

CURRICULUM CHECK SHEET
Bachelor of Arts in Mathematics
Arizona State University
2005-2006

MAJOR REQUIREMENTS

The B.A degree in mathematics requires a minimum of 36 hours of course work in mathematics and statistics, and additional course work in closely related fields, for a total of 51 semester hours. The required course work has the following components:

1. Core courses in mathematics:

- MAT 270, Calculus with Analytic Geometry I
- MAT 271, Calculus with Analytic Geometry II
- MAT 272, Calculus with Analytic Geometry III
- MAT 300, Mathematical Structures
 - or MAT 243, Discrete Mathematical Structures
- MAT 342, Linear Algebra
 - or MAT 343, Applied Linear Algebra
 - or both MAT 242 and MAT 294 ST: Sophomore Problem Seminar
- MAT 370, Intermediate Calculus
 - or MAT 371, Advanced Calculus I

Subtotal: 21 semester hours

2. Computer science requirement

- CSE 100, Principles of Programming with C++
 - or CSE 110, Principles of Programming Java
 - or CSE 200, Concepts of Computer Science

Subtotal: 3 semester hours

3. Two advanced courses in mathematics:

Both courses preferably should be taken from the same grouping

- (a) Algebra, Topology and Number Theory (MAT 410, 442, 443, 444, 445)
- (b) Computational mathematics (MAT 420, 421, 423, 425, 427)
- (c) Differential Equations (MAT 462, 475, 476)
- (d) Analysis and applications (MAT 372, 461, 472)
- (e) Statistics and Probability (STP 420, 421, 425, 427, 429)
- (f) Applied Mathematics and Dynamics (MAT 451, 452, 455)
- (g) Discrete Mathematical Structures (MAT 415, 416, 419)

Subtotal: 6 semester hours

4. Three additional courses in mathematics or statistics:
Three additional MAT or STP courses which may include MAT 243 or at the level of MAT 274 or higher or STP 336 or higher, subject to the restrictions below.

Subtotal: 9 semester hours

5. Related field coursework requirement:
Twelve additional hours of course work in mathematics, statistics, or related fields, subject to the restrictions below. A list of courses is available from the Undergraduate Mathematics Office and on our webpage at <http://math.la.asu.edu>

Subtotal: 12 semester hours

Restrictions:

1. MAT 370 and 371 may not both be counted toward degree requirements in mathematics.
2. Credit may not be earned for both MAT 274 and 275 or for both MAT 342 and 343.
3. A minimum grade of C is required in all coursework used to satisfy major requirements.
4. MAT 362, 485, and ASU West MAT 411 may not be used to satisfy requirement 4.