



## Electronics and Communications Engineering

### A. Orientation

COE 5000 - DLSU Orientation

### B. Basic Subjects

COE 5200 – Methods of Research

### C. Advanced Mathematics (Required 6 units)

COE 5100 – Statistical Design

COE 5320 – Numerical Methods

COE 5330 – Advanced Mathematical Methods

### D. Foundation Subjects (Required 12 units for MEng)

### E. Major Subjects (Required 15 units for MS)

#### Communications

ECE 6100 – Data Communications Network

ECE 6110 – Information Theory and Coding Techniques

ECE 6120 – Radio Wave Propagation and Antenna

ECE 6130 – Instrumentation in Broadcasting

ECE 6140 – Microwave Techniques

ECE 6150 – Optical Fiber Communications

ECE 6170 – Wireless Communications

ECE 6180 – Advanced Electromagnetic Theory

ECE 6190 – Network Architecture

ECE 6210 – Communication System

ECE 6220 – Broadcast Engineering

ECE 8110 – Special Topics in Communications Signal Processing

ECE 6310 – Digital Signal Processing 1

ECE 6320 – Digital Signal Processing 2 (Application)

ECE 6340 – Digital Signal Processors

ECE 6360 – DSP Algorithm Hardware Modeling using VHDL

ECE 8130 – Special Topics in DSP

#### Microelectronics

ECE 6500 – Switching Theory

ECE 6510 – Advanced Computer Organization

ECE 6520 – Integrated Circuit Electronics

ECE 6530 – Micro-Processing and Interfacing Techniques

ECE 6540 – Semiconductor Technology

ECE 6560 – Hardware Description Language Programming

ECE 6570 – Circuit Design and Simulation

ECE 6580 – Advanced Feedback Control System

ECE 6590 – Analog Circuit Design

ECE 6600 – Electronics Amplifier

ECE 6610 – Fuzzy Logic

ECE 6630 – Semiconductor Design and Fabrication

ECE 6650 – Robotics and Automation

ECE 6660 – Power Electronics

ECE 6200 – Neural Network

ECE 8120 – Special Topics in Electronics