

# COMPUTING, BACHELOR OF SCIENCE (BS) - CONCENTRATION IN COMPUTING ANALYTICS/ADVANCED PILOTING (CCBC)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
AVIP 180	Instrument Flight Theory (taken at CCBC)	7
AVIP 190	Instrument Flight Rating (taken at CCBC)	2
WRIT 101	English Composition (taken at CCBC)	3
SUBJ 139	Foundation of Academic Discovery	3
ESAP 101	FIRST Seminar	1
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
AVIP 120	Foundations and Development of Aviation (taken at CCBC)	3
CIST 100	Introduction to Information Technology (taken at CCBC)	3
MATH 126	Statistics (taken at CCBC)	3
CPSC 130	Introduction to Computing and Programming	3
MATH 125	Precalculus	4
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
AVIP 215	Commercial Flight Theory (taken at CCBC)	5
AVIP 220	Commercial Flight Certification I (taken at CCBC)	3
LITR 210	Concepts of Literature (taken at CCBC)	3
CPSC 146	Programming Principles	3
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
AVIP 202	Aircraft Engines Theory (taken at CCBC)	3
AVIP 204	Aircraft Systems Theory (taken at CCBC)	3
AVIP 225	Commercial Flight Certification II (taken at CCBC)	3
CPSC 246	Object-Oriented Programming	3
SCI 101	Science of Life	3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
AVIP 250	Multi-Engine Rating (taken at CCBC)	1
AVIP 260	Human Factors Theory (taken at CCBC)	3
AVIP 270	Aerodynamics of Flight (taken at CCBC)	3
CPSC Elective		3
CPSC 207	Shell Commands and Scripting	3
<b>Hours</b>		<b>13</b>

<b>Spring</b>		
AVIP 275	Certified Flight Instructor Theory (taken at CCBC)	2
Select 2 of the following:		4
AVIP 280	Multi-Engine Rating (taken at CCBC)	
AVIP 285	Certified Flight Instructor (taken at CCBC)	
AVIP 288	Certified Flight Instructor - Multi-Engine (taken at CCBC)	
CPSC 236	Selected Computer Languages	3
Creative & Aesthetic Inquiry ( <a href="https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/">https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/</a> )		3
CPSC 311	Discrete Computational Structures	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
METR 140	Foundations in Meteorology (taken at CCBC)	4
COMM 201	Public Speaking (taken at CCBC)	3
CPSC 374	Algorithms and Data Structures	3
CPSC 405	Data Mining and Data Analysis	3
CPSC 323	Fundamentals of Database Systems	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CPSC 300	Challenges of Computer Technology	3
CPSC 370	Computer Organization and Architecture	3
CPSC 485	Big Data Analytics	3
Humanities Inquiry ( <a href="https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/">https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/</a> )		3
<b>Hours</b>		<b>12</b>
<b>Fifth Year</b>		
<b>Fall</b>		
CPSC 423	Computer Networks	3
CPSC 474	Advanced Architecture & Parallel Computing	3
CPSC 480	Topics in Computer Science: Machine Learning	3
CPSC Elective		3
<b>Hours</b>		<b>12</b>
<b>Total Hours**</b>		<b>129</b>