## MILLIKIN UNIVERSITY

## Mathematics - Data Science - 8 Semester Plan

| Semester \#1 | Hours | Semester \#2 | Hours |
| :---: | :---: | :---: | :---: |
| MA140 Calculus I | 4 | MA208 Discrete Mathematics | 3 |
| CS135 Intro to Comp Sci | 3 | MA240 Calculus II | 4 |
| IN140 University Seminar ** | 3 | CS235 Intro to Data Science | 3 |
| IN180 University Writing ** | 3 | IS221 Programming Fundamentals | 3 |
| Foreign Language OR Science (1 of 3) | 4 | CO200 ** | 3 |
| Semester Total | 17 | Semester Total | 16 |
| Cumulative Total | 17 | Cumulative Total | 33 |
| Semester \#3 | Hours | Semester \#4 | Hours |
| MA304 Probability | 3 | MA303 Linear Algebra | 3 |
| MA340 Calculus III | 4 | MA314 Math Stats | 3 |
| CS337 Algorithms and Data Struct | 3 | CS342 Artificial Intlligence * | 3 |
| IS240 Foundations of Information Systems | 3 | AT110/BU230/BU250 (choose one) | 3 |
| Foreign Language OR Science (2 of 3) | 4 | IN280 Writing in the Disciplines ** | 3 |
| Semester Total | 17 | Semester Total | 15 |
| Cumulative Total | 50 | Cumulative Total | 65 |
| Semester \#5 | Hours | Semester \#6 | Hours |
| MA230 Regress./Time Series* | 3 | CS308 Theory of Computation * | 3 |
| IS321 System Analysis \& Design | 3 | IS370 Database Application Development | 3 |
| IN250 ** | 3 | ICS 1 ** | 3 |
| Natural Science with Lab ** | 4 | IN251 ** | 3 |
| Elective | 3 | Foreign Language OR Science (3 of 3) | 4 |
| Semester Total | 16 | Semester Total | 16 |
| Cumulative Total | 81 | Cumulative Total | 97 |
| Semester \#7 | Hours | Semester \#8 | Hours |
| IS470 Business Intelligence \& Big Data | 3 | MA499 Senior Seminar | 3 |
| IN350 Global Studies ** | 3 | Creative Arts ** | 3 |
| Literature *** | 3 | Elective | 3 |
| ICS 2 ** | 3 | Elective | 3 |
| Historical Studies *** | 3 |  |  |
| Semester Total | 15 | Semester Total | 12 |
| Cumulative Total | 112 | Cumulative Total | 124 |

NOTES:
The schedule above provides a template. Schedules will vary by student. Summer courses may be taken at Millikin or another institution (course approved through Registrar).
Courses in bold face are required.
Undergraduate graduation hour requirements: 124 credits ( 39 credits must be at 300 level)
To be considered full time, students must enoll in a minimum of 12 credit hours per semester.
If taking Advanced Placement courses in high school or considering dual enrollment in high school/community college courses, please speak with a faculty advisor or Registrar's Office at Millikin prior to selection/enrollment.
Students will select between additional foreign language or science hours depending on whether they choose the Bachelor of Arts or Bachelor of Science option.

* These courses are offered on an every other year basis.
** For students in the honors program, university studies courses are replaced with specific honors course requirements. Consult the bulletin for a list of these requirements.
*** Historical Studies and Literature may double dip with certain sections of some courses (e.g. honors seminars, IN250, IN350, etc.).

