## Computer Information Systems (A.A.S. Degree)

## RECOMMENDED 2-YEAR ACADEMIC PLAN

Credits

3-4 0-1 

REMEDIAL SEQUENCE (if required)	SEMESTER I Freshman	
□   ESL 1 (8)    □   ESL 2 (6)    □   ESL 3 (6)    □   ENG 9 (4)	ENG 110 <sup>1</sup> OR ENG 111	Fundamentals of Composition and Rhetoric <sup>1</sup> OR Composition and Rhetoric I (Required Core A)
□ ENG 1 <sup>1</sup> (4)	BUS 1112	Applications of Mathematics for Business <sup>2</sup>
□ RDL 1 <sup>1</sup> (4) → □ RDL 2 (6)	ECO 11 OR ECO 12	Microeconomics (Flexible Core D) OR Macroeconomics (Flexible Core B)
	DAT 30	Introduction to Computer Fundamentals and Programming
☐ MTH 1 (4) → ☐ MTH 5 <sup>5</sup> (6)	KEY 10	Keyboarding for Computers
CHM 2 (4)	DAT 33	Microcomputer Applications
GRADUATION REQUIREMENTS	FYS 11 <sup>3</sup>	First Year Seminar <sup>3</sup>
GPA ≥ 2.0 Writing Intensive 1 Writing Intensive 2		Subtotal:
FRESHMAN SEMINAR	SEMESTER II Freshman	
FYS 11 <sup>3</sup>	ENG 112 OR ENG 113	Composition and Rhetoric II OR Writing About Literature OR Written
PATHWAYS REQUIRED CORE (course list available online)	<b>OR</b> ENG 114 <b>OR</b> ENG 115	Composition and Prose Fiction OR Written Composition and Drama OR
A English Composition ENG 110/111 AND ENG 112/113/114/115/116 6	<b>OR</b> ENG 116	Written Composition and Poetry (Required Core A)
B <sup>5</sup> Mathematical and Quantitative Reasoning MTH 21/23 3	BUS 104 OR BUS 110	Introduction to Business <sup>4</sup> OR Introduction to Business Fundamentals
Life and Physical Sciences AST 111 + 101, BIO 11, CHM 11, CHM 17, ENV       11, ESE 11, ESE 12, ESE 13, PHY 110 OR PHY 11	☐ MTH 21 <b>OR</b> MTH 23 <sup>5</sup>	Survey of Mathematics <b>OR</b> Probability and Quantitative Reasoning <sup>5</sup> ( <b>Required Core B</b> )
PATHWAYS FLEXIBLE CORE (course list available online)	BIS 13	Web Development
A World Cultures and Global Issues HIS 10 OR HIS 116 3	🔲 DAT 47	JAVA Programming
B US Experience In Its Diversity ECO 12 OR		Subtotal:
D Individual and Society ECO 11 3   A-E <sup>9</sup> Select an additional course from Flexible Core A through E <sup>9</sup> 3	SEMESTER III Sophomore	
A-E <sup>9</sup> Select an additional course from Flexible Core A through E <sup>9</sup> 3 Pathways Total: 21-22	HIS 10 OR HIS 116	History of the Modern World <b>OR</b> Introduction to the Modern World <sup>6</sup>
<sup>1</sup> Students with prior ENG 1/RDL 1 placements (or English Proficiency Index < 50) will now take ENG 4 or RDL 4.	ACC 111	Principles of Accounting I
Passing ENG 4 or RDL 4 will allow them to register for ENG 110.	Life and Physical	AST 111, BIO 11, CHM 110, CHM 17, ENV 11, ESE 11, ESE 12, ESE 13, PHY
<sup>2</sup> Students who have completed MTH 06 (or three years high school mathematics) and intend to transfer to a four-year college may take BUS 41 instead of BUS 111.	Sciences <sup>7</sup>	110 OR PHY 11 (Required Core C)
	LAB <sup>7</sup>	Lab Science Course <sup>7</sup>
<sup>3</sup> Students must take FYS 11 prior to earning 24 degree or equated credits. Students who have earned 24 or more degree or equated credits are permitted to use the one credit as a free elective. It is highly recommended that	CWE 31 <sup>8</sup>	Cooperative Work Experience <sup>8</sup>
students take FYS 11 in their first or second semester. This requirement will be waived for students who have earned	🔲 BIS 23	Client-Side Programming
24 or more degree or equated credits at BCC or another college and transfer into this program.		Subtotal:
<sup>4</sup> Students must take BUS 110, as BUS 10 is no longer offered.	SEMESTER IV Sophomore	
<sup>5</sup> Students planning to transfer to a four-year college should take MTH 30 or 31. The prerequisite for MTH 30 is MTH 6. Students with prior MTH 5 placement (or Math Proficiency Index of 40 to 59) may now take MTH 20. Passing	DAT 49	Linux Operating System
MTH 20 is equivalent to MTH 23.	DAT 51	Web Programming with Python
6Reserved for students who have English remedial need and enroll in ENG 2, RDL 2, or ENG 110 as a corequisite.	BIS 31	Server-Side Programming
7Students may select either a 4-credit or a 3-credit science course. Students selecting a 3 credit course must also	COMM 12	Voice and Diction: Business and Professional Speech
complete an additional 1-credit lab course to fulfill graduation requirements.	Flexible. Core A-E <sup>9</sup>	Select <b>ONE</b> course from any Flex. Core A-E <sup>9</sup>
<sup>8</sup> CWE 31 is a two (2) credit course. Students should enroll in CWE 31 one year before graduating or when they have completed 30 credits towards their degree. Students should see the CWE 31 Coordinator in the Department of Business and Information Systems, during their second semester. Students who are employed full-time are not required to complete the internship portion of CWE 31, provided their employer agrees to participate in course-related surveys. Permission must be obtained from the CWE 31 Coordinator or Department Chairperson by submitting documentation of current full-time employment College. Work-Study assignments within CUNY may not be used as substitutes for the CWE internship.		Subtotal: TOTAL <sup>10</sup> :
<sup>9</sup> In an effort to provide students with a well-rounded liberal learning experience, students are encouraged to fulfill this requirement by selecting courses from Flexible Core Areas B, C or E as these areas are not already required by this program.		

<sup>10</sup>Students transferring into the program with 24 or more degree or equated credits will be exempt from FYS 11 and only required to complete 60 credits to graduate