

DEPARTMENT OF ENGINEERING TECHNOLOGIES

Through this instructional unit, courses are offered in the following academic disciplines: Civil Engineering Technology (CIVT), Electronics Engineering Technology (ELET), and Computer Engineering Technology (CMET). **The Bachelor of Science degree (B.S.) in aforementioned areas is offered at the undergraduate level; however, no graduate degree is offered through this unit.** Cooperative Education (COE) courses are also offered through this unit. **In addition, an undergraduate minor in Engineering Technology is offered for students majoring in other academic disciplines or programs where the declaration of a minor is required.** The Electronics Engineering Technology Program in the College of Science and Technology is accredited by The Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC of ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 – Telephone: (410) 347-7700. Members of the Department are housed on the third floor and first floor of the Technology Building with the Department Offices located in Rooms 319 and 121.

Students seeking the B. S. degree may choose from three (3) different programs that provide for concentrated study in one of the following engineering technologies: Civil Engineering Technology, Electronics Engineering Technology or Computer Engineering Technology. **Although students may choose one of the three programs, they are not required to declare a minor in another academic area.** For each program identified, a common core of courses drawn from many instructional units in the University, including those in the College of Science and Technology.

The mission of the Department is to provide an overall high quality, application-oriented curriculum in the engineering technologies. This curriculum is designed to prepare students for careers as engineering technologists who have the ability to understand new developments, adapt to change, embrace professional development opportunities, and assume professional roles in their respective fields.

Students wishing to pursue the B.S. degree or declare a major in the Department must first gain admission to the University. Then, they must satisfy ASSET requirements and eradicate identified deficiencies through the General University Academic Center (GUAC), and must contact the Department for admission after ASSET requirements have been completed and deficiencies remedied. Students wishing to declare a minor in Engineering Technology should contact the Department office once they have been admitted as majors in other academic units of the University and have met all ASSET requirements. Prior to graduation, majors must pass an exit examination during their senior year.

For those students wishing to declare a minor in Engineering Technology, twenty-one (21) semester credit hours must be completed with grades of “C” or better (grades below “C”, including “C-”, are unacceptable). The twenty-one (21) credit hours must be in one of the engineering technology programs (CIVT, ELET). All minors are also required to complete the following three (3) mathematics courses or their equivalents in conjunction with the designated twenty-one (21) semester credit hours above: MATH 133 (3 credits), MATH 134 (3 credits), and MATH 241 (4 credits). The Chair in the Department, prior to enrollment, must approve all courses and an overall program of study for each minor.

Detailed plans of study of the three (3) programs leading to the B.S. in Engineering Technology, including the sequencing of courses that must be taken, follow the list of faculty below. **As is the case for minors in Engineering Technology, grades below “C”, including “C-”, are unacceptable in courses specific to the major.** Additional information may be gained directly from the Department Office or by calling (713) 313-7119.

CIVT 231	<p>Surveying I (3)</p> <p>Theory and practice of plane surveying; instruments, measurements of distances, angles, elevations; introduction to traverse, contour, and electronic distance measurements. Two hours of lecture and two hours of laboratory per week. Listed as ENGR 1305 in the Texas Common Course Numbering System.</p>
CIVT 232	<p>Engineering Mechanics (3)</p> <p>Introduction to applications of equilibrium of rigid bodies, including moments, couples, and moments of inertia. Two hours of lecture and two hours of laboratory per week. Prerequisites: MATH 134 and PHYS 235.</p>
CIVT 233	<p>Dynamics (3)</p> <p>Principles of kinetics, kinematics, Newton's laws of motion, vectors, simple harmonic motion, and energy. Two hours of lecture and two hours of laboratory per week. Prerequisite: CIVT 232.</p>
CIVT 234	<p>Surveying II (3)</p> <p>Continuation of CIVT 231 with emphasis on field work, design, the transit, theodolite, electronic instruments, stake out, contour, topography, and profile leveling. One hour of lecture and four hours of laboratory per week. Prerequisites: MATH 134 and CIVT 231.</p>
CIVT 301	<p>Water and Wastewater Engineering (3)</p> <p>Water supply and treatment, wastewater characterization and treatment. Design of units process and operation, transmission and sewerage facilities. Two hours of lecture and two hours laboratory per week. Prerequisites: CHEM 111, CHEM 131. MATH 133, and ELET 130.</p>
CIVT 332	<p>Applied Fluid Mechanics (3)</p> <p>Fluid mechanics with engineering applications, properties of fluids, pressure, kinematics, energy, and flow through pipes. Two hours of lecture and two hours of laboratory per week. Prerequisites: MATH 134 and CIVT 232.</p>
CIVT 333	<p>Hydraulics Engineering (3)</p> <p>Introduction to quantitative hydrology, open channel flow, flow in conduits, hydraulic structures, flow measurements, and pumps. Two hours of lecture and two hours of laboratory per week. Prerequisite: MATH and CIVT 332.</p>
CIVT 334	<p>Transportation Engineering (3)</p> <p>Study of transportation engineering concepts, planning, traffic flow, capacity analysis, environmental and utility accommodations, and transportation economics analysis. Three hours of lecture per week. Prerequisites: DRFT 132 and CIVT 333.</p>
CIVT 335	<p>Geometric Design of Highway (3)</p> <p>Theory and application of the parameters impact the geometric design of highways and other roadways. Two hours of lecture and two hours of laboratory per week. Prerequisite: CIVT 334.</p>
CIVT 336	<p>Strength of Materials (3)</p> <p>Physical properties of engineering materials concepts of stress and loading shear force and bending moments. Design of structural elements. Three hours lecture per week. Prerequisites: MATH 241, CIVT 232, Physics 235.</p>
CIVT 337	<p>Reinforced Concrete Design (3)</p> <p>Concrete materials and properties, mixing and placement, concrete tests, design of concrete structures, elastic theory, stresses, beams, foundations, columns, and floor slabs. Two hours of lecture and two hours of laboratory per week. Prerequisite: CIVT 231.</p>

ELET 132	Electronics I	(3)
	Study of the operation and characteristics of semiconductor devices such as bipolar-junction transistors, diodes, field-effect transistors, and other devices Three hours of lecture per week. Prerequisite: ELET 133. Corequisite: ELET 112.	
ELET 133	Alternating Current Circuits	(3)
	Continuation of ELET 131 with studies of alternating current circuits, impedance concepts, network theorems, transformers, passive filters, and response curves. Three hours of lecture per week. Prerequisite: ELET 131. Corequisites: ELET 113 and MATH 134.	
ELET 212	Electronics II Laboratory	(1)
	Application, design, and evaluate operational amplifiers with feedback configurations, linear and nonlinear circuitry, oscillators, and active filters. Two hours of laboratory per week. Prerequisite: ELET 132. Corequisite: ELET 232.	
ELET 213	Digital Hardware Design Laboratory	(1)
	Experiments in digital hardware design. Two hours of laboratory per week. Corequisite: ELET 243.	
ELET 214	Digital Logic Circuits Laboratory	(1)
	Exercises on logic circuits, combinational and sequential logic devices, and flip-flops. Two hours of laboratory per week. Corequisite: ELET 241.	
ELET 223	Electric Machines	(3)
	Study of polyphase circuits, transformers, DC machines, induction machines, and small AC motors. Two hours of lecture and two hours of laboratory per week. Prerequisite: ELET 133.	
ELET 232	Electronics II	(3)
	Design and evaluating of the operational amplifier circuitry with feedback, linear and nonlinear circuitry, oscillators, and active filters. Three hours of lecture per week. Prerequisite: ELET 132. Corequisite: ELET 212.	
ELET 241	Digital Logic Circuits	(3)
	Introduction to digital technology, Boolean algebra, number systems, codes, truth tables, combinational and sequential logic, and logic devices. Three hours of lecture per week. Prerequisite: ELET 133. Corequisite: ELET 214.	
ELET 243	Digital Hardware Design	(3)
	Study of digital hardware with emphasis on digital circuits such as memory circuits, A/D and D/A converters. Three hours of lecture per week. Prerequisite: ELET 241. Corequisite: ELET 213.	
ELET 311	Communications Systems Laboratory	(1)
	Experiments on oscillators, transmitters, receivers, filters, and transmission lines as related to modern electronic communications techniques. Two hours of laboratory per week. Prerequisite: ELET 232. Corequisite: ELET 331.	
ELET 312	Control Systems Laboratory	(1)
	Laboratory experiments on final control elements and closed loop control systems. Two hours of laboratory per week. Prerequisite: ELET 212. Corequisite: ELET 332.	
ELET 313	Microprocessor Architecture Laboratory	(1)
	Experiments to explore the relationship between hardware and software in microprocessors, input/output operations, and assembly language techniques. Two hours of laboratory per week. Corequisite: ELET 343.	

ELET 322	Integrated Circuits	(3)
	Study of the design and application of digital and linear integrated circuits. Two hours of lecture and two hours of laboratory per week. Prerequisites: ELET 243.	
ELET 323	Digital Signal Processing	(3)
	To introduce the student to discrete time signals and the systems, sampling, recursive and non-recursive digital filters, and the z-transform. Three hours of lecture per week. Prerequisite: Math 242, ELET 243.	
ELET 331	Communications Systems	(3)
	Study of basic communications systems with emphasis on the applications of Fourier series, Fourier transforms, modulation techniques, and transmission lines. Three hours of lecture per week. Prerequisites: MATH 242 and ELET 232. Corequisite: ELET 311.	
ELET 332	Control Systems	(3)
	Study of feedback control systems, Laplace transforms, and control modes and methods of implementation by analog and digital means. Three hours of lecture per week. Prerequisite: ELET 232. Corequisites: ELET 312 and MATH 345.	
ELET 343	Microprocessor Architecture	(3)
	Introduction to microprocessor hardware and software, including: microprocessor principles, organization, machine language programming, and input/output functions. Three hours of lecture per week. Prerequisite: ELET 243. Corequisite: ELET 313.	
ELET 353	Microprocessor Software Applications	(3)
	Study of programming microprocessors and microcomputers using assembly language techniques with emphasis on writing industrial application programs for engineering technology. Two hours of lecture and two hours of laboratory per week. Prerequisites: ELET 130.	
ELET 410	Computer Control Systems Laboratory	(3)
	Experiments on computer control systems with emphasis on the practical aspects of control principles. Two hours of laboratory per week Prerequisite: ELET 343 and ELET 332. Corequisite: ELET 430.	
ELET 411	Microcomputer Networks Laboratory	(1)
	Experiments and written reports where students construct, test, and debug hardware and software components for computer networks. Two hours of laboratory per week. Corequisite: ELET 434.	
ELET 412	Senior Project Proposal	(1)
	Students will submit a written proposal along with functional specifications and timetable of a project for approval by members of faculty. One hour of class per week. Prerequisite: Senior status	
ELET 413	Microprocessor Interfacing Laboratory	(1)
	Experiments on interfacing microprocessors with emphasis on input/output operations, bus systems, peripheral hardware and software applications. Two hours of laboratory per week. Corequisite: ELET 431.	
ELET 422	Advanced Structured Programming with C++	(3)
	Study of object oriented programming in C++ on workstations with Microsoft C/C++. Prerequisites: Three hours of lecture per week. Prerequisite ELET 130.	
ELET 430	Computer Control Systems	(3)
	Analysis and design of control systems with emphasis on control software, programmable controllers, and data acquisitions. Three hours of lecture per week. Prerequisites: ELET 343 and ELET 332. Corequisite: ELET 410.	

- CMET 435** **Advanced Microcomputer Networks** **(3)**
Advanced topics in the design, operation, and analysis of microcomputer networks, including internetworking and routers, network management, and etc. Prerequisite: ELET 434.
- CMET 436** **Applications of Microprocessor Software** **(3)**
Utilization of micro assemblers to write floating point mathematical routines, special purpose languages, generate relocatable code, etc. Prerequisites: ELET 343, MATH 242. Corequisite: CMET 416.
- CMET 437** **Data Communication Methods** **(3)**
Study of data communication devices and software, their functional and operational aspects, including modems, control units, multiplexers, concentrators, front-end processors, etc. Corequisites: CMET 417.
- CMET 441** **Computer Engineering Technology Comprehensive Exam** **(0)**
Comprehensive Examination for graduating seniors majoring in Computer Engineering Technology. Prerequisite: Consent of the Faculty Chair.
- CMET 438** **Artificial Intelligence** **(3)**
The fundamental principals of artificial intelligence and expert systems are introduced and their application in various area of science and engineering. Prerequisites: ELET 422 and Senior standing.
- CMET 439** **Microcomputer Peripheral Hardware** **(3)**
Microprocessor peripheral hardware and its interfacing, configuration and construction, including series and parallel I/O and interrupt control devices, bus arbitration, and memory management units. Prerequisite: ELET 343. Corequisite: CMET 419.
- CMET 470** **Java Programming** **(3)**
High-level, object-oriented language programming using JAVA. The course includes inheritance and polymorphism, implementing hiding, and the creation of JAVA applets for internet usage. Prerequisites: ELET 130, ELET 422, and Senior standing.

COOPERATIVE EDUCATION COURSES

- COE 233** **Cooperative Education** **(3)**
First training period designed to give students full-time experience in industry. They are introduced to training in concentration areas, are supervised closely, and begin developing interpersonal skills. Forty hours of work experience per week. Prerequisites: completion of at least 30 semester credit hours with minimum GPA of 2.5.
- COE 235** **Cooperative Education** **(3)**
Second training period designed to make students assertive in the workplace and aware of gaining upward mobility. Students continue to develop skills in their chosen career areas and are closely supervised. Forty hours of work experience per week. Prerequisite: COE 233.
- COE 333** **Cooperative Education** **(3)**
Third training period where students continue career related work in their chosen areas. Students exposed to analyzing and evaluating their career choices through training requirements, working conditions, and employment outlook. Forty hours of work experience per week. Prerequisite: COE 235.
- COE 433** **Cooperative Education** **(3)**
Fourth training period where the student/employer exposure is well established and students are prepared for full-time employment upon graduation. Variables affecting decision making and other factors enhancing employee-employer relations explored. Forty hours of work experience per week. Prerequisite: COE 333.

**CURRICULUM SUMMARY FOR
BACHELOR OF SCIENCE IN
CIVIL ENGINEERING TECHNOLOGY
TOTAL CREDITS REQUIRED: 129**

CORE CURRICULUM (STANDARD)*	MAJOR (CIVIL ENGR TECH)	OTHER REQUIREMENTS
44 credits	57 credits	28 credits
ENG 131 (3)**	CIVT 141 (3) ^	ITEC 111 (1)
ENG 132 (3)	CIVT 224 (3) ^	ITEC 331 (3)
SC 135 or 136 (3)	CIVT 231 (3) ^	DRFT 233 (3)
MATH 133 (3)	CIVT 232 (3) ^	DRFT 336 (3)
CHEM 111, 131 (4)	CIVT 233 (3) ^	PHYS 216 (1)
PHYS 215, 235 (4)	CIVT 234 (3)	PHYS 236 (3)
ENG 2xx (3)	CIVT 301 (3)	MATH 134 (3)
MUSI 239 (3)	CIVT 332 (3) ^	MATH 241 (4)
HIST 231 (3)	CIVT 333 (3)	MATH 242 (4)
HIST 232 (3)	CIVT 334 (3)	General Electives (3)
POLS 231 (3)	CIVT 335 (3)	
POLS 232 (3)	CIVT 336 (3)	
CS 116 (3)—	CIVT 337 (3)	
ECON 231 (3)++	CIVT 338 (3)	
	CIVT 400 (3)	
	CIVT 434 (3)	
	CIVT 435 (3)	
	CIVT 436 (3)	
	Technical Elective (3)^^	

^ These courses are required for a minor in Civil Engineering Technology.

— This can be substituted for by ELET 130.

++ This can be substituted for by ENGT 331.

* Student should be advised by a major advisor prior to registering for any credit, particularly any core curriculum credit as listed.

** (N) represents the number of course credits.

^^ The Technical Elective should be selected from one of the following courses: ENGT 331 (3), ENGT 332 (3), ENGT 431, and ENGT 432 (3).

**CURRICULUM SUMMARY FOR
BACHELOR OF SCIENCE IN
ELECTRONICS ENGINEERING TECHNOLOGY
TOTAL CREDITS REQUIRED: 128**

CORE CURRICULUM* (STANDARD)	MAJOR (ELECTRN ENGR TECH)	OTHER REQUIREMENTS
44 credits	55 credits	29 credits
ENG 131 (3)**	ELET 111 (1)^	DRFT 233 (3)
ENG 132 (3)	ELET 112 (1)^	ITEC 111 (1)
SC 135 or 136 (3)	ELET 113 (1)^	ITEC 331 (3)
MATH 133 (3)	ELET 131 (3)^	ITEC 412 (1)
CHEM 111, 131 (4)	ELET 132 (3)^	MATH 134 (3)
PHYS 215, 235 (4)	ELET 133 (3)^	MATH 241 (4)
ENG 2xx (3)	ELET 212 (1)	MATH 242 (4)
MUSI 239 (3)	ELET 213 (1)	MATH 345 (3)
HIST 231 (3)	ELET 214 (1)	PHYS 216 (1)
HIST 232 (3)	ELET 232 (3)	PHYS 236 (3)
POLS 231 (3)	ELET 241 (3)^	General Elective (3)
POLS 232 (3)	ELET 243 (3)^	
CS 116 (3)—	ELET 311 (1)	
ECON 231 (3)++	ELET 312 (1)	
	ELET 313 (1)	
	ELET 331 (3)	
	ELET 332 (3)	
	ELET 343 (3)^	
	ELET 410 (1)	
	ELET 411 (1)	
	ELET 412 (1)	
	ELET 413 (1)	
	ELET 422 (3)	
	ELET 430 (3)	
	ELET 431 (3)	
	ELET 432 (3)	
	ELET 434 (3)	
	ELET 441 (0)	
	Technical Elective (3)^^	

^ These courses are required for a minor in Electronics Engineering Technology.

— This can be substituted for by ELET 130.

++ This can be substituted for by ENGT 331.

* Student should be advised by a major advisor prior to registering for any credit, particularly any core curriculum credit as listed.

** (N) represents the number of course credits.

^^ The Technical Elective should be selected from one of the following courses: ENGT 331 (3), ENGT 431, and ELET 322, ELET 323 and ELET 223.

**CURRICULUM SUMMARY FOR
BACHELOR OF SCIENCE IN
COMPUTER ENGINEERING TECHNOLOGY
TOTAL CREDITS REQUIRED: 129**

CORE CURRICULUM* (STANDARD)	MAJOR (COMPUTER ENGR TECH)	OTHER REQUIREMENTS
44 credits	56 credits	29 credits
ENG 131 (3)**	ELET 111 (1)^	DRFT 233 (3)
ENG 132 (3)	ELET 112 (1)^	ITEC 111 (1)
SC 135 or 136 (3)	ELET 113 (1)^	ITEC 331 (3)
MATH 133 (3)	ELET 131 (3)^	ITEC 412 (1)
CHEM 111, 131 (4)	ELET 132 (3)^	MATH 134 (3)
PHYS 215, 235 (4)	ELET 133 (3)^	MATH 241 (4)
ENG 2xx (3)	ELET 213 (1)	MATH 242 (4)
MUSI 239 (3)	ELET 214 (1)	MATH 345 (3)
HIST 231 (3)	ELET 241 (3)^	PHYS 216 (1)
HIST 232 (3)	ELET 243 (3)^	PHYS 236 (3)
POLS 231 (3)	ELET 313 (1)	General Elective (3)
POLS 232 (3)	ELET 343 (3)	
CS 116 (3)—	ELET 411 (1)	
ECON 231 (3)++	ELET 434 (3)	
	ELET 422 (3)	
	CMET 331 (3)	
	CMET 436 (3)	
	CMET 412 (1)	
	CMET 415 (1)	
	CMET 435 (3)	
	CMET 416 (1)	
	CMET 439 (3)	
	CMET 419 (1)	
	CMET 441 (0)	
	CMET 470 (3)	
	CMET 438 (3)	
	CMET 432 (3)	
	Technical Elective (3)^^	

^ These courses are required for a minor in Electronics Engineering Technology.

— This can be substituted for by ELET 130.

++ This can be substituted for by ENGT 331.

* Student should be advised by a major advisor prior to registering for any credit, particularly any core curriculum credit as listed.

** (N) represents the number of course credits.

^^ The Technical Elective should be selected from one of the following courses: ENGT 331 (3), ENGT 431, and ELET 322, ELET 323 and ELET 223.

**MAJOR/ASSOCIATED COURSES FOR THE
BACHELOR OF SCIENCE DEGREE IN
CIVIL ENGINEERING TECHNOLOGY
BY LEVEL AND SEQUENCE**

Freshman

First Semester

CIVT 141 (Civil Engineering Materials) 3 cr
DRFT 131 (Fundamentals of Drafting), 3 cr

Second Semester

ELET 130 (Applications of Structured Programming) 3 cr
DRFT 132 (Descriptive Geometry), 3cr

Sophomore

First Semester

CIVT 231 (Surveying I), 3 cr
CIVT 232 (Engineering Mechanics), 3 cr

Second Semester

CIVT 233 (Dynamics), 3 cr
CIVT 234 (Surveying II), cr

Junior

First Semester

CIVT 224 (Soil Mechanics), 3 cr
CIVT 332 (Applied Fluid Mechanics), 3 cr
CIVT 337 (Reinforced Concrete Design), 3 cr
CIVT 338 (Strength of Materials), 3 cr

Second Semester

CIVT 223 (Water Resources) 3 cr
CIVT 333 (Hydraulics Engineering), 3 cr
CIVT 335 (Geometric Design of Highways), 3 cr
CIVT 336 (Structural Analysis) 3 cr
DRFT 336 (Computer-Aided Design), 3 cr

Senior

First Semester

CIVT 334 (Transportation Engineering), 3 cr
CIVT 400 (Problems in Civil Engineering Technology), 3 cr
CIVT 435 (Building Construction), 3 cr
ITEC 331 (Technical Writing), 3 cr

Second Semester

CIVT 434 (Sanitary Engineering), 3 cr
CIVT 436 (Civil Engineering Construction Methods), 3 cr
ENGT 331 (Engineering Economy), 3 cr
Technical Elective, 3 cr

**MAJOR/ASSOCIATED COURSES FOR THE
BACHELOR OF SCIENCE DEGREE IN
ELECTRONICS ENGINEERING TECHNOLOGY
BY LEVEL AND SEQUENCE**

Freshman

First Semester

ELET 111 (Direct Current Circuits Laboratory), 1 cr
ELET 130 (Introduction to Structured Programming with C++), 3 cr
ELET 131 (Direct Current Circuits), 3 cr
DRFT 233 (Introduction to Computer-Aided Design), 3 cr

Second Semester

ELET 113 (Alternating Current Circuits Laboratory), 1 cr
ELET 133 (Alternating Current Circuits), 3 cr

Sophomore

First Semester

ELET 112 (Electronics I Laboratory), 1cr
ELET 132 (Electronics I), 3 cr
ELET 214 (Digital Logic Circuits Laboratory), 1 cr
ELET 241 (Digital Logic Circuits), 3 cr

Second Semester

ELET 212 (Electronics II Laboratory), 1cr
ELET 232 (Electronics II), 3 cr
ELET 213 (Digital Hardware Design Laboratory), 1 cr
ELET 243 (Digital Hardware Design), 3 cr

Junior

First Semester

ELET 313 (Microprocessor Architecture Laboratory), 1 cr
ELET 343 (Microprocessor Architecture), 3 cr

Second Semester

ELET 311 (Communication Systems Laboratory), 1 cr
ELET 331 (Communication Systems), 3 cr

Senior

First Semester

ELET 312 (Control Systems Laboratory), 1 cr
ELET 332 (Control Systems), 3 cr
ELET 353 (Microcomputer Software Applications), 3 cr
ELET 411 (Microcomputer Network Laboratory), 1 cr
ELET 412 (Senior Project Proposal), 1 cr
ELET 434 (Microcomputer Networks), 3 cr

Second Semester

ELET 410 (Computer Control Systems Laboratory), 1 cr
ELET 413 (Microprocessor Interfacing Laboratory), 1 cr
ELET 422 (Advanced Structured Programming with C++), 3 cr
ELET 430 (Computer Control Systems), 3 cr
ELET 431 (Microprocessor Interfacing), 3 cr
ELET 432 (Senior Electronics Project), 3 cr
ELET 441 (Electronics Senior Comprehensive), 0 cr

**MAJOR/ASSOCIATED COURSES FOR THE
BACHELOR OF SCIENCE DEGREE IN
COMPUTER ENGINEERING TECHNOLOGY
BY LEVEL AND SEQUENCE**

Freshman

First Semester

ELET 111 (Direct Current Circuits Laboratory), 1 cr
ELET 130 (Introduction to Structured Programming with C++), 3 cr
ELET 131 (Direct Current Circuits), 3 cr
DRFT 233 (Introduction to Computer-Aided Design), 3 cr

Second Semester

ELET 113 (Alternating Current Circuits Laboratory), 1 cr
ELET 133 (Alternating Current Circuits), 3 cr

Sophomore

First Semester

ELET 112 (Electronics I Laboratory), 1 cr
ELET 132 (Electronics I), 3 cr
ELET 214 (Digital Logic Circuits Laboratory), 1 cr
ELET 241 (Digital Logic Circuits), 3 cr

Second Semester

ELET 213 (Digital Hardware Design Laboratory), 1 cr
ELET 243 (Digital Hardware Design), 3 cr

Junior

First Semester

ELET 313 (Microprocessor Architecture Laboratory), 1 cr
ELET 343 (Microprocessor Architecture), 3 cr
CMET331 (Micro Computer Operating System), 3 cr

Second Semester

ELET 411 (Microcomputer Network Laboratory), 1 cr
ELET 434 (Microcomputer Networks), 3 cr

Senior

First Semester

ELET 422 (Advanced Struct. Prog. With C++), 3 cr
CMET 436 (Application Microprocessor Software), 3 cr
CMET 416 (Application Microprocessor Software Lab), 1 cr
CMET 412 (Senior Project Proposal), 1 cr
CMET 435 (Advanced Microcomputer Networks), 3 cr
CMET 415 (Advanced Microcomputer Networks Lab), 1 cr

Second Semester

CMET 437 (Data Communication Methods), 3 cr
CMET 417 (Data Communication Methods Lab), 1 cr
CMET 439 (Micro Peripheral Hard Ware), 3 cr
CMET 419 (Micro Peripheral Hard Ware Lab), 1 cr
CMET 470 (Java Programming), 3 cr
CMET 438 (Artificial Intelligence), 3 cr
CMET 432 (Senior Project II), 3 cr
CMET 441 (Computer Eng.Tech. Comprehensive Exam), 0 cr