

## 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.

LISTING OF FACULTY IN THE DEPARTMENT

|  |   |
|--|---|
| <p><b>Afiesimama, Boma T., P.E.</b><br/> <b>Associate Professor</b><br/>                     B.S., University of Michigan<br/>                     M. Eng., Texas A&amp;M University<br/>                     D. Eng., Texas A&amp;M University</p>  | <p><b>Olowokere, David</b><br/> <b>Chair, Professor</b><br/>                     B.S., Ahmadu Bello University, Zaria, Nigeria<br/>                     M.S., Queen's University<br/>                     Ph.D., State University of New York</p>                     |
| <p><b>Agbanobi, Raymond O., P.E.</b><br/> <b>Professor</b><br/>                     Diploma, Blackburn College of Technology<br/>                     M.S.C.E., University of Missouri<br/>                     Ph.D., North Carolina State University</p>   | <p><b>Saneifard, Rasoul, P.E.</b><br/> <b>Associate Professor</b><br/>                     B.S.E.E., Prairie View A&amp;M University<br/>                     M.S.E., Prairie View A&amp;M University<br/>                     Ph.D., New Mexico State University</p> |
| <p><b>Chen, Xuemin</b><br/> <b>Assistant Professor</b><br/>                     B.Eng., Nanjin University of Science and Technology<br/>                     M.Eng., Nanjing University of Science &amp; Technology<br/>                     Ph.D., Nanjing University of Science &amp; Technology</p> | <p><b>Stewart, Carrington</b><br/> <b>Visiting Assistant Professor</b><br/>                     B.S., Prairie View University<br/>                     M.S., University of Houston<br/>                     Ph.D., Kennedy Western University</p>                     |
| <p><b>Darayan, Shahryar</b><br/> <b>Professor</b><br/>                     B.S., Tabriz University<br/>                     M.S.E.E., University of Houston<br/>                     Ph.D., University of Houston</p>  | <p><b>Tahvilian, Hosein</b><br/> <b>Instructor</b><br/>                     B.S., Southern University<br/>                     M.S., Texas A&amp;M University</p>   |
| <p><b>Kamel, Eman</b><br/> <b>Visiting Assistant Professor</b><br/>                     B.S., Cairo University<br/>                     M.S., University of Cincinnati<br/>                     Ph.D., University of Louisville</p>  | <p><b>Thomas, Graham</b><br/> <b>Assistant Professor</b><br/>                     B.S., New Mexico State University<br/>                     M.S., New Mexico State University<br/>                     Ph.D., New Mexico State University</p>                        |
| <p><b>Kazakos, Demetrios</b><br/> <b>Professor &amp; Dean</b><br/>                     B.S., National Polytechnic University of Greece<br/>                     M.S., Princeton University<br/>                     Ph.D., University of Southern California</p>                                       | <p><b>Zhang, Yuhong</b><br/> <b>Assistant Professor</b><br/>                     B.Sc., Shandong University, China<br/>                     M.Sc., University of Manitoba, Canada<br/>                     Ph.D., University of Toledo</p>                            |
| <p><b>Kehinde, Lawrence</b><br/> <b>Visiting Professor</b><br/>                     B.S., University of Ife, Nigeria<br/>                     Ph. D., University of Sussex, U.K.<br/>                     Postdoctoral diploma, University of California, Berkeley</p>                                 |   |



|          |   |     |
|----------|---|-----|
| CIVT 231 | <b>Surveying I</b><br>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. <b>Listed as ENGR 1305 in the Texas Common Course Numbering System.</b> | (3) |
| CIVT 232 | <b>Engineering Statics</b><br>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 or 237.  | (3) |
| CIVT 233 | <b>Dynamics</b><br>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.   | (3) |
| CIVT 234 | <b>Surveying II</b><br>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.  | (3) |
| CIVT 301 | <b>Water and Wastewater Engineering</b><br>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 and MATH 133.                                | (3) |
| CIVT 332 | <b>Applied Fluid Mechanics</b><br>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.   | (3) |
| CIVT 333 | <b>Hydraulics Engineering</b><br>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: CIVT 332.  | (3) |
| CIVT 334 | <b>Transportation Engineering</b><br>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.  | (3) |
| CIVT 335 | <b>Geometric Design of Highways</b><br>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.  | (3) |
| CIVT 336 | <b>Structural Analysis</b><br>Study of determinate structures with emphasis on both the analytical and graphical approaches to trusses and building frames. Three hours of lecture per week. Prerequisites: MATH 241 and CIVT 338.  | (3) |
| CIVT 337 | <b>Reinforced Concrete Design</b><br>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 336.                               | (3) |
| CIVT 338 | <b>Strength of Materials</b><br>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, and PHYS 235 or 237.   | (3) |



|                 |  |            |
|-----------------|--|------------|
| <b>ELET 133</b> | <b>Alternating Current Circuits</b>  | <b>(3)</b> |
|                 | 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. |            |
| <b>ELET 212</b> | <b>Electronics II Laboratory</b>   | <b>(1)</b> |
|                 | 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.                       |            |
| <b>ELET 213</b> | <b>Digital Hardware Design Laboratory</b>  | <b>(1)</b> |
|                 | Experiments in digital hardware design. Two hours of laboratory per week. Corequisite: ELET 243.   |            |
| <b>ELET 214</b> | <b>Digital Logic Circuits Laboratory</b>   | <b>(1)</b> |
|                 | Exercises on logic circuits, combinational and sequential logic devices, and flip-flops. Two hours of laboratory per week. Corequisite: ELET 241.  |            |
| <b>ELET 223</b> | <b>Electric Machines</b>   | <b>(3)</b> |
|                 | 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.  |            |
| <b>ELET 232</b> | <b>Electronics II</b>  | <b>(3)</b> |
|                 | 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.                                   |            |
| <b>ELET 241</b> | <b>Digital Logic Circuits</b>  | <b>(3)</b> |
|                 | 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.                               |            |
| <b>ELET 243</b> | <b>Digital Hardware Design</b>   | <b>(3)</b> |
|                 | 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.   |            |
| <b>ELET 311</b> | <b>Communications Systems Laboratory</b>   | <b>(1)</b> |
|                 | 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.                               |            |
| <b>ELET 312</b> | <b>Control Systems Laboratory</b>  | <b>(1)</b> |
|                 | Laboratory experiments on final control elements and closed loop control systems. Two hours of laboratory per week. Prerequisite: ELET 212. Corequisite: ELET 332.   |            |
| <b>ELET 313</b> | <b>Microprocessor Architecture Laboratory</b>  | <b>(1)</b> |
|                 | 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.  |            |
| <b>ELET 322</b> | <b>Integrated Circuits</b>   | <b>(3)</b> |
|                 | 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.   |            |
| <b>ELET 323</b> | <b>Digital Signal Processing</b>   | <b>(3)</b> |
|                 | 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.  |            |

|                 |  |            |
|-----------------|--|------------|
| <b>ELET 331</b> | <b>Communications Systems</b><br>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.                       | <b>(3)</b> |
| <b>ELET 332</b> | <b>Control Systems</b><br>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.  | <b>(3)</b> |
| <b>ELET 343</b> | <b>Microprocessor Architecture</b><br>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.                          | <b>(3)</b> |
| <b>ELET 353</b> | <b>Microprocessor Software Applications</b><br>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. | <b>(3)</b> |
| <b>ELET 410</b> | <b>Computer Control Systems Laboratory</b><br>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.   | <b>(3)</b> |
| <b>ELET 411</b> | <b>Microcomputer Networks Laboratory</b><br>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.   | <b>(1)</b> |
| <b>ELET 412</b> | <b>Senior Project Proposal</b><br>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  | <b>(1)</b> |
| <b>ELET 413</b> | <b>Microprocessor Interfacing Laboratory</b><br>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.  | <b>(1)</b> |
| <b>ELET 422</b> | <b>Advanced Structured Programming with C++</b><br>Study of object oriented programming in C++ on workstations with Microsoft C/C++. Prerequisites: Three hours of lecture per week. Prerequisite ELET 130.  | <b>(3)</b> |
| <b>ELET 430</b> | <b>Computer Control Systems</b><br>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.  | <b>(3)</b> |
| <b>ELET 431</b> | <b>Microprocessor Interfacing</b><br>Study of interfacing with topics on bus timing, input/output timing, serial and parallel input/output methods, subroutine and control signals. Three hours of lecture per week. Prerequisites: ELET 343. Corequisite: ELET 413.   | <b>(3)</b> |
| <b>ELET 432</b> | <b>Senior Electronics Project</b><br>Opportunity for seniors to engage in a team project in applied electronics where integration of knowledge obtained throughout the program is possible. Prerequisite: Senior standing and consent of the Faculty Chair.  | <b>(3)</b> |

- ELET 434**                      **Microcomputer Networks**                      **(3)**  
 Study of networking components and techniques for a microcomputer network, including the study of standards, protocols, LANs, and WANs. Three hours of lecture per week. Prerequisite: ELET 243. Corequisite: ELET 411.
- ELET 441**                      **Electronics Senior Comprehensive**                      **(0)**  
 Senior Comprehensive examinations for graduating seniors majoring in Electronics Engineering Technology. Students who do not “Satisfactory” may be required to register in ELET 442 in order to complete the requirements for the course. Prerequisite: Consent of the Faculty Chair.
- ELET 442**                      **Special Topics**                      **(3)**  
 Direct study, independent study or internship designed to give the student an opportunity to study a particular aspect of the discipline in some depth. Consent of the faculty chair required.

### COMPUTER ENGINEERING TECHNOLOGY COURSES

- CMET 331**                      **Micro Computer Operating Systems**                      **(3)**  
 Basic functions, structure, and mechanism of modern operating systems; device management, input/output processing, and job management. Prerequisite: ELET 243.
- CMET 412**                      **Senior Project I**                      **(1)**  
 A capstone team project that includes a written proposal, with functional specifications and timetable of a project for approval by faculty members. Prerequisite: Senior status.
- CMET 416**                      **Applications of Microprocessor Software Laboratory**                      **(1)**  
 Practice in writing industrial application programs, such as floating point mathematical routines and special purposes languages utilizing micro assemblers. Corequisite: CMET 436.
- CMET 417**                      **Data Communication Methods Laboratory**                      **(1)**  
 Laboratory experiments in data communication devices. Modems, multiplexers, concentrators, front-end processor, error-checking, simplex/duplex transmission, and telecommunications. Corequisite: CMET 437.
- CMET 415**                      **Advanced Microcomputer Networks Lab**                      **(1)**  
 Experiments utilizing hardware and software in the design, operation, and analysis of computer networks. Topics include LANS, WANS, networking components and techniques, standards and protocols. Prerequisites: ELET 411 and ELET 434. Corequisite: CMET 435.
- CMET 419**                      **Microcomputer Peripheral Hardware Laboratory**                      **(1)**  
 Experiments in the application of microprocessor peripheral hardware and interfacing, including the configuration and construction of a microprocessor system. Prerequisite: ELET 313. Corequisite: CMET 439.
- CMET 432**                      **Senior Project II**                      **(3)**  
 A continuation of Senior Project I with design modifications necessary to produce a working prototype. Formal oral and written presentations, and a prototype required. Prerequisites: CMET 412, Senior standing, and consent of Faculty Chair.
- CMET 435**                      **Advanced Microcomputer Networks**                      **(3)**  
 Advanced topics in the design, operation, and analysis of microcomputer networks, including inter-networking 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.

Bachelor of Science Degree in Civil & Environmental Engineering  
4 Year Degree Plan - Total Credits: 129

| First Year                        |        |                                     |        |
|-----------------------------------|--------|-------------------------------------|--------|
| First Semester                    |        | Second Semester                     |        |
| DRAFT 131 Fundamental of Drafting | 3      | ENG 132 Freshman English II         | 3      |
| *ENG 131 Freshman English         | 3      | MATH 134 Plane Trigonometry         | 3      |
| *MATH 133 College Algebra         | 3      | SC 135 Speech                       | 3      |
| ITEC 111 Orientation              | 1      | CEE 141 Civil Engineering Materials | 3      |
| PHYS 237 College Physics 1        | 3      | PHYS 238 College Physics II         | 3      |
| PHYS 213 College Physics 1 Lab    | 1      | PHYS 214 College Physics II Lab.    | 1      |
|                                   | 14 hrs |                                     | 16 hrs |

| Second Year                      |        |                                     |        |
|----------------------------------|--------|-------------------------------------|--------|
| Third Semester                   |        | Fourth Semester                     |        |
| CIVT 231 Surveying I             | 3      | CIVT 233 Dynamics                   | 3      |
| CIVT 232 Statics                 | 3      | CIVT 224 Geotechnical Engineering   | 3      |
| ENG 2xx Upper level English      | 3      | MATH 242 Calculus & Anal. Geometry  | 4      |
| MATH 241 Calculus & Geometry I   | 4      | MUSIC 239 Fine Arts in Daily Living | 3      |
| CHEM 131 General Chemistry       | 3      | POLSC 231 American Pol. System I    | 3      |
| CHEM 111 General Chemistry I Lab | 1      |                                     |        |
|                                  | 17 hrs |                                     | 16 hrs |

| Third Year                          |        |                                       |       |
|-------------------------------------|--------|---------------------------------------|-------|
| Fifth Semester                      |        | Sixth Semester                        |       |
| CIVT 234 Surveying II               | 3      | CIVT 223 Hydrology & Water Resources  | 3     |
| CIVT 337 Reinforced Concrete Design | 3      | CIVT 333 Hydraulics Engineering       | 3     |
| CIVT 332 Applied Fluid Mechanics    | 3      | CIVT 335 Geometric Design of Hwys     | 3     |
| POLSC 232 America Pol System II     | 3      | DRFTG 336 Computer Aided Design       | 3     |
| HIST 231 Soc Pol History of U.S     | 3      | HIST 232 Soc & Pol History of the U.S | 3     |
| CIVT 338 Strength of Materials      | 3      | CIVT 336 Structural Analysis          | 3     |
|                                     | 18 hrs |                                       | 18hrs |

| Fourth Year                                  |        |                                     |        |
|--|--------|-------------------------------------|--------|
| Seventh Semester                             |        | Eighth Semester                     |        |
| CIVT 301 Water & Wastewater Treatment        | 3      | CIVT 331 Transportation Engineering | 3      |
| CIVT 400 Problems in Civil Engineering Tech. | 3      | CIVT 434 Environmental Engineering  | 3      |
| CIVT 435 Civil Engineering Const. Methods    | 3      | CIVT 340 Structural Steel Design    | 3      |
| ITEC 331 Technical Writing                   | 3      | ENGT 331 Engineering Economy        | 3      |
| ELECTIVE                                     | 3      | ** Technical Elective               | 3      |
|  | 15 hrs |                                     | 15 hrs |

Bachelor of Science Degree in Civil & Environmental Engineering  
5 Year Degree Plan - Total Credits: 129

| First Year                        |        |                                     |        |
|-----------------------------------|--------|-------------------------------------|--------|
| First Semester                    |        | Second Semester                     |        |
| DRAFT 131 Fundamental of Drafting | 3      | ENG 132 Freshman English II         | 3      |
| *ENG 131 Freshman English         | 3      | MATH 134 Plane Trigonometry         | 3      |
| *MATH 133 College Algebra         | 3      | SC 135 Speech                       | 3      |
| ITEC 111 Orientation              | 1      | CEE 141 Civil Engineering Materials | 3      |
|                                   | 10 hrs |                                     | 12 hrs |

| Second Year                    |        |                                   |        |
|--------------------------------|--------|-----------------------------------|--------|
| Third Semester                 |        | Fourth Semester                   |        |
| PHYS 237 College Physics 1     | 3      | PHYS 238 College Physics II       | 3      |
| PHYS 213 College Physics 1 Lab | 1      | PHYS 214 College Physics II Lab.  | 1      |
| CIVT 231 Surveying I           | 3      | CIVT 233 Dynamics                 | 3      |
| CIVT 232 Statics               | 3      | CIVT 224 Geotechnical Engineering | 3      |
|                                | 10 hrs |                                   | 10 hrs |

| Third Year                       |        |                                     |        |
|----------------------------------|--------|-------------------------------------|--------|
| Fifth Semester                   |        | Sixth Semester                      |        |
| CIVT 338 Strength of Materials   | 3      |                                     |        |
| ENG 2xx Upper level English      | 3      | MATH 242 Calculus & Anal. Geometry  | 4      |
| MATH 241 Calculus & Geometry I   | 4      | MUSIC 239 Fine Arts in Daily Living | 3      |
| CHEM 131 General Chemistry       | 3      | POLSC 231 American Pol. System I    | 3      |
| CHEM 111 General Chemistry I Lab | 1      | CIVT 234 Surveying II               | 3      |
|                                  | 13 hrs |                                     | 13 hrs |

| Fourth Year                          |        |                                       |        |
|--------------------------------------|--------|---------------------------------------|--------|
| Seventh Semester                     |        | Eighth Semester                       |        |
| CIVT 223 Hydrology & Water Resources | 3      | CIVT 333 Hydraulics Engineering       | 3      |
| CIVT 337 Reinforced Concrete Design  | 3      | CIVT 335 Geometric Design of Hwys     | 3      |
| CIVT 332 Applied Fluid Mechanics     | 3      | DRFTG 336 Computer Aided Design       | 3      |
| POLSC 232 America Pol System II      | 3      | HIST 232 Soc & Pol History of the U.S | 3      |
| HIST 231 Soc Pol History of U.S      | 3      | CIVT 336 Structural Analysis          | 3      |
|                                      | 15 hrs |                                       | 15 hrs |

| Fifth Year                                   |        |                                     |        |
|--|--------|-------------------------------------|--------|
| Ninth Semester                               |        | Tenth Semester                      |        |
| CIVT 301 Water & Wastewater Treatment        | 3      | CIVT 331 Transportation Engineering | 3      |
| CIVT 400 Problems in Civil Engineering Tech. | 3      | CIVT 434 Environmental Engineering  | 3      |
| CIVT 435 Civil Engineering Const. Methods    | 3      | CIVT 340 Structural Steel Design    | 3      |
| ITEC 331 Technical Writing                   | 3      | ENGT 331 Engineering Economy        | 3      |
| ELECTIVE                                     | 3      | ** Technical Elective               | 3      |
|  | 15 hrs |                                     | 15 hrs |

Bachelor of Science Degree in Civil & Environmental Engineering  
6 Year Degree Plan - Total Credits: 129

| First Year                        |        |                                     |        |
|-----------------------------------|--------|-------------------------------------|--------|
| First Semester                    |        | Second Semester                     |        |
| DRAFT 131 Fundamental of Drafting | 3      | ENG 132 Freshman English II         | 3      |
| *ENG 131 Freshman English         | 3      | MATH 134 Plane Trigonometry         | 3      |
| *MATH 133 College Algebra         | 3      | SC 135 Speech                       | 3      |
| ITEC 111 Orientation              | 1      | CEE 141 Civil Engineering Materials | 3      |
|                                   | 10 hrs |                                     | 12 hrs |

| Second Year                    |        |                                   |        |
|--------------------------------|--------|-----------------------------------|--------|
| Third Semester                 |        | Fourth Semester                   |        |
| PHYS 237 College Physics I     | 3      | PHYS 238 College Physics II       | 3      |
| PHYS 213 College Physics Lab I | 1      | PHYS 215 College Physics Lab II   | 1      |
| CIVT 231 Surveying I           | 3      | CIVT 233 Dynamics                 | 3      |
| CIVT 232 Statics               | 3      | CIVT 224 Geotechnical Engineering | 3      |
|                                | 10 hrs |                                   | 10 hrs |

| Third Year                       |        |                                     |        |
|----------------------------------|--------|-------------------------------------|--------|
| Fifth Semester                   |        | Sixth Semester                      |        |
| ENG 2xx Upper level English      | 3      | MATH 242 Calculus & Anal. Geometry  | 4      |
| MATH 241 Calculus & Geometry I   | 4      | MUSIC 239 Fine Arts in Daily Living | 3      |
| CHEM 131 General Chemistry       | 3      | POLSC 231 American Pol. System I    | 3      |
| CHEM 111 General Chemistry I Lab | 1      | CIVT 234 Surveying II               | 3      |
|                                  | 11 hrs |                                     | 13 hrs |

| Fourth Year                          |       |                                     |        |
|--------------------------------------|-------|-------------------------------------|--------|
| Seventh Semester                     |       | Eighth Semester                     |        |
| CIVT 223 Hydrology & Water Resources | 3     | CIVT 333 Hydraulics Engineering     | 3      |
|                                      |       | CIVT 335 Geometric Design of Hwys   | 3      |
| CIVT 332 Applied Fluid Mechanics     | 3     | DRFTG 336 Computer Aided Design     | 3      |
| CIVT 338 Strength of Materials       | 3     | CIVT 337 Reinforced Concrete Design | 3      |
|                                      | 9 hrs |                                     | 12 hrs |

| Fifth Year                            |       |                                       |       |
|---------------------------------------|-------|---------------------------------------|-------|
| Ninth Semester                        |       | Tenth Semester                        |       |
| POLSC 232 America Pol System II       | 3     | HIST 232 Soc & Pol History of the U.S | 3     |
| HIST 231 Soc Pol History of U.S       | 3     | CIVT 336 Structural Analysis          | 3     |
| CIVT 301 Water & Wastewater Treatment | 3     | CIVT 331 Transportation Engineering   | 3     |
|                                       | 9 hrs |                                       | 9 hrs |

| Sixth Year                                   |        |                                    |        |
|--|--------|------------------------------------|--------|
| Eleventh Semester                            |        | Twelfth Semester                   |        |
| CIVT 400 Problems in Civil Engineering Tech. | 3      | CIVT 434 Environmental Engineering | 3      |
| CIVT 435 Civil Engineering Const. Methods    | 3      | CIVT 340 Structural Steel Design   | 3      |
| ITEC 331 Technical Writing                   | 3      | ENGT 331 Engineering Economy       | 3      |
| ELECTIVE                                     | 3      | ** Technical Elective              | 3      |
|  | 12 hrs |                                    | 12 hrs |

Bachelor of Science Degree in Electronics Engineering Technology  
Four Year Degree Plan - Total Credits: 131

| First Year                              |        |                                    |        |
|---|--------|------------------------------------|--------|
| First Semester                          |        | Second Semester                    |        |
| ELET 111 DC Circuit Lab                 | 1      | ELET 113 Circuits Lab              | 1      |
| ELET 131 DC Circuits                    | 3      | ELET 133 AC Circuits               | 3      |
| ELET 130 Intro to Stru. Prog. with C++  | 3      | ENG 132 Freshman English II        | 3      |
| DRFT 233 Intro to Computer Aided Design | 3      | MATH 134 Plane Trigonometry        | 3      |
| ENG 131 Freshman English I              | 3      | MUSI 239 Fine Arts in Daily Living | 3      |
| MATH 133 College Algebra                | 3      | CHEM 111 General Chemistry Lab     | 1      |
| ITEC 111 Orientation                    | 1      | CHEM 131 General Chemistry         | 3      |
|   | 17 hrs |                                    | 17 hrs |

| Second Year                         |        |                                      |        |
|-------------------------------------|--------|--------------------------------------|--------|
| Third Semester                      |        | Fourth Semester                      |        |
| ELET 112 Electronics I Lab          | 1      | ELET 212 Electronics II Lab          | 1      |
| ELET 132 Electronics I              | 3      | ELET 232 Electronics II              | 3      |
| ELET 214 Digital Logic Circuits Lab | 1      | ELET 213 Digital Hardware Design Lab | 1      |
| ELET 241 Digital Logic Circuits     | 3      | ELET 243 Digital Hardware Design     | 3      |
| MATH 241 Calculus & Geometry I      | 4      | MATH 242 Calculus & Anal. Geometry   | 4      |
| ENG 2xx Upper level English         | 3      | SC 135 Business & Prof. Comm.        | 3      |
|                                     | 15 hrs |                                      | 15 hrs |

| Third Year                               |        |                                    |        |
|--|--------|------------------------------------|--------|
| Fifth Semester                           |        | Sixth Semester                     |        |
| ELET 313 Microprocessor Architecture Lab | 1      | ELET 311 Communicating Systems Lab | 1      |
| ELET 343 Microprocessor Architecture     | 3      | ELET 331 Communicating Systems     | 3      |
| MATH 345 Applied Math & Stat. for Tech.  | 3      | ITEC 331 Technical Writing         | 3      |
| PHYS 213 College Physics Lab I           | 1      | PHYS 214 College Physics Lab II    | 1      |
| PHYS 237 College Physics I               | 3      | PHYS 238 College Physics II        | 3      |
| POLS 231 American Pol Systems I          | 3      | POLS 232 American Pol Systems II   | 3      |
| HIST 231 Soc. Pol. His. of U.S.          | 3      | HIST 232 Soc. Pol. His. of U.S.    | 3      |
|  | 17 hrs |                                    | 17 hrs |

| Fourth Year                            |        |   |        |
|--|--------|---|--------|
| Seventh Semester                       |        | Eighth Semester                         |        |
| ELET 312 Control Systems Lab           | 1      | ELET 410 Computer Control Systems Lab   | 1      |
| ELET 332 Control Systems               | 3      | ELET 430 Computer Control Systems       | 3      |
| ELET 353 Micro Computer Software Appl. | 3      | ELET 413 Microprocessor Interfacing Lab | 1      |
| ELET 412 Senior Project Proposal       | 1      | ELET 431 Microprocessor Interfacing     | 3      |
| ELET 411 Micro Computer Networks Lab.  | 1      | ELET 432 Senior Electronics Project     | 3      |
| ELET 434 Micro Computer Networks       | 3      | ELET 441 Electronics SR. Comp           | 0      |
| ***** Technical Elective               | 3      | ELET 422 Advanced Stru. Prog. With C++  | 3      |
| ***** General Elective                 | 3      | ENGT 333 Ethics & Pro. Eng. Practice    | 1      |
|  | 18 hrs |   | 15 hrs |

Bachelor of Science Degree in Electronics Engineering Technology  
Five Year Degree Plan - Total Credits: 131

| First Year                             |        |   |        |
|--|--------|---|--------|
| First Semester                         |        | Second Semester                         |        |
| ELET 111 DC Circuit Lab                | 1      | ELET 113 Circuits Lab                   | 1      |
| ELET 131 DC Circuits                   | 3      | ELET 133 AC Circuits                    | 3      |
| ELET 130 Intro to Stru. Prog. with C++ | 3      | DRFT 233 Intro to Computer Aided Design | 3      |
| ENG 131 Freshman English I             | 3      | ENG 132 Freshman English II             | 3      |
| MATH 133 College Algebra               | 3      | MATH 134 Plane Trigonometry             | 3      |
| ITEC 111 Orientation                   | 1      |   |        |
|  | 14 hrs |   | 13 hrs |

| Second Year                    |        |                                    |        |
|--------------------------------|--------|------------------------------------|--------|
| Third Semester                 |        | Fourth Semester                    |        |
| ELET 112 Electronics I Lab     | 1      | ELET 212 Electronics II Lab        | 1      |
| ELET 132 Electronics I         | 3      | ELET 232 Electronics II            | 3      |
| MATH 241 Calculus & Geometry I | 4      | MATH 242 Calculus & Anal. Geometry | 4      |
| HIST 231 Soc. Pol. His. Of U.S | 3      | HIST 232 Soc. Pol. His. of U.S     | 3      |
| ENG 2xx Upper level English    | 3      | SC 135 Business & Prof. Comm.      | 3      |
|                                | 14 hrs |                                    | 14 hrs |

| Third Year                              |        |                                      |        |
|---|--------|--------------------------------------|--------|
| Fifth Semester                          |        | Sixth Semester                       |        |
| ELET 214 Digital Logic Circuits Lab     | 1      | ELET 213 Digital Hardware Design Lab | 1      |
| ELET 241 Digital Logic Circuits         | 3      | ELET 243 Digital Hardware Design     | 3      |
| MATH 345 Applied Math & Stat. for Tech. | 3      | ITEC 331 Technical Writing           | 3      |
| PHYS 213 College Physics Lab I          | 1      | PHYS 214 College Physics Lab II      | 1      |
| PHYS 237 College Physics Lab I          | 3      | PHYS 238 College Physics II          | 3      |
| POLS 231 American Pol Systems I         | 3      | POLS 232 American Pol Systems II     | 3      |
|   | 14 hrs |                                      | 14 hrs |

| Fourth Year                              |        |                                       |        |
|--|--------|---------------------------------------|--------|
| Seventh Semester                         |        | Eighth Semester                       |        |
| ELET 312 Control Systems Lab             | 1      | ELET 311 Communicating Systems Lab    | 1      |
| ELET 332 Control Systems                 | 3      | ELET 331 Communicating Systems        | 3      |
| ELET 313 Microprocessor Architecture Lab | 1      | ELET 410 Computer Control Systems Lab | 1      |
| ELET 343 Microprocessor Architecture     | 3      | ELET 430 Computer Control Systems     | 3      |
| ELET 422 Advanced Stru. Prog. With C++   | 3      | CHEM 111 General Chemistry Lab        | 1      |
| MUSI 239 Fine Arts in Daily Living       | 3      | CHEM 131 General Chemistry            | 3      |
|  | 14 hrs |                                       | 12 hrs |

| Fifth Year                             |        |   |        |
|--|--------|---|--------|
| Ninth Semester                         |        | Tenth Semester                          |        |
| ELET 353 Micro Computer Software Appl. | 3      | ELET 413 Microprocessor Interfacing Lab | 1      |
| ELET 412 Senior Project Proposal       | 1      | ELET 431 Microprocessor Interfacing     | 3      |
| ELET 411 Micro Computer Networks Lab.  | 1      | ELET 432 Senior Electronics Project     | 3      |
| ELET 434 Micro Computer Networks       | 3      | ELET 441 Electronics SR. Comp           | 0      |
| ***** Technical Elective               | 3      | ENGT 333 Ethics & Pro. Eng. Practice    | 1      |
|  |        | ***** General Elective                  | 3      |
|  | 11 hrs |   | 11 hrs |

Bachelor of Science Degree in Electronics Engineering Technology  
Six Year Degree Plan - Total Credits: 131

| First Year                 |        |  |        |
|----------------------------|--------|--|--------|
| First Semester             |        | Second Semester                        |        |
| ELET 111 DC Circuit Lab    | 1      | ELET 113 Circuits Lab                  | 1      |
| ELET 131 DC Circuits       | 3      | ELET 133 AC Circuits                   | 3      |
| ENG 131 Freshman English I | 3      | ELET 130 Intro to Stru. Prog. with C++ | 3      |
| MATH 133 College Algebra   | 3      | ENG 132 Freshman English II            | 3      |
| ITEC 111 Orientation       | 1      | MATH 134 Plane Trigonometry            | 3      |
|                            | 11 hrs |  | 13 hrs |

| Second Year                    |        |                                    |        |
|--------------------------------|--------|------------------------------------|--------|
| Third Semester                 |        | Fourth Semester                    |        |
| ELET 112 Electronics I Lab     | 1      | ELET 212 Electronics II Lab        | 1      |
| ELET 132 Electronics I         | 3      | ELET 232 Electronics II            | 3      |
| MATH 241 Calculus & Geometry I | 4      | MATH 242 Calculus & Anal. Geometry | 4      |
| ENG 2xx Upper level English    | 3      | SC 135 Business & Prof. Comm.      | 3      |
|                                | 11 hrs |                                    | 11 hrs |

| Third Year                              |        |                                      |        |
|---|--------|--------------------------------------|--------|
| Fifth Semester                          |        | Sixth Semester                       |        |
| ELET 214 Digital Logic Circuits Lab     | 1      | ELET 213 Digital Hardware Design Lab | 1      |
| ELET 241 Digital Logic Circuits         | 3      | ELET 243 Digital Hardware Design     | 3      |
| MATH 345 Applied Math & Stat. for Tech. | 3      | POLS 232 American Pol Systems II     | 3      |
| POLS 231 American Pol Systems I         | 3      | MUSI 239 Fine Arts in Daily Living   | 3      |
|   | 10 hrs |                                      | 10 hrs |

| Fourth Year                    |        |                                    |        |
|--------------------------------|--------|------------------------------------|--------|
| Seventh Semester               |        | Eighth Semester                    |        |
| ELET 312 Control Systems Lab   | 1      | ELET 311 Communicating Systems Lab | 1      |
| ELET 332 Control Systems       | 3      | ELET 331 Communicating Systems     | 3      |
| PHYS 213 College Physics Lab I | 1      | PHYS 214 College Physics Lab II    | 1      |
| PHYS 237 College Physics I     | 3      | PHYS 238 College Physics II        | 3      |
| HIST 231 Soc. Pol. His. Of U.S | 3      | HIST 232 Soc. Pol. His. Of U.S     | 3      |
|                                | 11 hrs |                                    | 11 hrs |

| Fifth Year                               |        |                                       |        |
|--|--------|---------------------------------------|--------|
| Ninth Semester                           |        | Tenth Semester                        |        |
| ELET 313 Microprocessor Architecture Lab | 1      | ELET 410 Computer Control Systems Lab | 1      |
| ELET 343 Microprocessor Architecture     | 3      | ELET 430 Computer Control Systems     | 3      |
| ELET 411 Micro Computer Networks Lab.    | 1      | CHEM 111 General Chemistry Lab        | 1      |
| ELET 434 Micro Computer Networks         | 3      | CHEM 131 General Chemistry            | 3      |
| DRFT 233 Intro to Computer Aided Design  | 3      | ITEC 331 Technical Writing            | 3      |
|  | 11 hrs |                                       | 11 hrs |

| Sixth Year                             |        |   |        |
|--|--------|---|--------|
| Eleventh Semester                      |        | Twelfth Semester                        |        |
| ELET 353 Micro Computer Software Appl. | 3      | ELET 413 Microprocessor Interfacing Lab | 1      |
| ELET 412 Senior Project Proposal       | 1      | ELET 431 Microprocessor Interfacing     | 3      |
| ELET 422 Advanced Stru. Prog. With C++ | 3      | ELET 432 Senior Electronics Project     | 3      |
| ENGT 333 Ethics & Pro. Eng. Practice   | 1      | ELET 441 Electronics SR. Comp           | 0      |
| ***** Technical Elective               | 3      | ***** General Elective                  | 3      |
|  | 11 hrs |   | 10 hrs |

Bachelor of Science Degree in Computer Engineering Technology  
Four Year Degree Plan - Total Credits: 133

| First Year                              |        |                                |        |
|---|--------|--------------------------------|--------|
| First Semester                          |        | Second Semester                |        |
| ELET 111 DC Circuit Lab                 | 1      | ELET 113 Circuits Lab          | 1      |
| ELET 131 DC Circuits                    | 3      | ELET 133 AC Circuits           | 3      |
| ELET 130 Intro to Stru. Prog. with C++  | 3      | ENG 132 Freshman English II    | 3      |
| DRFT 233 Intro to Computer Aided Design | 3      | MATH 134 Plane Trigonometry    | 3      |
| ENG 131 Freshman English I              | 3      | CHEM 111 General Chemistry Lab | 1      |
| MATH 133 College Algebra                | 3      | CHEM 131 General Chemistry     | 3      |
| ITEC 111 Orientation                    | 1      |                                |        |
|   | 17 hrs |                                | 14 hrs |

| Second Year                         |        |                                      |        |
|-------------------------------------|--------|--------------------------------------|--------|
| Third Semester                      |        | Fourth Semester                      |        |
| ELET 112 Electronics I Lab          | 1      | ELET 213 Digital Hardware Design Lab | 1      |
| ELET 132 Electronics I              | 3      | ELET 243 Digital Hardware Design     | 3      |
| ELET 214 Digital Logic Circuits Lab | 1      | MATH 242 Calculus & Anal. Geometry   | 4      |
| ELET 241 Digital Logic Circuits     | 3      | MUSI 239 Fine Arts in Daily Living   | 3      |
| MATH 241 Calculus & Geometry I      | 4      | SC 135 Business & Prof. Comm.        | 3      |
| POLS 231 American Pol Systems I     | 3      | POLS 232 American Pol Systems II     | 3      |
| ENG 2xx Upper level English         | 3      |                                      |        |
|                                     | 18 hrs |                                      | 17 hrs |

| Third Year                               |        |                                       |        |
|--|--------|---------------------------------------|--------|
| Fifth Semester                           |        | Sixth Semester                        |        |
| ELET 313 Microprocessor Architecture Lab | 1      | ELET 411 Micro Computer Networks Lab. | 1      |
| ELET 343 Microprocessor Architecture     | 3      | ELET 434 Micro Computer Networks      | 3      |
| CMET 331 MicroComputer Operating System  | 3      | ITEC 331 Technical Writing            | 3      |
| MATH 345 Applied Math & Stat. for Tech.  | 3      | PHYS 214 College Physics Lab II       | 1      |
| PHYS 213 College Physics Lab I           | 1      | PHYS 238 College Physics II           | 3      |
| PHYS 237 College Physics I               | 3      | HIST 232 Soc. Pol. His. of U.S.       | 3      |
| HIST 231 Soc. Pol. His. of U.S.          | 3      | ***** General Elective                | 3      |
|  | 17 hrs |                                       | 17 hrs |

| Fourth Year                               |        |   |        |
|---|--------|---|--------|
| Seventh Semester                          |        | Eighth Semester                         |        |
| ELET 422 Advanced Stru. Prog. With C++    | 3      | CMET 417 Data Communication Methods Lab | 1      |
| CMET 412 Senior Project I                 | 1      | CMET 437 Data Communication Methods     | 3      |
| CMET 415 Advanced MicroCom. Networks Lab  | 1      | CMET 419 Micro Peripheral Hardware Lab  | 1      |
| CMET 435 Advanced MicroCom. Networks      | 3      | CMET 439 Micro Peripheral Hardware      | 3      |
| CMET 416 Applied Microprocessor Soft. Lab | 1      | CMET 432 Senior Project II              | 3      |
| CMET 436 Applied Microprocessor Soft      | 3      | CMET 438 Artificial Intelligence        | 3      |
| ***** Technical Elective                  | 3      | CMET 441 Computer Eng. Tech. Comp. Exam | 0      |
|   |        | CMET 470 Java Programming               | 3      |
|   |        | ITEC 412 Senior Seminar                 | 1      |
|   | 15 hrs |   | 18 hrs |

Bachelor of Science Degree in Computer Engineering Technology  
Five Year Degree Plan - Total Credits: 133

| First Year                             |        |   |        |
|--|--------|---|--------|
| First Semester                         |        | Second Semester                         |        |
| ELET 111 DC Circuit Lab                | 1      | ELET 113 Circuits Lab                   | 1      |
| ELET 131 DC Circuits                   | 3      | ELET 133 AC Circuits                    | 3      |
| ELET 130 Intro to Stru. Prog. with C++ | 3      | DRFT 233 Intro to Computer Aided Design | 3      |
| ENG 131 Freshman English I             | 3      | ENG 132 Freshman English II             | 3      |
| MATH 133 College Algebra               | 3      | MATH 134 Plane Trigonometry             | 3      |
| ITEC 111 Orientation                   | 1      |   |        |
|  | 14 hrs |   | 13 hrs |

| Second Year                    |        |   |        |
|--------------------------------|--------|---|--------|
| Third Semester                 |        | Fourth Semester                         |        |
| ELET 112 Electronics I Lab     | 1      | CMET 331 MicroComputer Operating System | 3      |
| ELET 132 Electronics I         | 3      | MATH 242 Calculus & Anal. Geometry      | 3      |
| MATH 241 Calculus & Geometry I | 4      | HIST 232 Soc. Pol. His. of U.S          | 4      |
| HIST 231 Soc. Pol. His. of U.S | 3      | SC 135 Business & Prof. Comm.           | 3      |
| ENG 2xx Upper level English    | 3      |   |        |
|                                | 14 hrs |   | 13 hrs |

| Third Year                              |        |                                      |        |
|---|--------|--------------------------------------|--------|
| Fifth Semester                          |        | Sixth Semester                       |        |
| ELET 214 Digital Logic Circuits Lab     | 1      | ELET 213 Digital Hardware Design Lab | 1      |
| ELET 241 Digital Logic Circuits         | 3      | ELET 243 Digital Hardware Design     | 3      |
| MATH 345 Applied Math & Stat. for Tech. | 3      | ITEC 331 Technical Writing           | 3      |
| PHYS 213 College Physics Lab I          | 1      | PHYS 214 College Physics Lab II      | 1      |
| PHYS 237 College Physics I              | 3      | PHYS 238 College Physics II          | 3      |
| POLS 231 American Pol. Systems I        | 3      | POLS 232 American Pol. Systems II    | 3      |
|   | 14 hrs |                                      | 14 hrs |

| Fourth Year                              |        |  |        |
|--|--------|--|--------|
| Seventh Semester                         |        | Eighth Semester                          |        |
| ELET 313 Microprocessor Architecture Lab | 1      | CMET 417 Data Communication Methods Lab  | 1      |
| ELET 343 Microprocessor Architecture     | 3      | CMET 437 Data Communication Methods      | 3      |
| ELET 411 Micro Computer Networks Lab.    | 1      | CMET 415 Advanced MicroCom. Networks Lab | 1      |
| ELET 434 Micro Computer Networks         | 3      | CMET 435 Advanced MicroCom. Networks     | 3      |
| ELET 422 Advanced Stru. Prog. With C++   | 3      | CHEM 111 General Chemistry Lab           | 1      |
| MUSI 239 Fine Arts in Daily Living       | 3      | CHEM 131 General Chemistry               | 3      |
|  | 14 hrs |  | 12 hrs |

| Fifth Year                                |        |   |        |
|---|--------|---|--------|
| Ninth Semester                            |        | Tenth Semester                          |        |
| CMET 416 Applied Microprocessor Soft. Lab | 1      | CMET 419 Micro Peripheral Hardware Lab  | 1      |
| CMET 436 Applied Microprocessor Soft      | 3      | CMET 439 Micro Peripheral Hardware      | 3      |
| CMET 412 Senior Project I                 | 1      | CMET 432 Senior Project II              | 3      |
| CMET 438 Artificial Intelligence          | 3      | CMET 441 Computer Eng. Tech. Comp. Exam | 0      |
| ***** Technical Elective                  | 3      | CMET 470 Java Programming               | 3      |
| ***** General Elective                    | 3      | ITEC 412 Senior Seminar                 | 1      |
|   | 14 hrs |   | 11 hrs |

Bachelor of Science Degree in Computer Engineering Technology  
Six Year Degree Plan - Total Credits: 133

| First Year                 |        |  |        |
|----------------------------|--------|--|--------|
| First Semester             |        | Second Semester                        |        |
| ELET 111 DC Circuit Lab    | 1      | ELET 113 Circuits Lab                  | 1      |
| ELET 131 DC Circuits       | 3      | ELET 133 AC Circuits                   | 3      |
| ENG 131 Freshman English I | 3      | ELET 130 Intro to Stru. Prog. with C++ | 3      |
| MATH 133 College Algebra   | 3      | ENG 132 Freshman English II            | 3      |
| ITEC 111 Orientation       | 1      | MATH 134 Plane Trigonometry            | 3      |
|                            | 11 hrs |  | 13 hrs |

| Second Year                    |        |   |        |
|--------------------------------|--------|---|--------|
| Third Semester                 |        | Fourth Semester                         |        |
| ELET 112 Electronics I Lab     | 1      | CMET 331 MicroComputer Operating System | 3      |
| ELET 132 Electronics I         | 3      | MATH 242 Calculus & Anal. Geometry      | 4      |
| MATH 241 Calculus & Geometry I | 4      | SC 135 Business & Prof. Comm.           | 3      |
| ENG 2xx Upper level English    | 3      | ***** General Elective                  | 3      |
|                                | 11 hrs |   | 13 hrs |

| Third Year                              |        |                                      |        |
|---|--------|--------------------------------------|--------|
| Fifth Semester                          |        | Sixth Semester                       |        |
| ELET 214 Digital Logic Circuits Lab     | 1      | ELET 213 Digital Hardware Design Lab | 1      |
| ELET 241 Digital Logic Circuits         | 3      | ELET 243 Digital Hardware Design     | 3      |
| MATH 345 Applied Math & Stat. for Tech. | 3      | POLS 232 American Pol Systems II     | 3      |
| POLS 231 American Pol Systems I         | 3      | MUSI 239 Fine Arts in Daily Living   | 3      |
|   | 10 hrs |                                      | 10 hrs |

| Fourth Year                            |        |   |        |
|--|--------|---|--------|
| Seventh Semester                       |        | Eighth Semester                         |        |
| ELET 422 Advanced Stru. Prog. With C++ | 3      | CMET 417 Data Communication Methods Lab | 1      |
| ITEC 412 Senior Seminar                | 1      | CMET 437 Data Communication Methods     | 3      |
| PHYS 213 College Physics Lab I         | 1      | PHYS 214 College Physics Lab II         | 1      |
| PHYS 237 College Physics I             | 3      | PHYS 238 College Physics II             | 3      |
| HIST 231 Soc. Pol. His. Of U.S         | 3      | HIST 232 Soc. Pol. His. Of U.S          | 3      |
|  | 11 hrs |   | 11 hrs |

| Fifth Year                               |        |  |        |
|--|--------|--|--------|
| Ninth Semester                           |        | Tenth Semester                           |        |
| ELET 313 Microprocessor Architecture Lab | 1      | CMET 415 Advanced MicroCom. Networks Lab | 1      |
| ELET 343 Microprocessor Architecture     | 3      | CMET 435 Advanced MicroCom. Networks     | 3      |
| ELET 411 Micro Computer Networks Lab.    | 1      | CHEM 111 General Chemistry Lab           | 1      |
| ELET 434 Micro Computer Networks         | 3      | CHEM 131 General Chemistry               | 3      |
| DRFT 233 Intro to Computer Aided Design  | 3      | ITEC 331 Technical Writing               | 3      |
|  | 11 hrs |  | 11 hrs |

| Sixth Year                                |        |   |        |
|---|--------|---|--------|
| Eleventh Semester                         |        | Twelfth Semester                        |        |
| CMET 416 Applied Microprocessor Soft. Lab | 1      | CMET 419 Micro Peripheral Hardware Lab  | 1      |
| CMET 436 Applied Microprocessor Soft.     | 3      | CMET 439 Micro Peripheral Hardware      | 3      |
| CMET 412 Senior Project I                 | 1      | CMET 432 Senior Project II              | 3      |
| CMET 438 Artificial Intelligence          | 3      | CMET 441 Computer Eng. Tech. Comp. Exam | 0      |
| ***** Technical Elective                  | 3      | CMET 470 Java Programming               | 3      |
|   | 11 hrs |   | 10 hrs |