

## PATHWAYS

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

#### Computer Programming Option

FALL 2019-SPRING 2020

#### REMEDIAL SEQUENCE (if required)

ESL 1 (8) ▶▶  ESL 2 (6) ▶▶  ESL 3 (6) ▶▶  ENG 9 (4)

ENG 1 (4) ▶▶  ENG 2 (4)

RDL 1 (4) ▶▶  RDL 2 (6)

MTH 1 (4) ▶▶  MTH 5 (6)

CHM 2 (4)

#### GRADUATION REQUIREMENTS

CAT-R  CAT-W  CAT-M  GPA ≥ 2.0

Writing Intensive 1  Writing Intensive 2

#### REQUIRED FRESHMAN SEMINAR

FYS 11

<sup>1</sup> Students planning to transfer to a four-year college should take MTH 30 or 31. The prerequisite for MTH 30 is MTH 6.

<sup>2</sup> Students may select either a 4-credit or a 3-credit science course. Students selecting a 3-credit course must also complete an additional 1-credit lab course to fulfill graduation requirements.

<sup>3</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>4</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.

<sup>5</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.

<sup>6</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 students take FYS 11 in their first or second semester. This requirement will be waived for students who have earned 24 or more degree or equated credits at BCC or another college and transfer into this program.

<sup>7</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.

#### REQUIRED COMMON CORE

<input type="checkbox"/> A	English Composition ENG 110 OR ENG 111; AND ENG 112 OR ENG 113 OR ENG 114 OR ENG 115 OR ENG 116	6
<input type="checkbox"/> B	Mathematical and Quantitative Reasoning <sup>1</sup> MTH 21 Survey of Mathematics I OR MTH 23 Probability and Statistics	3
<input type="checkbox"/> C	Life and Physical Sciences <sup>2</sup> AST 111, BIO 11, CHM 111, CHM 17, ENV 11 ESE 11, ESE 12, ESE 13, PHY 110 OR PHY 11	3-4
<b>Subtotal:</b>		<b>12-13</b>

#### FLEXIBLE COMMON CORE (Course list at: <http://www.bcc.cuny.edu/pathways/?p=Flexible-Common-Core>)

<input type="checkbox"/> A	World Cultures and Global Issues HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World	3
<input type="checkbox"/> B - ECO 12 Macroeconomics OR <input type="checkbox"/> D - ECO 11 Microeconomics		3
<input type="checkbox"/>	Select an additional course from Flexible Core A-E <sup>3</sup>	3
<b>Subtotal:</b>		<b>9</b>

#### MAJOR REQUIREMENTS

<input type="checkbox"/> ACC 111	Principles of Accounting I	4
<input type="checkbox"/> BIS 13	Web Development	3
<input type="checkbox"/> BUS 10	Introduction to Business	3
<input type="checkbox"/> BUS 111	Applications of Mathematics for Business <sup>4</sup>	3
<input type="checkbox"/> COMM 12	Voice and Diction: Business and Professional Speech	2
<input type="checkbox"/> CWE 31	Cooperative Work Experience <sup>5</sup>	2
<input type="checkbox"/> DAT 30	Introduction to Computer Fundamentals and Programming	3
<input type="checkbox"/> DAT 33	Microcomputer Applications	2
<input type="checkbox"/> DAT 35	BASIC Language Programming	3
<input type="checkbox"/> FYS 11	First Year Seminar <sup>6</sup>	0-1
<input type="checkbox"/> KEY 10	Keyboarding for Computers	1
<input type="checkbox"/> LAB	Lab science credit <sup>2</sup>	0-1

#### Computer Programming Option Requirements:

<input type="checkbox"/> DAT 38	Database Management Applications	3
<input type="checkbox"/> DAT 47	JAVA Programming	3
<input type="checkbox"/> DAT 48	Advanced JAVA Programming	3
<input type="checkbox"/> DAT 49	UNIX Fundamentals	3
<b>Subtotal:</b>		<b>39-40</b>
<b>TOTAL:</b>		<b>60-61<sup>7</sup></b>