

**Zayed University**  
**College of Interdisciplinary Studies**  
**Bachelor of Science in Computational Systems**  
**Concentration in Applied Data Science**  
*(Recommended Sequence)*

	Semester 1			Semester 2		
			Credits			Credits
Year 1	ICB101	Strategic Learning and Growth	4	IDS101	Critique and Communications	4
	ICB102	Expressive Clarity	3	IAR210 or IAR211	Arabic Lab 2 (N): Writing to Inform	1
	IAR110 or IAR111	Arabic Lab 1 (N): Speaking to Engage & Persuade	1	IAR211	Arabic Lab 2 (NN): Arabic Language & Culture for Intermediate Proficiency	
	IAR111	Arabic Lab 1 (NN): Arabic Language & Culture for Beginners		IDS103	Statistical Intuitions and Applications	4
	ICB103	Applied Algorithmic Thinking	4	IDS105	Systems and Society	4
	IDS102	Applied Creative and Critical Thinking	4	IDS220	Fundamentals of Innovation and Entrepreneurship	3
		<b>Total</b>	<b>16</b>		<b>Total</b>	<b>16</b>
Year 2	Semester 3			Semester 4		
	IDS204	Deriving Insights from Evidence	4	IAH244	Ethical Systems, Moral Dilemmas	4
	ICS211	Single and Multivariable Calculus	4	ICS221	Data Structures and Algorithms	4
	ICS215	Mathematics For Computational Systems	3	ICS220	Programming Fundamentals	3
	ICS230	Information Security and Data Privacy	3	ICS214	Probability, Statistics, and the Structure of Randomness	4
		<b>Total</b>	<b>14</b>		<b>Total</b>	<b>15</b>
Year 3	Semester 5			Semester 6		
	ICS340	Database Systems	3	IDS391	Capstone Seminar I	3
	ICS360	Computer Networks Fundamentals	3	ICS351	Machine Learning	4
	ICS350	Introduction to Artificial Intelligence	3	ICS315	Computational Bayesian Statistics	4
	Elective	Elective from other programs	3	ICS341	Big Data Analytics	4
	Elective	Elective from other programs	3			
		<b>Total</b>	<b>15</b>		<b>Total</b>	<b>15</b>
Year 4	Semester 7			Semester 8		
	IDS493	Capstone Project I	4	ICS490	Internship	3
	ICS420	Parallel Programming & Distributed Computing	4	IDS494	Capstone Project II	4
	ICS441	Data Science and Decision Making	4	Elective	Elective from other programs	3
	ICS443	Visual and Interactive Analytics	4	Elective	Elective from other programs	3
		<b>Total</b>	<b>16</b>		<b>Total</b>	<b>13</b>

**Total = 120 Credit Hours**