

**General Education Requirements and Degree Information: BACHELOR OF ARTS IN COMPUTATIONAL MATHEMATICS**

**ID:** \_\_\_\_\_  
**Name:** \_\_\_\_\_  
**Major: Computational Mathematics**  
 \_\_\_\_\_

**Update:** \_\_\_\_\_  
**Advisor:** \_\_\_\_\_  
**Catalog: 2016-2017**  
**Anticipated Degree Completion:** \_\_\_\_\_

| Course                        | Grade | Credit |
|-------------------------------|-------|--------|
| <b>FY/Adv. Entry Seminar:</b> |       |        |
| 05-014/214                    |       |        |

| Course                       | Grade | Credit |
|------------------------------|-------|--------|
| <b>Natural Sciences:</b>     |       |        |
| Exp. Lab:                    |       |        |
| CSC54-184 Computer Science I | MAJOR |        |

**Foreign Language (4 sem.)**

|      |  |  |
|------|--|--|
| I.   |  |  |
| II.  |  |  |
| III. |  |  |
| IV.  |  |  |

**Social Sciences: 2 courses, must be diff. depts:**

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**Social Justice Course:**

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**Fine Arts Lecture:**

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**Intercultural Perspective Course:**

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**Fine Arts Performance:**

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**2 different FRAs:**

|  |  |  |
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**Paideia:**

| Cluster:     | Grade | Credit |
|--------------|-------|--------|
| Course 1:    |       |        |
| Course 2:    |       |        |
| Course 3:    |       |        |
| Seminar:     |       |        |
| Distinction: |       |        |
|              |       |        |
|              |       |        |

**Humanities: 2 courses, may be same dept.:**

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A "C" average on all work attempted is required for graduation. No grade below "C-" may be counted toward the major or minor. At least 127 credits are required to earn a degree at Southwestern; of these, 64 credits must be completed in residence, including the last 32 credits. No more than 56 credit hours may be counted in one subject area. A major requires at least 30 credits, more than 50% upper-level, and a minor (optional) requires at least 18 credits (at least 12 upper-level). With the exception of FRAs and the FY/AES seminar, all gen.ed. requirements require a minimum of 3 credits, including Fine Arts Performance.

**COMPUTATIONAL MATHEMATICS MAJOR (BA)**

**Major Courses:**

|                                 | <b>Grade</b> | <b>Credit</b> |
|---------------------------------|--------------|---------------|
| CSC54-184 Computer Science I    |              |               |
| CSC54-284 Computer Science II   |              |               |
| CSC54-384 Discrete Mathematics  |              |               |
| CSC54-394 Computer Organization |              |               |
| CSC54-454 Algorithms            |              |               |

**1 addnl course in upper-level Mathematics or Computer Science**

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| MAT52-154 Calculus I               |  |  |
| MAT52-254 Calculus II              |  |  |
| MAT52-354 Calculus III             |  |  |
| MAT52-674 Linear Algebra           |  |  |
| MAT52-754 Differential Equations I |  |  |

**2 courses from:**

|  |  |  |
|--|--|--|
| CSC54-414 Operations Research                  |  |  |
| CSC54-514 Database Management                  |  |  |
| CSC54-524 Introduction to Numerical Analysis   |  |  |
| MAT52-574 Probability and Mathematical Studies |  |  |

|   |  |  |
|---|--|--|
| MAT52-894 Senior Seminar in Math<br>Modeling OR CSC54-894 Senior Seminar in |  |  |
|---|--|--|

**Electives:**

|  | <b>Grade</b> | <b>Credit</b> |
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***Both capstones require Major Field Test***

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| Total credits w/gen ed: |  |
|-------------------------|--|

***\*\*Minimum of 127 credits required.***