

**City Colleges of Chicago AS in Computer Science & DePaul University BS in Data Science Transfer Pathway**

**City Colleges of Chicago**

**Year 1**

Semester 1	Sem Hr
ENGLISH 101 Composition	3
CIS 103 Fundamentals of Programming	3
MATH 146 Discrete Mathematics	3
Physical Science	4
HUMANITIES—Choose from PHIL 106,107,108,110, 201,202 or 215*	3
Semester 2	Sem Hr
ENGLISH 102 Composition	3
CIS 144 Java Object Oriented Programming I	3
MATH 207 Calculus & Analytic Geometry I	5
Social & Behavioral Sciences**	3
Social & Behavioral Sciences**	3

**Year 2**

Semester 3	Sem Hr
SPEECH 101 Fundamentals of Speech Communication	3
CIS 244 Java Object Oriented Programming II	3
MATH 208 Calculus & Analytic Geometry II	5
CIS 114 Mobile Application Development	3
Semester 4	Sem Hr
Life Sciences	4
Physical/Life Science	3
FINE ARTS—Choose HUM 123 Intro To Arts & Ideas *	3
MATH 125 Introductory Statistics	4

SUMMER SEMESTER	Sem Hr
Additional elective (to reach 64+ CH)	3

**Year 3**

Quarter 1	Qtr Hr
MAT 220 APPLIED LINEAR ALGEBRA	4
DSC 323 DATA ANALYSIS AND REGRESSION	4
MAT 349 APPLIED PROBABILITY	4
Religious Domain (LSP)^^^	4
Quarter 2	Qtr Hr
CSC 301 DATA STRUCTURES II	4
DSC 341 FOUNDATIONS OF DATA SCIENCE	4
DSC 324 ADVANCED DATA ANALYSIS	4
Religious Domain (LSP)^^^	4
Quarter 3	Qtr Hr
CSC 355 DATABASE SYSTEMS	4
DSC 365 DATA VISUALIZATION	4
MAT 360 GENERALIZED LINEAR MODELS	4
EL Credit	4

**DePaul University**

**Year 4**

Quarter 1	Qtr Hr
Major Elective	4
CSC 321 DESIGN AND ANALYSIS OF ALGORITHMS	4
DSC 345 MACHINE LEARNING	4
Philosophical Inquiry (LSP)^^^	4
Quarter 2	Qtr Hr
Open Elective	4
DSC 333 INTRODUCTION TO BIG DATA PROCESSING	4
SE 350 OBJECT-ORIENTED SOFTWARE DEVELOPMENT	4
Arts and Literature (LSP)	4
Quarter 3	Qtr Hr
DSC 394 DATA SCIENCE PROJECT	4
Open Elective	4
Arts and Literature (LSP)	4
SCBI (LSP)	4

SUMMER SEMESTER	Sem Hr
Additional elective (to reach 102 QH)	6

## City Colleges of Chicago AS in Math & DePaul University BS in Data Science Transfer Pathway

Program without the additional electives yields only 187.5 quarter hours; either one of the additional elective options will suffice to bring the total to the 192 quarter hours needed for the BS in Data Science.

Students may complete an additional elective at the City Colleges of Chicago or additional elective(s) at DePaul to reach the needed quarter hours total, depending on their particular situation. Since the undergraduate tuition package at DePaul covers up to 18 quarter hours per quarter, students may take an additional two-quarter-hour elective course for at least one quarter at DePaul to satisfy the credit hour deficit without paying additional tuition.

\* Fulfills one of DePaul's Philosophical Inquiry courses (PI)

\*\*Human Diversity

^^ One is recommended to be an approved Ethics course, except if PHIL course at CCC is an ethics course. Can replace one Religious Dimensions course with any LSP domain course. Philosophical Inquiry course can be replaced with any LSP domain course if PHIL course taken at CCC.