

Bachelor of Science in Applied Computer Science

Database Option



Core Courses – 29.0 credits		Credits
COMP 7003	Introduction to Information Network Security	3.0
COMP 7012	Interaction Design	3.0
COMP 7035	Operating Systems	3.0
COMP 7082	Software Engineering	3.0
COMP 8042	Advanced Algorithms and Data Structures Design and Analysis	3.0
COMP 8082	Project Management	3.0
COMP 8085	Artificial Intelligence	3.0
MATH 7808	Calculus for Computing	4.0
MATH 7908	Linear Algebra and Applications for Computing	4.0
Major Project – 6.0 credits		Credits
COMP 8800	Major Project 1	3.0
COMP 8900	Major Project 2	3.0
Specialty Courses – 9.0 credits		Credits
COMP 7071	Database Applications Development and Optimization	3.0
COMP 8071	Data Warehousing	3.0
COMP 8575	Data Mining and Analytics	3.0
And 6.0 credits from the following courses, with at least 3.0 credits at the 8000 level:		
COMP 7005	Computer Network and Protocols	3.0
COMP 7022	Foundations of Human-Computer Interaction	3.0
COMP 7031	Mobile Applications Development Fundamentals	3.0
COMP 7401	Topics in Computer Programming - Mobile Graphics	3.0
COMP 7402	Topics in Computer Programming - Cryptology	3.0
COMP 7404	Topics in Computer Programming – Artificial Intelligence	3.0
COMP 7611	Selected Topics in Computer Systems - Data Mining	3.0
COMP 7612	Selected Topics in Computer Systems – Malware Analysis	3.0
COMP 7881	Advanced Topics Software Engineering	3.0
COMP 8003	Network Security Administration	3.0
COMP 8005	Network and Security Applications Development	3.0
COMP 8022	Multimodal Interfaces	3.0
COMP 8031	Interactive and Responsive Mobile Applications	3.0
COMP 8505	Special Topics in Network and Security Development	3.0
COMP 8522	Adaptive User Interfaces	3.0
COMP 8531	Robust and Trustworthy Mobile Applications	3.0
General Education – 15.0 credits		Credits
LIBS 7001	Critical Reading and Writing	3.0
LIBS 7002	Applied Ethics*	3.0
and		

General Education Electives - 9.0 credits

Refer to the [Bachelor of Science in Applied Computer Science General Education Requirements \[PDF\]](#) for a list of pre-approved General Education electives.

*Students who have completed the CST Diploma (full-time or part-time) are exempt from taking the LIBS 7002 Applied Ethics course, as they have already completed the LIBS 7102 Ethics for Computing Professionals course in the CST Diploma program, which is considered an equivalent course.

Total Credits:

65.0