

**Bachelor of Computing (Information Security)
with Minor in Innovation & Design**

Cohort AY2021/2022

Modular Requirements	Modular Credits (MCs)
University Level Requirements ¹	
GE1: Data Literacy	4
GE2: Communities and Engagement ²	4
GE3: Cultures and Connections ²	4
GE4: Singapore Studies ²	4
GE5: Critique and Expression ²	4
Sub-total for University Level Requirements	20
Programme Requirements	
CS1010 Programming Methodology ¹	4
CS1231S Discrete Structures	4
CS2040C Data Structures and Algorithms	4
CS2100 Computer Organisation	4
CS2101 Effective Communication for Computing Professionals ³	4
CS2102 Database Systems	4
CS2105 Introduction to Computer Networks	4
CS2106 Introduction to Operating Systems	4
CS2107 Introduction to Information Security	4
CS2113T Software Engineering & Object-Oriented Programming ³	4
CS3235 Computer Security	4
IS1103 Ethics in Computing	4
IS3103 Information Systems Leadership and Communication	4
IS4231 Information Security Management	4
MA1521 Calculus for Computing	4
MA2001 Linear Algebra I	4
ST2334 Probability and Statistics	4
IFS4205 Information Security Capstone Project or CS4238 Computer Security Practice and IFS4103 Penetration Testing Practice	8
Programme electives	12
Computing breadth modules	8
Industrial Experience Requirement	12
Sub-total for Programme Requirements	108
Unrestricted Electives	
Group A module for Minor	4
Group B module for Minor	4
EG3301R DCP Project (over 2 consecutive semesters)	12
Other unrestricted electives	12
Sub-total for Unrestricted Electives	32
Total	160

Notes:

- ¹ Digital Literacy is satisfied by CS1010.
- ² Students may read equivalent modules in USP/NUSC, UTP, and RVRC.
- ³ Students taking CS2113T must take CS2101 in the same semester.

Recommended semester schedule

(for students who opt for vacation internships)

Semester 1	MCs	Semester 2	MCs
MA1521 Calculus for Computing	4	MA2001 Linear Algebra I	4
CS1010 Programming Methodology	4	ST2334 Probability and Statistics	4
CS1231S Discrete Structures	4	CS2040C Data Structures and Algorithms	4
IS1103 Ethics in Computing	4	CS2100 Computer Organisation	4
GE1	4	GE2	4
Sub-total	20	Sub-total	20

Semester 3	MCs	Semester 4	MCs
CS2105 Introduction to Computer Networks	4	CS2101 Effective Communication for Computing Professionals	4
CS2106 Introduction to Operating Systems	4	CS2113T Software Engineering & Object-Oriented Programming	4
CS2107 Introduction to Information Security	4	CS3235 Computer Security	4
Group A module for Minor	4	GE3	4
Group B module for Minor	4	EG3301R DCP Project	6
Sub-total	20	Sub-total	22

Summer vacation between Semesters 4 and 5	MCs
CP3200 Internship	6
Sub-total	6

Semester 5	MCs	Semester 6 – can be used for SEP	MCs
EG3301R DCP Project	6	Computing breadth 1	4
CS2102 Database Systems	4	Computing breadth 2	4
IS3103 Information Systems Leadership and Communication	4	GE4 *	4
IFS4205 Information Security Capstone Project	8	GE5 *	4
		UEM	4
Sub-total	22	Sub-total	20

Summer vacation between Semesters 6 and 7	MCs
CP3202 Internship II	6
Sub-total	6

Semester 7	MCs	Semester 8	MCs
IS4231 Information Security Management	4	Programme elective 2	4
Programme elective 1	4	Programme elective 3	4
UEM	4	UEM	4
Sub-total	12	Sub-total	12

* Students in UTCP and RVRC will need to overload in Semesters 2 to 4 in order to clear these modules earlier.

Recommended semester schedule
(for students who opt for industrial attachment)

Semester 1	MCs	Semester 2	MCs
MA1521 Calculus for Computing	4	MA2001 Linear Algebra I	4
CS1010 Programming Methodology	4	ST2334 Probability and Statistics	4
CS1231S Discrete Structures	4	CS2040C Data Structures and Algorithms	4
IS1103 Ethics in Computing	4	CS2100 Computer Organisation	4
GE1	4	GE2	4
Sub-total	20	Sub-total	20

Semester 3	MCs	Semester 4	MCs
CS2105 Introduction to Computer Networks	4	CS2101 Effective Communication for Computing Professionals	4
CS2106 Introduction to Operating Systems	4	CS2113T Software Engineering & Object-Oriented Programming	4
CS2107 Introduction to Information Security	4	CS3235 Computer Security	4
Group A module for Minor	4	EG3301R DCP Project	6
Group B module for Minor	4	GE4	4
GE3	4		
Sub-total	24	Sub-total	22

Semester 5	MCs	Semester 6	MCs
EG3301R DCP Project	6	CP3880 Advanced Technology Attachment Programme	12
CS2102 Database Systems	4		
IS3103 Information Systems Leadership and Communication	4		
IFS4205 Information Security Capstone Project	8		
Sub-total	22	Sub-total	12

Semester 7	MCs	Semester 8	MCs
IS4231 Information Security Management	4	Programme elective 1	4
Computing breadth 1	4	Programme elective 2	4
Computing breadth 2	4	Programme elective 3	4
GE5 *	4	UEM	4
UEM	4	UEM	4
Sub-total	20	Sub-total	20

* Students in UTCP and RVRC will need to overload in Semesters 2 to 4 in order to clear this module earlier.