# Plan of Study 

Mathematics Information Systems Specialization Catalog Year: 2023-2024

Sample Schedule: students are not limited to this plan; it is meant to serve as a guide for planning purposes in discussions with your academic advisor. This plan is one possible path to completing this degree in four years.

Students obtaining a degree in Computer Science, Computer Game Design, Physical Science, Biology only need to complete the Mathematics Component to obtain a second major in Mathematics with a specialization in Info Systems.

## FIRST YEAR

First Semester

| Course | Prerequisites / Comments | Credits | Semester(s) Offered |
| :--- | :--- | :---: | :---: |
| SGR Written Communication (ENGL 101) |  | 3 | F, S |
| SGR Natural Science |  | 3 | F, S, SU |
| MATH 123 Calculus I | Majors must take MATH 123 for <br> SGE Requirement. | 4 | F, S, SU |
| CSC 105 Intro to Computers |  | 3 | F, S, SU |
| SGR Social Science |  | 3 | F, S |
| GS 100 University Experience: MATH | Total Credit Hours | $\mathbf{1 6}$ | F |
|  |  |  |  |

## Second Semester

| Course | Prerequisites / Comments | Credits | Semester(s) Offered |
| :--- | :--- | :---: | :---: |
| SGE Natural Science |  | 3 | F, S, SU |
| MATH 125 Calculus II | MATH 123 | 4 | S, SU |
| CSC 150 Computer Science I |  | 3 | F, S, SU |
| SGR Oral Communication |  | 3 | F, S |
| SGR Arts and Humanities |  | 3 | F, S |
|  | Total Credit Hours | $\mathbf{1 6}$ |  |

## SECOND YEAR

Third Semester

| Course | Prerequisites / Comments | Credits | Semester(s) Offered |
| :--- | :--- | :---: | :---: |
| MATH Elective |  | 3 | F, S |
| CIS 251 Business Applications Programming | CSC 150 | 3 | S $\mid$ F/S/SU |
| SGR Written Communication |  | 3 | F, S |
| SGR Social Science |  | 3 | F, S |
| Elective (Minor) | Consult with academic advisor to <br> select a minor. | $\mathbf{3}$ |  |
|  | Total Credit Hours | $\mathbf{1 5}$ |  |

## Fourth Semester

| Course | Prerequisites / Comments | Credits | Semester(s) Offered |
| :--- | :--- | :---: | :---: |
| MATH 201 Intro to Discrete Math | MATH 104 or MATH 114 or MATH <br> 115 or MATH 120 or MATH 123 | 3 | F, S, SU |
| MATH 281 Intro to Statistics | MATH 114 or MATH 115 or MATH <br> 121 or MATH 123 | 3 | F, S, SU |
| CIS 325 Management Information Systems |  | 3 | F $\mid \mathrm{F} / \mathrm{S} / \mathrm{SU}$ |


| Course | Prerequisites / Comments | Credits | Semester(s) Offered |
| :--- | :--- | :---: | :---: |
| SGR Arts and Humanities |  | 3 | F, S |
| Elective (Minor) |  | $\mathbf{3}$ |  |
|  | Total Credit Hours | $\mathbf{1 5}$ |  |

## THIRD YEAR

## Fifth Semester

| Course | Prerequisites / Comments | Credits | Semester(s) Offered |
| :--- | :--- | :---: | :---: |
| MATH 316 Discrete Mathematics | MATH 123 or MATH 201 or MATH <br> 225 | 3 | F, S, SU |
| CIS 332 Structured Systems Analysis \& Design | CIS 123 or CIS 130 or CIS 150 | 3 | F/S \\| F/S/SU |
| Elective (Minor) |  | 3 |  |
| Elective |  | 3 |  |
| Elective |  | 3 |  |
|  | Total Credit Hours | $\mathbf{1 5}$ |  |

## Sixth Semester

| Course | Prerequisites / Comments | Credits | Semester(s) Offered |
| :--- | :--- | :---: | :---: |
| MATH 315 Linear Algebra | MATH 123, 201, or 225 | 3 | S |
| MATH Elective |  | 3 | F, S |
| CSC 161 or CSC 163 Computer Hardware, Data <br> Communications, and Networking | Hardware/Virtualization/Datacom | 3 | F,S or S\|F,S |
| Elective (Minor) |  | 3 |  |
| Elective |  | 2 |  |
|  | Total Credit Hours | $\mathbf{1 4}$ |  |

## DFOURTH YEAR

## Seventh Semester

| Course | Prerequisites/Comments | Credits | Semester(s) Offered |
| :--- | :--- | :---: | :---: |
| MATH Elective |  | 3 | F, S |
| CIS 484 Database Management Systems |  | 3 | F,S\|F,S,SU|S |
| Elective (Minor) |  | 3 |  |
| Elective |  | 3 |  |
| Elective |  | 3 |  |
|  | Total Credit Hours | $\mathbf{1 5}$ |  |

## Eighth Semester

| Course | Prerequisites / Comments | Credits | Semester(s) Offered |
| :--- | :--- | :---: | :---: |
| MATH Elective |  | 3 | F, S |
| CIS/CSC Elective |  | 3 |  |
| Elective (Minor) |  | 3 |  |
| Elective |  | 5 |  |
|  | Total Credit Hours | $\mathbf{1 4}$ |  |

$P=$ Course Prerequisite
Semester: F = Fall; S = Spring; SU = Summer
Information and course schedules may change. This is not a contract.

