

**New Curriculum Requirements for the Major in
Mathematics and Computer Science – effective Fall 2007**

Course	Hours	Prerequisites and Advice
Math 180, 181, 210 Calculus I, II, III	13	C or higher in each to continue
Math 215 Intro to Adv. Math	3	C or higher in Math 181
MCS 260 Intro to Comp Science	4	C or concurrent enrollment in Math 180
MCS 275 Programming Tools	4	C or higher in MCS 260 and Math 180
Math 300 Writing in Mathematics	1	C or higher in Math 210 Open only to declared majors
Math 310 Applied Linear Algebra OR Math 320 Linear Algebra I	3 3	C or higher in Math 210 C or higher in Math 215
MCS 360 Intro to Data Structures OR MCS 320 Intro to Symbolic Computation	4 3	C or better in MCS 275 C or better in Math 210 and MCS 260
four MSCS elective courses taken from the clusters below. At least 6 hours must be at the 400 level.	12	See below for elective recommendations

Students are urged to consider minors in: physics, chemistry, biology, economics, or engineering except computer science.

Students are advised to take at least 3 major electives from one Cluster.

Theoretical Computer Science: MCS 361 **choose from** MCS 421, MCS 423, MCS 425, MCS 441, Math 430, Math 435, Math 436

Algorithms and Programming: MCS 360, MCS 401, MCS 415, MCS 451, MCS 481

Computational Methods: **choose from** Math 220, MCS 320, MCS 471, MCS 472; also Math 480, Math 481

Statistical Computation: **choose from** Stat 381, Stat 401, Stat 481, Stat 486, Stat 471

Actuarial Science: Stat 381, Stat 401, Stat 481 **choose from**, Stat 461 or Stat 411;
Strongly recommended: Economics minor (VEE credit): Econ 120, 121, 220 or 218, 221;
and two electives: Econ 346 (requires Stat 381) , Econ 450.