Academic Advisement Report
UGRD.USCNC.MATHBS.COMPS
Undergraduate Career
College of Science Program
Mathematics Major (BS)
Computer Science Option
Requirement Term: Fall 2010

Undergraduate Graduation Requirements
All course work and requirements for this degree must be completed prior to the date the degree is awarded. The University of Arizona requirements to follow in this audit are required for graduation and awarding of the degree.

Curriculum:
1. The University of Arizona and the Arizona Board of Regents have sole discretion over all curricula changes.
2. Courses, programs & requirements may be suspended, deleted, restricted, or changed in any manner, at any time.
3. Students must remain currently informed about all policies & other info that bears on completing a degree.

Required Units:
Additional units will be required to complete this degree if a student:
A) is admitted to the UA with deficiencies;
B) changes his/her academic plan(s);
C) fails to meet minimum course/plan requirements;
D) ineffectively plans or fails to execute a course of study that leads directly to degree completion; or
E) is completing more than one baccalaureate degree.

The following requirements must be met for graduation.

Units Required and Cumulative GPA
120 units are required at a 2.0 GPA. View the pdf report grid for units earned toward this degree and cumulative GPA.
Completing a second bachelor's degree at The University of Arizona requires no fewer than 30 units in addition to the units required for the first degree, and all requirements for the second degree must be met.

Upper Division Units
Not Satisfied: A minimum of 42 units of upper-division credit are required for this degree.

- Units: 42.00 required, 0.00 completed, 42.00 needed

Units in Residence
Not Satisfied: A minimum of 30 units in residence at The University of Arizona (excluding correspondence credit and credit by exam) is required.

- Units: 30.00 required, 0.00 completed, 30.00 needed

Final Units in Residence
Not Satisfied: A minimum of 18 of the final 30 units taken toward degree requirements must be in residence at The University of Arizona.

- Units: 18.00 required, 0.00 completed, 18.00 needed

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Correspondence and/or Exam Credit Limit

*Satisfied:* A maximum of 60 units of Correspondence Credit and/or Exam Credit may apply toward graduation.

Non Degree Seeking Limit

*Not Satisfied:* A maximum of 15 units completed as a non-degree seeking student may be used for fulfilling undergraduate degree requirements. Units exceeding this limit must be subtracted from the units required towards the degree and graduation requirements.

Community College Limit

*Not Satisfied:* A maximum of 64 units of community college course work may apply toward graduation. A minimum of 56 units of course work must be completed at a 4-year institution, military institution, or as test credit.

- *Units:* 56.00 required, 0.00 completed, 56.00 needed

Success Course Limit

*Satisfied:* No more than 3 units will apply toward a student's graduation requirements. Success Course units exceeding the 3 unit maximum must be subtracted from the total units, residency requirements and cumulative grade point average.

Foundation Mathematics

*Not Satisfied:* Foundation Mathematics

GE Substantial Math Strand

*Not Satisfied:* GE Substantial Math Strand

GE Substantial Math Strand

*Not Satisfied:* Complete 1 course from MATH 124,125,129,223 TO 499.


- *Units:* 2.67 required, 0.00 completed, 2.67 needed
Courses Available
MATH 124, MATH 125, MATH 125-CC, MATH 129, MATH 129-CC, MATH 215, MATH 223, MATH 223-CC, MATH 250A, MATH 254, MATH 254-CC

Undergraduate General Education and Foundation Requirements
Overall Requirement Not Satisfied: Undergraduate General Education and Foundation Requirements

Foundation Composition
Not Satisfied: Complete 1 of the 2 following options:
1. First and Second Semester Composition OR
2. Honors Composition

Mid-Career Writing Assessment - Complete 2nd semester English Composition with a B grade or higher. Students who do not earn a grade of B or better in 2nd semester English Composition must also satisfy a college or department writing requirement. Consult your major advisor if you do not earn a grade of B in 2nd semester English Composition.

Option 1: First Semester Composition
Not Satisfied: Complete 1 course.
- Courses: 1.00 required, 0.00 completed, 1.00 needed

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Courses Available
ENGL 101, ENGL 103H, ENGL 107

AND Option 1: Second Semester Composition
Not Satisfied: AND Complete 1 course
- Courses: 1.00 required, 0.00 completed, 1.00 needed

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Courses Available
ENGL 102, ENGL 104H, ENGL 108

OR Option 2: Honors Composition
Not Satisfied: OR Complete 1 course with a C or better.
- Courses: 1.00 required, 0.00 completed, 1.00 needed

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ENGL 109H
Courses Available

ENGL 109H

Foundation Second Language - Second Semester Proficiency

Not Satisfied: Credit will not be given for a course at an equivalent or lower level than prior language credit earned. Course must be taken for a grade, not as pass/fail. Third semester or higher courses used to fulfill this requirement may also be used to fulfill other requirements.

Demonstrate second semester proficiency in a second language by completing a second semester or higher language course or by passing a language proficiency examination at the second semester level or higher.

Second Semester Language Course

Not Satisfied: Complete 1 course.


· Courses: 1.00 required, 0.00 completed, 1.00 needed

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Courses Available


General Education Tier I

Overall Requirement Not Satisfied: Complete 2 courses in each of the following areas.

Tier I Individuals & Societies

Not Satisfied: Fulfillment of Individuals and Societies requires completion of two distinctly numbered courses (e.g., INDV 101 & 103).

· Courses: 2.00 required, 0.00 completed, 2.00 needed

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Courses Available

INDV 101, INDV 101-SA, INDV 102, INDV 102-SA, INDV 103, INDV 103-CC, INDV 103-SA, (***) (###)

Tier I Traditions & Cultures

Not Satisfied: Fulfillment of Traditions and Cultures requires completion of two distinctly numbered courses (e.g., TRAD 102 & 104).

· Courses: 2.00 required, 0.00 completed, 2.00 needed

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Courses Available

TRAD 101, TRAD 101-CC, TRAD 102, TRAD 102-CC, TRAD 103, TRAD 103-SA, TRAD 104, TRAD 104-SA, (***) (###)

General Education Tier II

Overall Requirement Not Satisfied: Complete 1 course from each of the following areas.

Tier II Arts

Not Satisfied: Complete 3 units.

- Units: 3.00 required, 0.00 completed, 3.00 needed

Courses Available


Tier II Humanities

Not Satisfied: Prerequisite course work in Tier 1 Traditions and Cultures (TRAD) must be completed prior to taking. If LAT 201 or 202 are used to fulfill Foundation Second Language Proficiency, they cannot be used to fulfill Tier II Humanities.

- Courses: 1.00 required, 0.00 completed, 1.00 needed

Courses Available

- **Courses**: 1.00 required, 0.00 completed, 1.00 needed

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### Courses Available


### Diversity Emphasis Course

Not Satisfied: One course must be taken that focuses on Gender, Race, Class, Ethnicity, Sexual Orientation or Non-Western Area Studies.

Courses used to fulfill this requirement may also be used to fulfill other requirements.

### Diversity Emphasis Course

Not Satisfied: General Education Diversity Emphasis Course: Gender, Race, Class, Ethnicity, Sexual Orientation or Non-Western Area Studies.

INDV 101 will only fulfill this area if topic taken is “Race, Ethnicity, and the American Dream”.

- **Courses**: 1.00 required, 0.00 completed, 1.00 needed

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### Courses Available

Additional Coursework
Courses listed in this section may include general elective credits, UA courses and transferable courses from other institutions. Consult with your advisor to determine if courses listed in this section may be used to fulfill a requirement or sub-requirement in your degree program.

Courses taken for Pass/Fail option can only count as elective credit. They cannot fulfill any General Education, Major, or Minor requirements.

BS in Mathematics
Overall Requirement Not Satisfied: Complete Introductory Chemistry or Natural Sciences.

Equivalent MATV courses may be available through UA South. For approved courses consult with your advisor.

Mathematics Introductory Chemistry
Overall Requirement Not Satisfied: Complete the Chemistry sequence OR select 1 of the Natural Science sequences. Courses used to fulfill this requirement may also be used to fulfill other requirements

Option 1: Introductory Chemistry
Not Satisfied: Complete CHEM 103A and 104A

- Courses: 2.00 required, 0.00 completed, 2.00 needed

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Courses Available
CHEM 103A, CHEM 103A-CC, CHEM 104A

OR Option 2: Introductory Chemistry
Not Satisfied: OR Complete Chem 151

- Courses: 1.00 required, 0.00 completed, 1.00 needed

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Courses Available
CHEM 151, (***) (###)

OR Option 3: Introductory Chemistry
Not Satisfied: OR Complete CHEM 105A and 106A

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Courses Available
CHEM 151, (***) (###)
Courses: 2.00 required, 0.00 completed, 2.00 needed

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Courses Available

CHEM 105A, CHEM 106A

AND Option 1: Introductory Chemistry II

Not Satisfied: AND Complete CHEM 103B and 104B

- Courses: 2.00 required, 0.00 completed, 2.00 needed

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Courses Available

CHEM 103B, CHEM 103B-CC, CHEM 104B

OR Option 2: Introductory Chemistry II

Not Satisfied: OR Complete CHEM 152

- Courses: 1.00 required, 0.00 completed, 1.00 needed

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Courses Available

CHEM 152, (***) (###)

OR Option 3: Introductory Chemistry II

Not Satisfied: OR Complete CHEM 105B and 106B

- Courses: 2.00 required, 0.00 completed, 2.00 needed

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Courses Available

CHEM 105B, CHEM 106B

OR Mathematics Natural Sciences

Not Satisfied: Complete the above Chemistry sequence OR select 1 of the following sequences of laboratory science courses.
Courses used to fulfill this requirement may also be used to fulfill other requirements.

**Option 1: Geosciences**

*Not Satisfied:* Complete 1 course

- **Courses:** 1.00 required, 0.00 completed, 1.00 needed

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**Courses Available**

GEOS 251

AND **Option 1: Geosciences**

*Not Satisfied:* Complete 1 course

- **Courses:** 1.00 required, 0.00 completed, 1.00 needed

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**Courses Available**

GEOS 302, GEOS 304

OR **Option 2: Biology**

*Not Satisfied:* OR Complete 4 units

- **Units:** 4.00 required, 0.00 completed, 4.00 needed

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**Courses Available**


AND **Option 2: Biology**

*Not Satisfied:* Complete 4 units

- **Units:** 4.00 required, 0.00 completed, 4.00 needed

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**Courses Available**
ECOL 182L, ECOL 182R

OR Option 3: Introductory Physics with Calculus I

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Not Satisfied: Complete 2 courses

- **Courses**: 2.00 required, 0.00 completed, 2.00 needed

Courses Available

PHYS 131, PHYS 131-CC, PHYS 181

AND Option 3: Introductory Physics with Calculus I

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Not Satisfied: Complete 2 courses

- **Courses**: 2.00 required, 0.00 completed, 2.00 needed

Courses Available

PHYS 182

OR Option 4: Introductory Mechanics

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Not Satisfied: OR Complete Physics 141

- **Courses**: 1.00 required, 0.00 completed, 1.00 needed

Courses Available

PHYS 141

AND Option 4: Intro Thermodynamics & Optics or Electricity & Magnetism

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Not Satisfied: AND Complete 1 course from Physics 142 or Physics 241

- **Courses**: 1.00 required, 0.00 completed, 1.00 needed

Courses Available

PHYS 142, PHYS 241
OR Option 5: Introduction to Mechanics
Not Satisfied: OR Complete 2 courses

- Courses: 2.00 required, 0.00 completed, 2.00 needed

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Courses Available

PHYS 151, PHYS 152

OR Option 6: Honors Physics
Not Satisfied: OR Complete 2 courses

- Courses: 2.00 required, 0.00 completed, 2.00 needed

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Courses Available

PHYS 161H, PHYS 162H

Mathematics Application Courses
Not Satisfied: Complete at least 6 units of non-math coursework with a prerequisite or corequisite of at least Calculus I (MATH 124 or higher). Courses used to fulfill this requirement may also be used to fulfill other requirements.

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Courses with Calculus Prerequisite
Not Satisfied: Consult with the advisor to discuss approved courses.

- Units: 6.00 required, 0.00 completed, 6.00 needed

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Courses Available


Math Major Requirements
Overall Requirement Not Satisfied: Math Major Requirements

Introduction Course
Not Satisfied: Complete 1 course

- Courses: 1.00 required, 0.00 completed, 1.00 needed

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Courses Available
MATH 124, MATH 125, MATH 125-CC

Option 1: Calculus and Differential Equations 1
Not Satisfied: Complete MATH 129 and MATH 355

- Courses: 2.00 required, 0.00 completed, 2.00 needed

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Courses Available
MATH 129, MATH 129-CC, MATH 355

OR Option 2: Calculus and Differential Equations 2
Not Satisfied: Complete MATH 250A and MATH 250B

- Courses: 2.00 required, 0.00 completed, 2.00 needed

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Courses Available
MATH 250A, MATH 250B

Core Courses
Not Satisfied: Complete 4 courses

- Courses: 4.00 required, 0.00 completed, 4.00 needed

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Courses Available
CSC 127A, MATH 215, MATH 223, MATH 223-CC, MATH 323

Option in Computer Science Mathematics
Overall Requirement Not Satisfied: Option in Computer Science Mathematics

Equivalent MATV courses may be available through UA South. For approved courses consult with your advisor.

Computer Science Option Requirements
Overall Requirement Not Satisfied: Computer Science Option Requirements

Option 1. Abstract Algebra
Not Satisfied: Complete MATH 415A and MATH 415B

- Courses: 2.00 required, 0.00 completed, 2.00 needed

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Courses Available
MATH 415A, MATH 415B

OR Option 2. Probability and Statistics
Not Satisfied: OR Complete MATH 464 and MATH 466

- Courses: 2.00 required, 0.00 completed, 2.00 needed

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Courses Available
MATH 464, MATH 466

OR Option 3: Numerical Analysis
Not Satisfied: OR Complete MATH 475A and MATH 457B

- Courses: 2.00 required, 0.00 completed, 2.00 needed

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Courses Available
CSC 475A, CSC 475B, MATH 475A, MATH 475B

Electives

(R1175/L40)
Not Satisfied: Complete 2 courses

- **Courses**: 2.00 required, 0.00 completed, 2.00 needed

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**Courses Available**

CSC 443, CSC 479, MATH 413, MATH 443, MATH 445, MATH 446, MATH 447, MATH 479

Not Satisfied: Complete one course in consultation with an advisor.

- **Courses**: 1.00 required, 0.00 completed, 1.00 needed

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**Courses Available**

ADVR 401

**Computer Science Math Option Graduation Requirements**

Overall Requirement Not Satisfied: Computer Science Math Option Graduation Requirements

**Mid Career Writing Assessment**

Not Satisfied: Complete 2nd semester English Composition with a B grade or higher. Students who do not earn a grade of B or higher in 2nd semester English Composition must also satisfy a college or department writing requirement. Consult your major advisor if you do not earn a grade of B or higher in 2nd semester English Composition.

- **Courses**: 1.00 required, 0.00 completed, 1.00 needed

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**Major GPA**

Satisfied: A minimum 2.0 GPA is required in the major coursework.

- **GPA**: 2.000 required, 0.000 completed

**Major Residency**

Not Satisfied: A minimum of 18 units in the pre-major, supporting coursework, professional core, and/or major must be taken at the University of Arizona.

- **Units**: 18.00 required, 0.00 completed, 18.00 needed
Major 400-level Upper Division

**Not Satisfied:** A minimum of 15 units of 400-level upper-division major coursework must be completed.

- **Units:** 15.00 required, 0.00 completed, 15.00 needed

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Minor Required

**Not Satisfied:** A minor is required for this major. Consult with your advisor to select a minor or discuss other options such as selecting a second major.