COMPUTER ENGINEERING (CMPN)

CMPN 150 Principles of Electronics and Computer Engineering
Prerequisite: Completion of or concurrent enrollment in MATH 201 and PHYS 201
Introduction to electronics and computers for engineering majors. Active and passive electronic devices. Analog and digital electronic circuit principles, Magnetism, Electrical machines, Electromechanical devices. Lab included. Not challengeable.

Grade Mode: Letter, Credit/No Credit, Audit
Semester Hours: 4

CMPN 202 Electronic Devices and Circuits
Prerequisite: Completion of CMPN 150 AND MATH 201 or MATH 202
Bipolar and field effect transistor theory. Audio and RF circuit design and analysis. Bias stabilization techniques. Operational amplifiers. Lab included. Not challengeable.

Grade Mode: Letter, Credit/No Credit, Audit
Semester Hours: 4

CMPN 280 Computer Organization
Registers and arithmetic logic units. Control unit. Memory unit. I/O systems. Instruction set fundamentals and addressing modes. Lab included. Not challengeable.

Grade Mode: Letter, Credit/No Credit, Audit
Semester Hours: 4

CMPN 330 Microprocessor Systems
Prerequisite: Completion of CMPN 280 with a C- or better
Studies of 16-bit microprocessors. Architecture, addressing modes, assembly language programming, input and output. Simple analog and digital interfaces. Hardware and software debugging aids. Lab included. Not challengeable.

Grade Mode: Letter, Credit/No Credit, Audit
Semester Hours: 4

CMPN 480 Advanced Computer Architecture
Prerequisite: Completion of CMPN 280 and CMPN 330
System design with bit slice processors. Trends in microprogramming. High-speed arithmetic processors. Pipelined and multiprocessor systems. Performance evaluation techniques. Lab included.

Grade Mode: Letter, Credit/No Credit, Audit
Semester Hours: 4