

**UTSA Bachelor of Science in Computer Science  
Four-Year Plan (Recommended)  
2020-2022 Catalog**

**FALL**

**SPRING**

**FIRST YEAR**

AIS 1203	Academic Inquiry and Scholarship	3		<b>CS 1714</b>	<b>Computer Programming II</b>	4
<b>CS 1083</b>	<b>Prog. 1 for Computer Scientists</b>	3		<b>MAT 1224</b>	<b>Calculus II</b>	4
<b>MAT 1214</b>	<b>Calculus I</b>	4		POL 1133 or 1213	Texas Politics or Civil Rights	3
WRC 1013	Freshman Comp I	3		<b>CS 2233</b>	<b>Discrete Math. Structures</b>	3
CORE	Creative Arts	3				
<b>TOTAL</b>		<b>16</b>		<b>TOTAL</b>		<b>14</b>

**SECOND YEAR**

<b>CS 2124</b>	<b>Data Structures</b>	4		<b>CS 3424</b>	<b>Systems Programming</b>	4
<b>CS 3333</b>	<b>Math Foundations of CS</b>	3		<b>CS 3443</b>	<b>Application Programming</b>	3
POL 1013	Introduction to American Politics	3		<b>CS 3844</b>	<b>Computer Organization</b>	4
CORE	Life & Physical Sciences	3		CORE	Social & Behavioral Sciences	3
WRC 1023	Freshmen Comp II	3				
<b>TOTAL</b>		<b>16</b>		<b>TOTAL</b>		<b>14</b>

**THIRD YEAR**

<b>CS 3343</b>	<b>Analysis of Algorithms</b>	3		<b>CS 3853</b>	<b>Computer Architecture</b>	3
<b>CS 3723</b>	<b>Programming Languages</b>	3		<b>CS 3733</b>	<b>Operating Systems</b>	3
<b>CS 3743</b>	<b>Database Systems</b>	3		<b>CS 3XX3/4XX3</b>	<b>UD CS Elective</b>	3
CORE	Life & Physical Sciences	3		<b>CS 3XX3/4XX3</b>	<b>UD CS Elective</b>	3
<i>ELEC</i>	<i>Free Elective</i>	3		<i>ELEC</i>	<i>Free Elective</i>	3
<b>TOTAL</b>		<b>15</b>		<b>TOTAL</b>		<b>15</b>

**FOURTH YEAR**

<b>CS 3XX3/4XX3</b>	<b>UD CS Elective</b>	3		<b>CS 3XX3/4XX3</b>	<b>UD CS Elective</b>	3
<b>CS 3XX3/4XX3</b>	<b>UD CS Elective</b>	3		<b>CS 3XX3/4XX3</b>	<b>UD CS Elective</b>	3
<b>CS 3XX3/4XX3</b>	<b>UD CS Elective</b>	3		<b>CS 3XX3/4XX3</b>	<b>UD CS Elective</b>	3
CORE	Component Area Option	3		CORE	Lang, Philosophy, & Cult.	3
CORE	American History	3		CORE	American History	3
<b>TOTAL</b>		<b>15</b>		<b>TOTAL</b>		<b>15</b>

The Bachelor of Science (B.S.) degree in Computer Science is designed to prepare students with a strong technical emphasis on modern computing and systems. The degree program offers students the opportunity to prepare for advanced graduate study and for careers in high-technology companies, business, government, and teaching. The department offers concentrations in Cloud and Systems, Cyber Security, Data Science, and Software Engineering.