

# 2012 Mathematics major (non-teaching) with Computer Science Concentration

Requirements Checklist, REV. 5/16/12

All of the following courses:

- |                                                    |                                                                                                                                                                                                                  |
|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| _____ CISC 105, Intro to Problem Solving           | _____ OREN 105 (1 hour)                                                                                                                                                                                          |
| _____ CISC 110, Intro to Programming I             | _____ CISC 100 or validation                                                                                                                                                                                     |
| _____ CISC 210, Data Structures & Adv. Programming | _____ ENGL 110 or validation by ACT/SAT                                                                                                                                                                          |
| _____ MATH 190, Calculus I                         | _____ ENGL 111, HIST 112 or a writing-intensive research course in the major                                                                                                                                     |
| _____ MATH 240, Differential Equations             | _____ MATH 122, 124, 126, 135 or higher level Math course (one class required – students who validate MATH 135 by ACT/SAT or test may take a higher level math (excluding MATH 137) to satisfy this requirement) |
| _____ MATH 260, Linear Algebra                     |                                                                                                                                                                                                                  |
| _____ MATH 290, Calculus II                        |                                                                                                                                                                                                                  |
| _____ MATH 390, Calculus III                       | Arts and Humanities (4 hours required)                                                                                                                                                                           |
| _____ MATH 460, Mathematics Seminar                | _____ ENGL 120, 201, 213, 214, 223, 224, 225, 227, 228, 231, 250; HNRS 101, HUMA 222, 223; MUSC 101, REGL101, 102; THEA 104, VISA 110, 204 or 208                                                                |

And any other four of the following five:

- |                                                     |                                                                                                               |
|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| _____ MATH 140, Elementary Statistics               | Natural Sciences (4 hours required)                                                                           |
| _____ MATH 170, Finite Math                         | _____ ATEP 252, BIOL 100, 101, 251; CHEM 101, EVSC 111, GEOL 101, PHED 252, PHYS 201                          |
| _____ MATH 320, Discrete Mathematics                | Social Sciences (4 hours required)                                                                            |
| _____ MATH 430, Abstract Algebra                    | _____ BUSN 201, CRJU 101, GEOG 200, HIST 101, 102, 201, 202; POLS 203, 205, 207, 209; PSYC 101; SOCI 101, 105 |
| _____ MATH 460, Mathematics Seminar (a second time) | _____ PHED 201 or PSYC102                                                                                     |

And the following three Computer Science courses:

- |                                                  |                                                                                    |
|--------------------------------------------------|------------------------------------------------------------------------------------|
| _____ CISC 215, Database Management              | *_____ CMNS 251                                                                    |
| _____ CISC 310, Networking Fund. and Programming | _____ CMNS 330 or HNRS 330 or the combination of RELG101and RELG 102               |
| _____ CISC 330, Software Engineering             | _____ CMNS 380 or HNRS 380                                                         |
|                                                  | *_____ CMNS 480, BIOL/EVSC 480, BUSN 446, ENGL 402, HIST 480, PHED 480 or PSYC 430 |

And one additional course from the following six:

- |                                    |                                               |
|------------------------------------|-----------------------------------------------|
| _____ CISC 325, Software Assurance | *_____ SVLN 351, 354, 356; BUSN 356; VISA 354 |
|------------------------------------|-----------------------------------------------|

_____ CISC 350, Special Topics in Languages	Arts and Lecture Series (no credit hours)
---------------------------------------------	-------------------------------------------

_____ CISC 375, Web Design	Attended _____ of _____ required A&L events
----------------------------	---------------------------------------------

_____ CISC 385, Web Programming	*If you are double majoring with an Education major, CMNS 251, Service-Learning and CMNS 480 are not required.
_____ CISC 405, Mobile Application Development	

_____ CISC 410, Operating Systems	
-----------------------------------	--

## COMMONS REQUIREMENTS:

---

### 128.00 hours required for graduation

- Commons: 53 semester hours
- Major: 68 semester hours
- Electives: 7 hours