# BS with a Major in Mathematics and Computer Science 

## Program Codes:

20FT5897BS
The Bachelor of Science with a Major in Mathematics and Computer Science is designed for students who seek careers in computer science and/or computer related fields requiring a strong mathematical background. The program is flexible and provides the students with a well-rounded education. Students pursuing the major in Mathematics and Computer Science must complete either the Concentration in Algorithms and Theory or the Concentration in Computational Mathematics.

## Degree Requirements

To earn a Bachelor of Science in Liberal Arts and Sciences degree from UIC, students must complete university, college, and department degree requirements. The Department of Mathematics, Statistics, and Computer Science degree requirements are outlined below. Students should consult the College of Liberal Arts and Sciences section for additional degree requirements and college academic policies.

| Code Title | Hours |
| :--- | :---: |
| Summary of Requirements |  |
| Major Requirements | $38-39$ |
| General Education and Electives to reach Minimum Total $81-82$ <br> Hours  $\mathbf{l}$ |  |

## Total Hours

## General Education

See General Education and Writing-in-the-Discipline in the College of Liberal Arts section of the catalog for information on meeting these requirements.



## Recommended Plan of Study

Students who do not place into MATH 180 should expect to take summer session courses and possibly take longer than four years to graduate. Students who have taken AP exams in calculus or computer science need to see a departmental advisor for correct placement.


| Elective | 3 |
| :---: | :---: |
| Hours | 16-18 |
| Spring Semester |  |
| MATH 310 <br> Applied Linear Algebra or MATH 320 or Linear Algebra I | 3 |
| MCS 275 Programming Tools and File Management | 4 |
| General Education Requirement course | 3-5 |
| Foreign Language | 4 |
| Hours | 14-16 |
| Third Year |  |
| Fall Semester |  |
| MCS 320 Introduction to Symbolic Computation <br> or MCS 360 or Introduction to Data Structures | 3-4 |
| MATH $300 \quad$ Writing for Mathematics | 1 |
| General Education Requirement course | 3-4 |
| General Education Requirement course | 3 |
| Electives | 6 |
| Hours | 16-18 |
| Spring Semester |  |
| Electives | 6 |
| MCS 401 Computer Algorithms I <br> or MCS 471 or Numerical Analysis | 3 |
| General Education Requirement course | 3 |
| General Education Requirement course | 3 |
| Hours | 15 |
| Fourth Year |  |
| Fall Semester |  |
| MATH, MCS, or STAT selective in concentration | 3 |
| Electives | 12 |
| Hours | 15 |
| Spring Semester |  |
| MATH, MCS, or STAT selective in concentration | 3 |
| Electives | 12 |
| Hours | 15 |
| Total Hours | 120 |

## Elective Course Suggestions for MCS Majors

A minor is strongly recommended in: physics, chemistry, biology, economics, or from the College of Engineering, except computer science.

