

Bachelor of Science in Computer Engineering Technology

Curriculum

Required courses and recommended terms during which they should be taken:

Freshman Year	Fall	
CST 102	Introduction to Computer Systems	3
CST 162	Introduction to Digital Logic	4
MATH 111	College Algebra	4
PSY 201	Psychology	3
WRI 121	English Composition	3
Total		17

Freshman Year	Winter	
CST 116	C++ Programming I	4
CST 130	Computer Organization	3
MATH 112	Trigonometry	4
WRI 122	English Composition	3
	Humanities elective	3
Total		17

Freshman Year	Spring	
CST 105	Introduction to Computer Systems III	1
CST 126	C++ Programming II	4
CST 131	Computer Architecture	3
MATH 251	Differential Calculus	4
SPE 111	Fundamentals of Speech	3
Total		15

Sophomore Year	Fall	
CST 133	Digital Electronics II – Sequential Logic with HDL	4
CST 250	Computer Assembly Language	4
MATH 252	Integral Calculus	4
WRI 227	Technical Report Writing	3
Total		15

Sophomore Year	Winter	
CST 204	Introduction to Microcontrollers	4
CST 231	Computer Design with Programmable Logic	3
CST 232	Computer Design with Programmable Logic Laboratory	1
EE 221	Circuits I	4
MATH 254N	Vector Calculus I	4
Total		16

Sophomore Year	Spring	
CST 240	UNIX	3
EE 223	Circuits II	4
SPE 321	Small Group and Team Communication	3
	Advanced Math elective**	4
Total		14

Junior Year	Fall	
CST 321	Introduction to Microprocessors	5
CST 335	I/O Device Interfacing Techniques	4
CST 371	Embedded Systems Development I	4
PHY 221	General Physics with Calculus	4
Total		17

Junior Year	Winter	
CST 331	Microprocessor Peripheral Interfaces	5
CST 372	Embedded Systems Development II	3
EE 321	Electronics I	5
PHY 222	General Physics with Calculus	4
Total		17

Junior Year	Spring	
CST 351	Advanced PLD Circuits	3
CST 373	Embedded Systems Development III	2
PHY 223	General Physics with Calculus	4
WRI 327	Advanced Technical Writing	3
	Humanities elective	3
Total		15

Senior Year	Fall	
BUS 304	Engineering Management	3
CST 344	Intermediate Computer Architecture	3
CST 441	Logic Synthesis with VHDL+	3
	Social Science elective	3
	Technical elective*	3
Total		15

Senior Year	Winter	
CST 418	Data Communications and Networks	3
CST 442	Advanced Computer Architecture	3
CST 451	ASIC Design using FPGAs+	4
MGT 345	Engineering Economy	3
	Social Science elective	3
Total		16

Senior Year	Spring	
ANTH 452	Globalization	3
CST 461	Advanced Topics in VLSI Design+	3
CST 464	RISC-Based Microprocessor Systems	4
	Humanities elective	3
Total		13

* Technical elective: CST 136, CST 345, CST 415, or CST 407.

** Electives: MATH 253N or MATH 465. MATH 341 or MATH 321 are also acceptable provided the student earns a total of 36 credits in Math and Science.

+ OR Senior Project: CST 334(1), CST 412(3), CST 422(3), CST 432(2)