

General Curriculum in Mathematics or Concentrations (select one)

GENERAL CURRICULUM IN MATHEMATICS

This is the pathway for students who do not wish to select a concentration.

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| CSC/CPE 101 Fund of Comp Sci I or CSC/CPE 235 Fund Comp Sci Scientists & Engr I. | 4 |
| STAT 301 Stat I or STAT 325 Intro to Prob Mods | 4 |
| MATH 336 Combinatorial Mathematics | 4 |
| Tracks (two paired courses representing depth of study with a particular focus)..... | 24 |
| Choose <i>three</i> tracks from the following list, with at least one track from these first two listed: | |
| MATH 413 and MATH 414 | |
| MATH 406 and MATH 482 | |
| MATH 304 and MATH 404 | |
| MATH 335 and MATH 435 | |
| MATH 344, and MATH 416 or MATH 418 | |
| MATH 350, and MATH 341 or MATH 344 | |
| MATH 408 and MATH 409 | |
| MATH 437 and MATH 453 | |
| MATH 440 and MATH 441 | |
| MATH 442 and MATH 443 | |
| MATH 451 and MATH 452 | |
| Select 12 units from the following:..... | 12 |
| MATH 304, 335, 341, 344, 350, 404, 406, 408, 409, 413, 414, 416, 418, 419, 435, 436, 437, 440, 441, 442, 443, 451, 452, 453, 470, 482; | |
| CSC/CPE 102, 103, 236, 349; | |
| PHYS 132, 133, 211, 301, 302, 322, 323, 405, 408; | |
| STAT 301, 302, 325, 425, 426, 427 | |
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APPLIED MATHEMATICS CONCENTRATION

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| CSC/CPE 101 Fund of Comp Sci I or CSC/CPE 235 Fund Comp Sci Scientists & Engr I. | 4 |
| MATH 304 Vector Analysis..... | 4 |
| MATH 344 Linear Analysis II..... | 4 |
| MATH 350 or CSC/CPE 102 or CSC/CPE 236..... | 4 |
| MATH 413 Intro to Analysis II..... | 4 |
| MATH 451 Numerical Analysis I..... | 4 |
| STAT 301 Stat I or STAT 325 Intro to Prob Mods..... | 4 |
| Tracks (two paired courses representing depth of study with a particular focus)..... | 16 |
| Choose <i>two</i> tracks from the following: | |
| MATH 408 and MATH 409 | |
| MATH 416 and MATH 418 | |
| MATH 452 and MATH 453 | |
| Advisor approved electives (form required)..... | 12 |
| To be taken outside of the Mathematics Dept with significant applications to mathematics; at least one course at 300-level or above. | |
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PURE MATHEMATICS CONCENTRATION

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| MATH 336 Combinatorial Mathematics..... | 4 |
| MATH 408 Complex Analysis I..... | 4 |
| MATH 413 Intro to Analysis II..... | 4 |
| MATH 440 Topology I..... | 4 |
| MATH 482 Abstract Algebra II | 4 |
| Select 12 units from the following: | 12 |
| MATH 406, 409, 414, 435, 441 | |
| Select 8 units from the following: | 8 |
| CSC/CPE 101 or CSC/CPE 235 | |
| MATH 350 | |
| STAT 301 or STAT 325 | |
| Select 12 units from the following: | 12 |
| MATH 304, 335, 341, 344, 350, 404, 406, 409, 414, 416, 418, 435, 436, 437, 441, 451, 452, 453, 470 | |
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MATHEMATICS TEACHING CONCENTRATION

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| CSC/CPE 101 Fund of Comp Sci I or CSC/CPE 235 Fund Comp Sci Scientists & Engr I | 4 |
| SCM 300 Early Field Exp, Science/Math (CR/NC)..... | 4 |
| MATH 300 Technology in Mathematics Education.... | 4 |
| STAT 301 Statistics I | 4 |
| STAT 302 or STAT 325 or STAT 425 | 4 |
| MATH 336 Combinatorial Mathematics..... | 4 |
| MATH 341 Theory of Numbers..... | 4 |
| MATH 419 Intro to the History of Mathematics | 4 |
| MATH 423 Advanced Mathematics for Teaching | 4 |
| MATH 442 Euclidean Geometry..... | 4 |
| MATH 443 Modern Geometries | 4 |
| MATH 482 Abstract Algebra II | 4 |
| Select 4 units from the following: | 4 |
| CSC/CPE 102, 236; MATH 304, 335, 344, 406, 408, 413, 416, 435, 437, 440, 451, 470; | |
| PHYS 132, 133, 302 | |
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