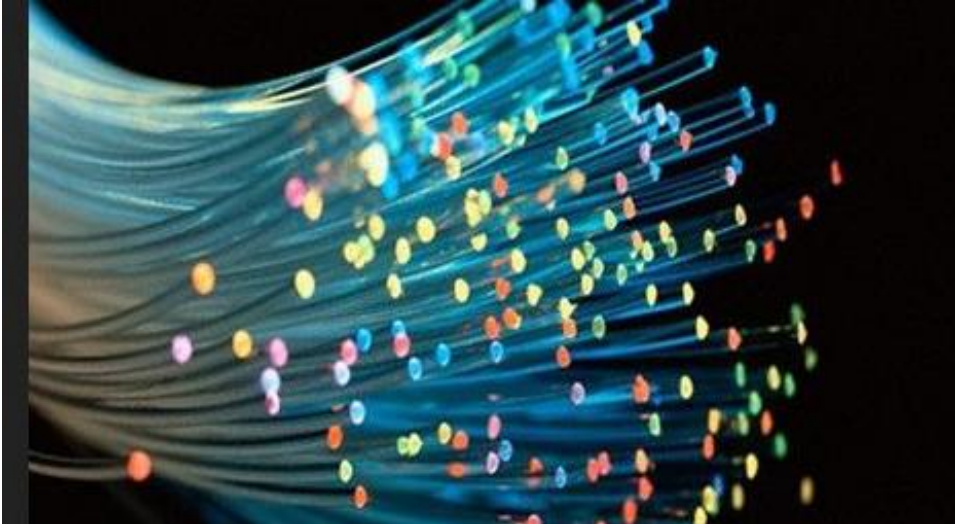
ENEE 101



What's cool about ECE?

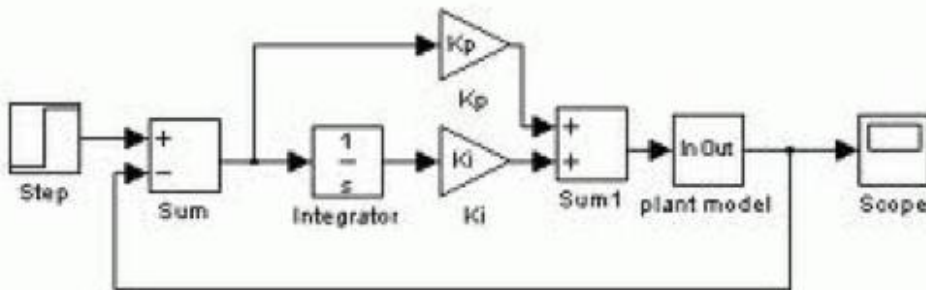
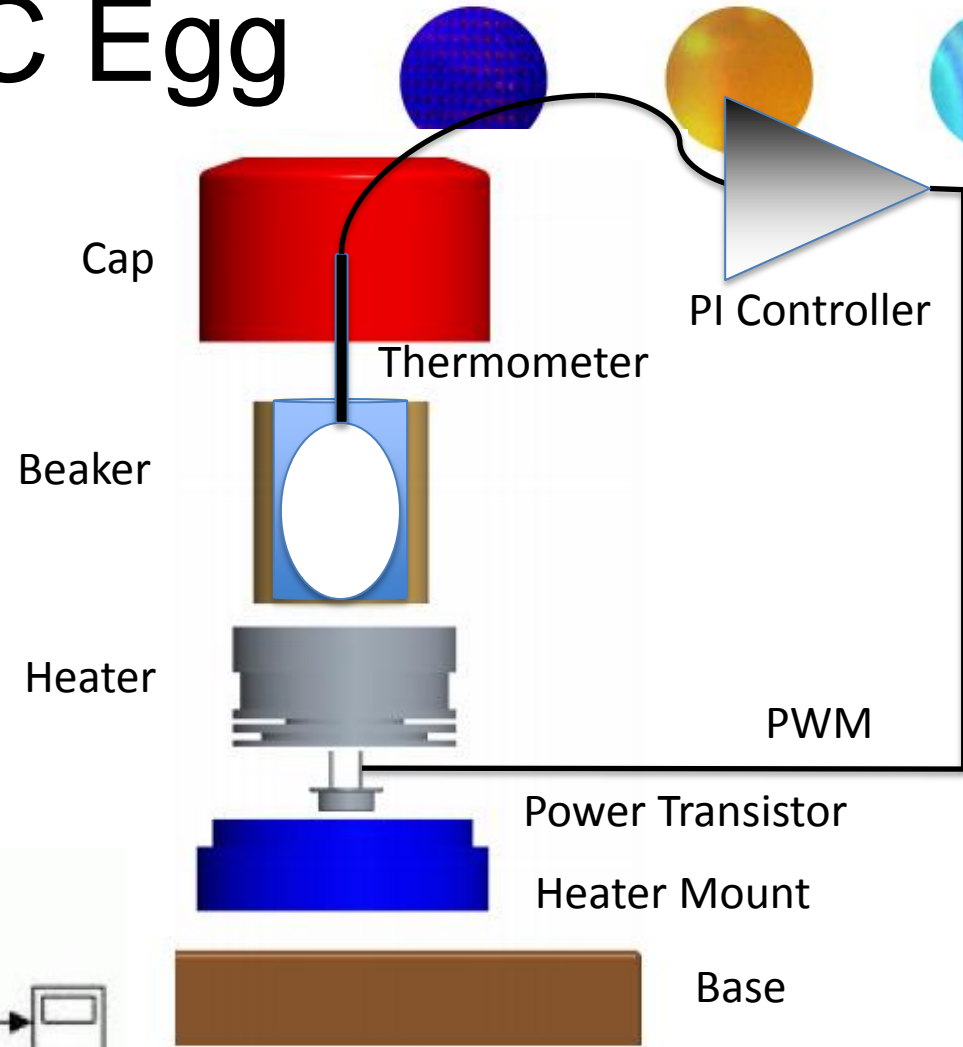
- **Starting Fall 2015**
- 3 credits, hands-on lab/design course
- 75 mins lecture, 2hr lab x2 per week
- Students will be exposed to various applications of ECE

Optical Fiber Communication

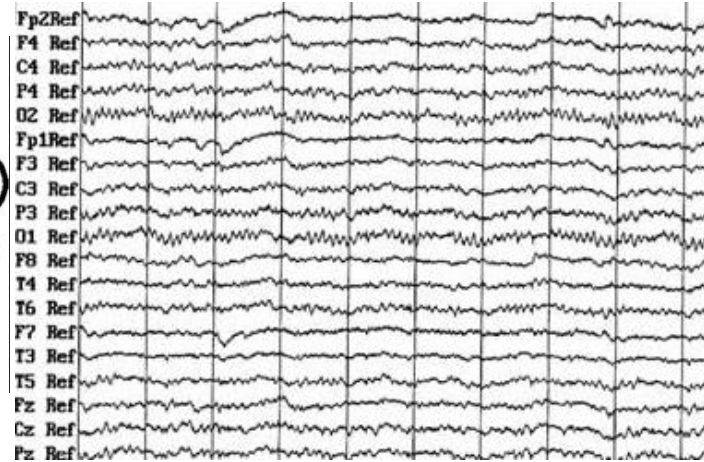


www.thefoa.org

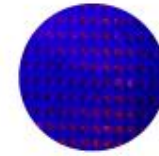
65°C Egg



Brainwaves & Cognition



Energy



All about Energy Harvesting



Solar



Peltier



Piezo



Image Processing

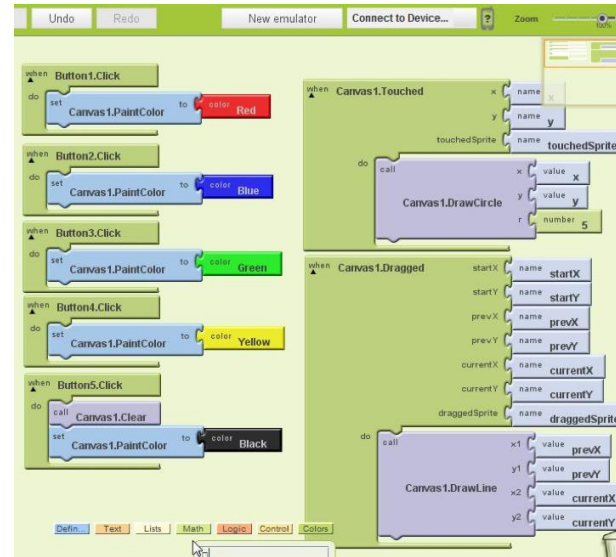
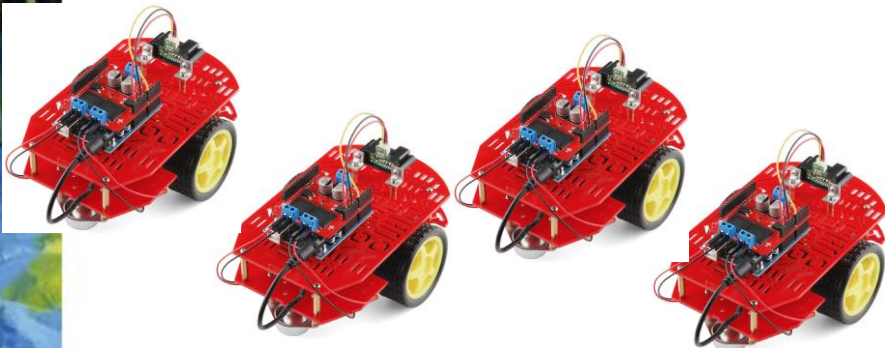
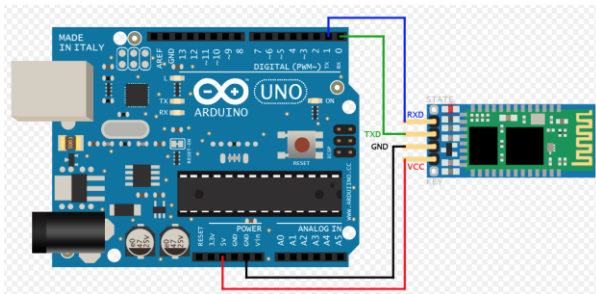


<http://poetsandquants.com/wp-content/uploads/2012/04/spy.jpg>

blogs.mathworks.com

www.softicons.com

Android & Arduino



```
//
// Uses the TVout library by Myles Metzler
// Uses the DHT11 library at Arduino.cc
// -----

#include <TVout.h> // include the TVout library
#include <fontALL.h> // include the screen font info from the library
#include <dht11.h> // include the DHT11 sensor library
#include "apclogo.h" // include our APC logo file! :)

#define DHT11PIN 11 // set pin 11 on the Arduino Uno as the input pin from

TVout TV; // create TV as a TVout class
dht11 DHT11; // create DHT11 as a dht11 class
int DHTread = 0; // set DHTread as an integer variable
int temp = 0; // set temp as integer variable
int humid = 0; // set humid as integer variable
```

Model-Based Software

