### **EE TRACKS**

#### 1. COMMUNICATIONS AND NETWORKS

| EEEN 5342 | Wireless Communications             |
|-----------|-------------------------------------|
| EEEN 5303 | Microwave Engineering               |
| EEEN 5303 | Broadband Networks                  |
| EEEN 5303 | Adaptive Array Processing           |
| EEEN 5303 | <b>Optical Fiber Communications</b> |
| EEEN 5303 | Satellite Communication             |
|           |                                     |

### 2. SIGNAL AND IMAGE PROCESSING

| EEEN 5331 | Digital Signal Processing      |
|-----------|--------------------------------|
| EEEN 5340 | Speech Processing              |
| EEEN 5337 | Digital Image Processing       |
| EEEN 5303 | Real-time DSP course           |
| EEEN 5303 | Adaptive Array Processing      |
| EEEN 5350 | Application of Neural Networks |
| EEEN 5303 | Medical Imaging Principals     |

### 3. VLSI AND MICRO/NANO-ELECTRONICS

| EEEN 5340 | Rapid Prototyping and ASIC Design       |
|-----------|---|
| EEEN 5333 | Principles of VLSI Circuit Design       |
| EEEN 5303 | Semiconductor Fundamentals              |
| EEEN 5303 | Analy/Des Analog Integrated Circuits    |
| EEEN 5303 | Advanced Semiconductor Devices Concepts |
| EEEN 5341 | Advanced Digital Integrated Circuits    |

# 4. CONTROLS, SENSORS, AND POWER SYSTEMS

| EEEN 5338 | Digital and DSP-Based Control |
|-----------|-------------------------------|
| EEEN 5303 | Robust Control                |
| EEEN 5324 | Control System Synthesis      |
| EEEN 5329 | Adaptive Controls             |
| EEEN 5326 | Dynamic Systems I             |
| EEEN 5303 | Nonlinear Systems             |
|           |                               |

### 5. COMPUTER ENGINEERING AND EMBEDDED SYSTEMS

| EEEN 5330 | Rapid Prototyping and ASIC Design    |
|-----------|--------------------------------------|
| EEEN 5333 | Principles of VLSI Circuit Design    |
| EEEN 5339 | Embedded System Design               |
| EEEN 5304 | Advanced Computer Architecture       |
| EEEN 5321 | Digital Computer Design              |
| EEEN 5350 | Application of Neural Networks       |
| EEEN 5341 | Advanced Digital Integrated Circuits |

## 6. ENERGY AND POWER SYSTEMS

| EEEN 5303 | Renewable Energy and Distributed Generation            |
|-----------|--|
| EEEN 5303 | Introduction to Power Energy Innovation and Smart Grid |
| EEEN 5303 | Power Transmission and Alternative Energy              |
| EEEN 5303 | Advanced Electrical Machines                           |
| EEEN 5303 | Electric Power Distribution Systems                    |