

## Bachelor of Science in Embedded Systems 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
<b>Total</b>		<b>17</b>

#### 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
<b>Total</b>		<b>17</b>

#### 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
<b>Total</b>		<b>15</b>

#### Sophomore Year Fall

CST 133	Digital Electronics II–Sequential Logic with HDL	4
CST 136	Object-Oriented Programming with C++	4
CST 250	Computer Assembly Language	4
MATH 252	Integral Calculus	4
<b>Total</b>		<b>16</b>

#### 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
<b>Total</b>		<b>16</b>

#### Sophomore Year Spring

CST 211	Data Structures	4
CST 236	Software Systems Testing	4
CST 240	Unix	3
EE 223	Circuits II	4
WRI 227	Technical Report Writing	3
<b>Total</b>		<b>18</b>

#### Junior Year

##### Fall

CST 315	Embedded Sensor Interfacing and I/O	4
CST 337	Embedded System Architecture	4
CST 371	Embedded Systems Development I	4
PHY 221	General Physics with Calculus	4
<b>Total</b>		<b>16</b>

#### Junior Year

##### Winter

CST 345	Hardware/Software Co-Design	4
CST 372	Embedded Systems Development II	3
PHY 222	General Physics with Calculus	4
MATH 465	Mathematical Statistics	4
<b>Total</b>		<b>15</b>

#### Junior Year

##### Spring

CST 334	Project Proposal	1
CST 347	Real-Time Embedded Operating Systems	4
CST 373	Embedded Systems Development III	2
WRI 350	Documentation Development	3
	Laboratory Science elective	4
	Social Science elective	3
<b>Total</b>		<b>17</b>

#### Senior Year

##### Fall

CST 412	Senior Development Project	3
CST 455	System On a Chip Design	4
BUS 304	Engineering Management	3
	CSET Technical elective	3
	Social Science elective	3
<b>Total</b>		<b>16</b>

#### Senior Year

##### Winter

CST 422	Senior Development Project	3
CST 417	Embedded Networking	4
CST 456	Embedded System Testing	4
MGT 345	Engineering Economy	3
	Humanities elective	3
<b>Total</b>		<b>17</b>

#### Senior Year

##### Spring

ANTH 452	Globalization	3
CST 432	Senior Development Project	2
CST 466	Embedded System Security	3
SPE 321	Small Group and Team Communication	3
	Humanities elective	3
<b>Total</b>		<b>14</b>