



## General Curriculum in Mathematics *or* Concentrations (select one)

### GENERAL CURRICULUM IN MATHEMATICS

This is the default curriculum for students who do not declare a concentration.

CSC/CPE 101 Fund of Comp Sci I <i>or</i> CSC/CPE 235 Fund Comp Sci Scientists & Engr I...	4
STAT 301 <i>or</i> STAT 325 <i>or</i> STAT 425 .....	4
MATH 336 Combinatorial Mathematics .....	4
<b>Tracks</b> .....	24

Choose three tracks from the following list, with at least one track chosen from the first two tracks listed. A track consists of two paired courses representing depth of study with a particular focus:

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

#### <sup>1</sup>Approved Electives ..... 12

Select three courses from the following:

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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### PURE MATHEMATICS CONCENTRATION

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 <u>three</u> course from the following: .....	12
MATH 406, 409, 414, 435, 441	
Select <u>two</u> courses from the following: .....	8
CSC/CPE 101 <i>or</i> CSC/CPE 235 (4)	
MATH 350 (4)	
STAT 301 <i>or</i> STAT 325 <i>or</i> STAT 425 (4)	
Select <u>three</u> courses 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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### APPLIED MATHEMATICS CONCENTRATION

CSC/CPE 101 Fund of Comp Sci I <i>or</i> CSC/CPE 235 Fund Comp Sci Scientists & Engr I...	4
MATH 304 Vector Analysis.....	4
MATH 344 Linear Analysis II .....	4
MATH 350 <i>or</i> CSC/CPE 102 <i>or</i> CSC/CPE 236.....	4
MATH 413 Intro to Analysis II.....	4
MATH 451 Numerical Analysis I .....	4
STAT 301 <i>or</i> STAT 325 <i>or</i> STAT 425 .....	4
<b>Tracks</b> .....	16

Choose two tracks from the following. A track consists of two paired courses representing depth of study with a particular focus:

MATH 408 *and* MATH 409  
MATH 416 *and* MATH 418  
MATH 452 *and* MATH 453

#### <sup>1</sup>Advisor approved electives ..... 12

Select 12 units from one of the following categories, with at least one course at the 300-level or above.

Other choices are also possible and should be pre-approved in consultation with academic advisor.

1. ASTR 301, 302, 326  
PHYS 132, 133, 211, 301, 302, 303, 317, 322, 323, 405, 408, 412, 417
2. STAT 302, 323, 324, 325, 330, 331, 416, 417, 418, 419, 421, 423, 425, 426, 427
3. CSC/CPE 102 *or* 236, 103, 225, 349, 357, 448
4. ME 211, 212, 341
5. ECON 311, 313, 408

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### MATHEMATICS TEACHING CONCENTRATION

CSC/CPE 101 Fund of Comp Sci I <i>or</i> CSC/CPE 235 Fund Comp Sci & Engr I.....	4
SCM 300 Early Field Exp, Science/Math .....	4
MATH 300 Technology in Math Educ.....	4
STAT 301 Statistics I .....	4
STAT 302 <i>or</i> STAT 325 <i>or</i> 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 Adv Mathematics for Teaching.....	4
MATH 442 Euclidean Geometry.....	4
MATH 443 Modern Geometries .....	4
MATH 482 Abstract Algebra II .....	4
Select <u>one</u> course 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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<sup>1</sup> Consultation with advisor is recommended prior to selecting approved electives. Bear in mind your selections may impact pursuit of post-baccalaureate studies and/or goals.