

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

City Colleges of Chicago

Year 1

| Semester 1 | Sem Hr |
|---|--------|
| ENGLISH 101 Composition | 3 |
| MATH 207 Calculus & Analytic Geometry I | 5 |
| SPEECH 101 Fundamentals of Speech Communication | 3 |
| Social & Behavioral Sciences** | 3 |
| Semester 2 | Sem Hr |
| ENGLISH 102 Composition | 3 |
| MATH 208 Calculus & Analytic Geometry II | 5 |
| CHEMISTRY 201 General Chemistry I | 5 |
| Social & Behavioral Sciences** | 3 |

Year 2

| Semester 3 | Sem Hr |
|--|--------|
| BIOLOGY 121 Biology I | 5 |
| MATH 209 Calculus & Analytic Geometry III | 5 |
| MATH 210 Differential Equations | 3 |
| HUMANITIES—Choose from PHIL 106,107,108,110, 201,202 or 215* | 3 |
| Semester 4 | Sem Hr |
| MATH 125 Introductory Statistics | 4 |
| MATH 146 Discrete Mathematics | 4 |
| MATH 212 Linear Algebra | 3 |
| CIS 103 Fundamentals of Programming | 3 |
| FINE ARTS—Choose HUM 123 Intro To Arts & Ideas * | 3 |

| SUMMER SEMESTER | Sem Hr |
|---------------------------------------|--------|
| Additional elective (to reach 64+ CH) | 1-3 |

DePaul University

Year 3

| Quarter 1 | Qtr Hr |
|--|--------|
| CSC 243 INTRODUCTION TO COMPUTER SCIENCE FOR PROGRAMMERS | 4 |
| DSC 323 DATA ANALYSIS AND REGRESSION | 4 |
| MAT 349 APPLIED PROBABILITY | 4 |
| Religious Domain (LSP)^^^ | 4 |
| Quarter 2 | Qtr Hr |
| CSC 300 DATA STRUCTURES I | 4 |
| DSC 341 FOUNDATIONS OF DATA SCIENCE | 4 |
| DSC 324 ADVANCED DATA ANALYSIS | 4 |
| Religious Domain (LSP)^^^ | 4 |
| Quarter 3 | Qtr Hr |
| CSC 301 DATA STRUCTURES II | 4 |
| DSC 365 DATA VISUALIZATION | 4 |
| MAT 360 GENERALIZED LINEAR MODELS | 4 |
| El Elective | 4 |

Year 4

| Quarter 1 | Qtr Hr |
|---|--------|
| CSC 321 DESIGN AND ANALYSIS OF ALGORITHMS | 4 |
| CSC 355 DATABASE SYSTEMS | 4 |
| DSC 345 MACHINE LEARNING | 4 |
| Philosophical Inquiry (LSP)^^^ | 4 |
| Quarter 2 | Qtr Hr |
| Major 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 |
| Major elective | 4 |
| Arts and Literature (LSP) | 4 |
| SCBI (LSP) | 4 |

| Any Quarter | Sem Hr |
|--------------------------------------|--------|
| Additional elective (to reach 98 QH) | 2 |

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Program without the additional electives yields only 190.5 quarter hours; either one of the additional elective options will suffice to bring 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

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

**Human Diversity

^ One of the Mathematics courses can be taken over the summer.

^^ 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.