EET - ELECTRICAL/ ELECTRONIC ENGINEERING TECHNOLOGY

EET 2000 Electrical Principles Cr. 3
Kirchhoff's laws, D.C. and A.C. circuit analysis, impedance, phasors, power and power factor correction, mutual coupling. Power transformers, D.C. and A.C. generators and motors, motor controls. Offered Yearly.
Prerequisites: MAT 1800 with a minimum grade of C-

EET 2100 Principles of Digital Design Cr. 3
Applied Boolean algebra and number systems. Logic families, K-mapping; combinational logic, multiplexers and demultiplexers, readouts and displays, flip flops. Offered Yearly.

EET 2720 Microprocessor Fundamentals Cr. 3
Use of microprocessors as interface devices, including software, interfaces, memory, registers, and microcomputer system architecture, computer programming design projects. Offered Yearly.
Prerequisites: CSC 1050 with a minimum grade of C- or ET 2160 with a minimum grade of C-
Fees: $25

EET 3100 Advanced Digital Design Cr. 3
System level design of digital logic circuits using hardwired and programmable logic devices. ROMs, PROMs, and PLAs. Synchronous and asynchronous circuit design and analysis. Offered Fall, Winter.
Prerequisites: EET 2100 with a minimum grade of C-

EET 3150 Network Analysis Cr. 4
Analysis of circuits with dependent sources, RL, RC, and RLC circuit transient and sinusoidal response, network functions, frequency response, and power analysis. Offered Fall, Winter.
Prerequisites: EET 2000 with a minimum grade of C-, ET 3450 with a minimum grade of C-, and PHY 2140 with a minimum grade of C-

EET 3180 Analog Electronics Cr. 4
Operational amplifiers, circuit and applications; summing and subtracting amplifiers; integrating and differentiating amplifiers; comparators. Design of active filters, oscillators and waveform generating circuits, and audio integrated circuits. Offered Fall, Winter.
Prerequisites: CHM 1020 with a minimum grade of C- and EET 2000 with a minimum grade of C-
Fees: $20

EET 3300 Applied Signal Processing Cr. 3
Continuous-time and discrete-time signals, frequency response and impulse response; transfer function of linear systems, data acquisition and sampling, continuous and discrete Fourier transform; spectrum analysis and filtering; digital filter design. Offered Fall, Winter.
Prerequisites: EET 3150 with a minimum grade of C- (may be taken concurrently)

EET 3500 Electrical Machines and Power Systems Cr. 3
Energy fundamentals. Physical and operating characteristics of D.C. and A.C. generators and motors, transformers. Electric power network. Transmission line stability. Power factor correction. Load sharing by transformers and generators. Per unit notation. Environmental impact of electric power generation. Offered Winter.
Prerequisites: EET 2000 with a minimum grade of C- and ET 3450 with a minimum grade of C-

EET 3720 Micro and Programmable Controllers Cr. 3
Microprocessors and Programmable logic controllers; on-chip I/O resources, interfacing; controls, instrumentation, and communication; data manipulation and sequencer instruction set; development and debugging tools. Offered Fall, Winter.
Prerequisites: EET 2720 with a minimum grade of C-
Fees: $20

EET 4100 Computer Hardware Design Cr. 3
Structural organization and hardware design of digital computers. Register transfer, micro-operations, and microprogram control. Processing and control units, arithmetic algorithms, input-output systems, and memory systems. Offered Yearly.
Prerequisites: EET 2720 with a minimum grade of C- and EET 3100 with a minimum grade of C-

EET 4200 Control Systems Cr. 4
Feedback control systems with topics in time response, stability criteria, system representation, frequency response, compensation. PID controller; simulation of electrical and mechanical systems. Offered Fall, Winter.
Prerequisites: ET 3450 with a minimum grade of C- and EET 3500 with a minimum grade of C-
Fees: $10

EET 4990 Guided Study Cr. 1-6
Supervised study and instruction in field selected by student. Offered Intermittently.
Repeatable for 6 Credits

EET 5720 Computer Networking Applications Cr. 4
Networking protocols, components, architecture, and standards. Data communication, data packet structure, data transmission methods and techniques, network topologies, and media access control methods. Offered Yearly.
Prerequisites: EET 2720 with a minimum grade of C- and EET 3100 with a minimum grade of C-
Fees: $25