Bachelor of Science with Honours Computer Science with Artificial Intelligence

Foundation Year
Compulsory
Students must take all modules in this group

Code	Title	Credits	Compensatable	Taught
CELEN036	Foundation Algebra for Physical Sciences & Engineering	10	N	Autumn China
CELEN039	Foundation Physics	10	N	Autumn China
CELEN048	Reading and Writing in Academic Contexts	20	N	Autumn China
CELEN069	Oral Communication Skills A	10	N	Autumn China
CELEN086	Introduction to Algorithms	10	N	Autumn China
CELEN037	Foundation Calculus and Mathematical Techniques	20	N	Spring China
CELEN052	English in Specific Academic Contexts B (Engineering; Comp Sci; Env'mental Sci & Architecture)	20	N	Spring China
CELEN082	Oral Communication Skills B	10	N	Spring China
CELEN087	Introduction to Mathematical Software and Programming	10	N	Spring China

Credit total 120

Qualifying Year
Compulsory
Students must take all modules in this group

Code	Title	Credits	Compensatable	Taught
COMP1036	Computer Fundamentals	10	Y	Autumn China
COMP1038	Programming and Algorithms	20	N	Autumn China
COMP1046	Mathematics for Computer Scientists	20	Y	Autumn China
COMP1048	Databases and Interfaces	10	Y	Autumn China
COMP1035	Software Engineering	10	Y	Spring China
COMP1037	Fundamentals of Artificial Intelligence	10	Y	Spring China
COMP1039	Programming Paradigms	20	Y	Spring China
COMP1047	Systems and Architecture	20	Y	Spring China

Credit total 120

Part I
Compulsory
Students must take all modules in this group

Code	Title	Credits	Compensatable	Taught
COMP2046	Operating Systems & Concurrency	20	Y	Autumn China
COMP2059	Developing Maintainable Software	20	Y	Autumn China
COMP2068	Introduction to Formal Reasoning	10	Y	Autumn China
COMP2043	Software Engineering Group Project	20	Y	Full year China
COMP2049	Languages and Computation	10	Y	Spring China
COMP2051	Artificial Intelligence Methods	20	Y	Spring China

Code	Title	Credits	Compensatable	Taught
COMP2069	Algorithms Data Structures and Efficiency	10	Y	Spring China

Credit total 110

PI - Restricted
Students must take a 10-30 credits from this group

Code	Title	Credits	Compensatable	Taught
COMP2044	Human Computer Interaction	10	Y	Spring China
COMP2045	C++ Programming	10	Y	Spring China
COMP2047	Introduction to Image Processing	10	Y	Spring China

Credit total 30

Additional course choice

Additional course choice should be minimum of 0 and a maximum of 10 credits from this group. Part I students can take Part II modules, however, we would only recommend this for students with a first year average over 60%. Students must take exactly 120 credits per year. Across Part I and Part II, students need to take at least 190 credits at level 2 or above and at least 100 credits at level 3 or above. All students must take at least 280 credits of Computer Science courses across all three years of study.

Part II
Compulsory
Students must take all modules in this group

Code	Title	Credits	Compensatable	Taught
COMP3056	Professional Ethics in Computing	10	Y	Autumn China
COMP3052	Computer Security	10	Y	Spring China

Credit total 20

PII - Restricted - Group 1
Students must take 20 credits from this group

Code	Title	Credits	Compensatable	Taught
COMP3065	Computer Vision	20	Y	Spring China

Credit total 20

PII - Restricted - Group 2
Students must take 20 credits from this group

Code	Title	Credits	Compensatable	Taught
COMP3055	Machine Learning	20	Y	Autumn China

Credit total 20

PII - Restricted - Group 3
Students must take a minimum of 50 and maximum of 60 credits from this group

Code	Title	Credits	Compensatable	Taught
COMP3050	Individual Dissertation Single Honours	40	Y	Full year China
COMP3053	Software Quality Assurance	10	Y	Autumn China
COMP3059	Mobile Device Programming	20	Y	Spring China

COMP3069	Computer Graphics	20	Y	Autumn China
COMP4107	Big Data	10	Y	Spring China

Credit total 100

Additional course choice

Additional course choice should be minimum of 0 and a maximum of 10 credits from this group. You may be permitted to choose an optional course not listed above. Please contact your Course Director to discuss your options. Students must take exactly 120 credits per year. Across Part I and Part II, students need to take at least 190 credits at level 2 or above and at least 100 credits at level 3 or above. All students must take at least 280 credits of Computer Science courses across all three years of study.