

**Computing Hardware & Emerging Architectures and Robotics & Autonomous Systems**

<b>FIRST YEAR-FALL</b>	<b>HR</b>	<b>Notes</b>	<b>FIRST YEAR-SPRING</b>	<b>HR</b>	<b>Notes</b>
ENGL 1101	3		ENGL 1102	3	
MATH 1551	2		MATH 1552	4	
MATH 1554	4		Social Science Elective	3	
CS 1301	3		PHYS 2211	4	
CHEM 1310	4		CS 1331	3	
ECE 1100	1				
<b>TOTAL SEMESTER HOURS</b>	<b>17</b>		<b>TOTAL SEMESTER HOURS</b>	<b>17</b>	

<b>SECOND YEAR-FALL</b>	<b>HR</b>	<b>Notes</b>	<b>SECOND YEAR-SPRING</b>	<b>HR</b>	<b>Notes</b>
MATH 2550	2		ECE 2040	3	
PHYS 2212	4		History/Government Elective	3	6
CS 1332	3		MATH 2552	4	
ECE 2020	3		ECE 2035	4	
ECE 2026	3		ECE 2031	2	
APPH 1040 OR 1050	2				
<b>TOTAL SEMESTER HOURS</b>	<b>17</b>		<b>TOTAL SEMESTER HOURS</b>	<b>16</b>	

<b>THIRD YEAR-FALL</b>	<b>HR</b>	<b>Notes</b>	<b>THIRD YEAR-SPRING</b>	<b>HR</b>	<b>Notes</b>
Humanities Elective	3		Economics/Social Science Elective	3	
ECE 3550	3		ECE 3150	4	
CS 2050 OR CS 2051	3		ECE 4550	4	
Prob & Stat option	3		Humanities Elective	3	
ECE 3058	4		ECE 3030	3	
ECE 3005	1				
<b>TOTAL SEMESTER HOURS</b>	<b>17</b>		<b>TOTAL SEMESTER HOURS</b>	<b>17</b>	

<b>FOURTH YEAR-FALL</b>	<b>HR</b>	<b>Notes</b>	<b>FOURTH YEAR-SPRING</b>	<b>HR</b>	<b>Notes</b>
Senior Design Sequence	1	2	Senior Design Sequence	2	2
Pick 1 of Robotics & Auto Systems	3		ECE 3000/4000 Elective (EE Thread)	3	5
Pick 1 of Embedded Systems	3	1	Pick 1 of Integration, Devices, & Fab	3	
Elective Hours	3		Pick 1 of Computer Architecture	3	
Social Science Elective	3		Elective Hours	3	1
Elective Hours	1	1			
<b>TOTAL SEMESTER HOURS</b>	<b>14</b>		<b>TOTAL SEMESTER HOURS</b>	<b>14</b>	

Completed Hours:		
Remaining Hours:		
Surplus Non Usable Hours		
<b>Total Hours for Degree</b>	<b>129</b>	129

CHEA + ROB			
	Lec	Lab	Hours
Institute Core Hours+Prob Stat:	x	x	60
Common Core	x	x	27
Total Thread Hours:	x	x	32
Elective Hours (includes Senior Design Sequence)	x	x	10
Total Degree Hours			129

CmpE Common Core			
ECE 1100 - ECE Discovery Studio	1	0	1
CS 1331 Introduction to Object-Oriented Programming	3	0	3
CS 1332 Data Structures and Algorithms	3	0	3
CS 2050 or CS 2051 Introduction to Discrete Math for CS	3	0	3
ECE 2020 – Fundamentals of Digital System Design	3	0	3
ECE 2040 - Circuit Analysis	3	0	3
ECE 2031 – Digital Design Laboratory	1	3	2
ECE 2035 - Programming HW/SW Sys	3	3	4
ECE 3005 - Professional Communications	1	0	1
ECE 3058 – Architecture, Concurrency and Energy in Computation	3	3	4
<b>Total</b>	<b>24</b>	<b>9</b>	<b>27</b>

Computing Hardware & Emerging Architectures			
ECE 3150 - VLSI & Adv Digital Design	3	3	4
ECE 3030 – Physical Found. of Computer Engineering	3	0	3
<b>Pick 1 of Embedded Systems (*)</b>	<b>3</b>	<b>0</b>	<b>3</b>
<b>Pick 1 of Integration, Devices &amp; Fabrication</b>	<b>3</b>	<b>x</b>	<b>3</b>
<b>Pick 1 of Computer Architecture</b>	<b>3</b>	<b>0</b>	<b>3</b>
<b>Robotics &amp; Autonomous Systems</b>			
ECE2026 - Intro Signal Processing	2	3	3
ECE 3550 - Feedback Control Systems	3	0	3
ECE 4550 - Control System Design	3	3	4
<b>Pick 1 of Robotics &amp; Autonomous Systems Topics</b>	<b>3</b>	<b>0</b>	<b>3</b>
<b>ECE 3000/4000 Elective (From any EE Thread)</b>	<b>3</b>	<b>0</b>	<b>3</b>
<b>Total (See Notes 3 and 4)</b>	<b>x</b>	<b>x</b>	<b>32</b>

<b>Total Degree Hours:</b>	<b>x</b>	<b>x</b>	<b>129</b>
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- (1) Elective hours depend on thread picks and Senior Design Option
- (2) See degree options for senior design
- (3) Thread hours may depend on thread picks
- (4) For shared thread courses, select an additional ECE/CS 3000/4000 elective or pick
- (5) EE Thread electives must come from an EE thread
- (6) HIST 2111/2122 or POL 1101 or INTA 1200 or PUBP 3000