Academic Advisement Report
UGRD.USCNC.MATHBS.COMP
Undergraduate Career
College of Science Program
Mathematics Major (BS)
Comprehensive Emphasis
Requirement Term: Fall 2015

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. 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.

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
A minimum of 18 of the final 30 units taken toward degree requirements must be in residence at The University of Arizona. Consult with your academic advisor if you plan to use transfer credits to fulfill your degree requirements.

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

- Units: 0.00 completed
Non Degree Seeking Limit
A maximum of 15 units completed as a non-degree seeking student may be used for fulfilling undergraduate degree requirements.
Units exceeding this limit (shown below) 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.
All Success courses taken can be seen below. Success Course units exceeding the 3 unit maximum must be subtracted from the total units, residency requirements and cumulative grade point average.

PE Activity Course Limit
Satisfied: No more than 3 units will apply toward a student's graduation requirements.
All PE activity courses taken can be seen below. PE Activity 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: Complete 1 course from MATH 124,125,129,223 TO 499.

GE Substantial Math Strand
Not Satisfied: Complete 1 course from MATH 122B,124,125,129,223 TO 499.
- Units: 2.67 required, 0.00 completed, 2.67 needed
Undergraduate General Education and Foundation Requirements

Overall Requirement Not Satisfied: Undergraduate General Education and Foundation Requirements

Foundation Composition

Not Satisfied: Select from 1 of the 3 following options:
1. First and Second Semester Composition OR
2. Honors Composition with grade of C or higher OR
3. Honors Composition with a grade of D and Second Semester Composition.

Please note: Students who earn a grade of D in Honors Composition may choose to repeat the course in order to earn a higher grade to satisfy the requirement. Please consult with your major advisor.

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 101A, ENGL 103H, ENGL 107, ENGL 107A

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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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. A grade of C or higher is required in the course that satisfies the second language requirement.

Demonstrate second semester proficiency in a second language by completing a sequence of courses through a second semester or higher level or by passing a language proficiency examination at the second semester level or higher.

Second Semester Language Course

Not Satisfied: Complete 1 course with a grade of C or better.


- 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 or PSY 150A1 & ANTH 150B1 or PSY 150A1 & INDV 103).

Only one course may be completed from the 150A options OR INDV 101. Only one course may be completed from the 150B options OR INDV 102. Only one course may be completed from the 150C options OR INDV 103.

INDV 101 = 150A#
INDV 102 = 150B#
INDV 103 = 150C#

- Courses: 2.00 required, 0.00 completed, 2.00 needed

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Courses Available

150A1, MIS 150A1-SA, PHIL 150A1, PHIL 150A1-SA, POL 150A1, POL 150A1-SA, PSY 150A1, PSY 150A1-SA, AED 150C1, AREC 150C1, AREC 150C1-SA, AREC 150C2, AREC 150C2-SA, ECON 150C1, ECON 150C1-SA, GEOG 150C1, GEOG 150C1-SA, HIST 150C1, HIST 150C1-SA, HIST 150C2, HIST 150C2-SA, HIST 150C3, HIST 150C3-SA, HIST 150C4, HIST 150C4-CC, HIST 150C4-SA, HIST 150C5, HIST 150C5-CC, HIST 150C5-SA, HIST 150C6, HIST 150C6-SA, HNRS 150C1, JOUR 150C1, JOUR 150C1-SA, MAS 150C1, MAS 150C1-SA, MENA 150C1, MENA 150C1-SA, PHIL 150C1, PHIL 150C1-SA, PLP 150C1, PLP 150C1-SA, POL 150C1, POL 150C1-SA, POL 150C2, POL 150C2-SA, POL 150C3, RNR 150C1, SOC 150C1, SOC 150C1-SA, SOC 150C2, SOC 150C2-SA, TLS 150C1

**Tier I Traditions & Cultures**

Not Satisfied: Fulfillment of Traditions and Cultures requires completion of two distinctly numbered courses (e.g., TRAD 102 & 104 or AFAS 160C2 & RSSS 160C1 or TRAD 101 & RSSS 160C1).

Only one course may be completed from the 160A options OR TRAD 101. Only one course may be completed from the 160B options OR TRAD 102. Only one course may be completed from the 160C options OR TRAD 103. Only one course may be completed from the 160D options OR TRAD 104.

TRAD 101 = 160A#
TRAD 102 = 160B#
TRAD 103 = 160C#
TRAD 104 = 160D#

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

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**Courses Available**


**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

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Courses Available


Tier II Humanities

Courses:

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- Courses: 1.00 required, 0.00 completed, 1.00 needed

Courses Available


Tier II Individual & Societies

Courses:

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- Courses: 1.00 required, 0.00 completed, 1.00 needed

Courses Available


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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 curriculum.

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.

Additional Coursework

Courses listed in this section may also be used to fulfill a requirement or sub-requirement in your curriculum.

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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:** Common requirements for the BS in Mathematics, including completion of: Introductory Chemistry or Natural Sciences, Application courses, and Core Mathematics courses.

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

**Mathematics Introductory Chemistry**

**Overall Requirement Not Satisfied:** BS students must complete a two-semester sequence in a laboratory science. Complete a Chemistry sequence OR select one of the Natural Science sequences below (including Physics, Biology, Physiology, or Geosciences). 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

**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

**Courses Available**

CHEM 151, Approved Transfer Course

**OR Option 3: Introductory Chemistry**

**Not Satisfied:** OR Complete CHEM 105A and 106A

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

**Courses Available**

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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, Approved Transfer Course

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: BS students must complete a two-semester sequence in a laboratory science. Complete one of the Natural Science sequences (including Physics, Biology, Physiology, or Geosciences) OR select one of the Chemistry sequences above. 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

MCB 181L, MCB 181R, Approved Transfer Course, MCB 184

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, Approved Transfer Course

OR Option 3: Physiology

Not Satisfied: Complete 2 courses

- Courses: 2.00 required, 0.00 completed, 2.00 needed

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**Courses Available**

PSIO 201, PSIO 202

**OR Option 5: Introductory Mechanics**

*Not Satisfied:* OR Complete Physics 141

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

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**Courses Available**

PHYS 141

**AND Option 5: Intro Thermodynamics & Optics or Electricity & Magnetism**

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

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

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**Courses Available**

PHYS 151, PHYS 152

**OR Option 6: Introduction to Mechanics**

*Not Satisfied:* OR Complete 2 courses

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

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- 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 122B or higher). Courses used to fulfill this requirement may also be used to fulfill other requirements.

This requirement does not apply to the Mathematics Education Option.

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 Core Requirements

Overall Requirement Not Satisfied: Math Major Core Requirements

Calculus I

Not Satisfied: Complete 1 course

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

MATH 122B, MATH 124, MATH 125, MATH 125-CC

Computer Science

**Not Satisfied:** Complete 1 course. Either CSC 127A or ISTA 130 is recommended for most students. This alternative group of courses may require prior programming experience, additional prerequisites, and/or a major or minor declared in another subject.

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

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Courses Available

CSC 127A, ISTA 130

**Alternative to Computer Science Course**

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Courses Available

CSC 227, ECE 175, MIS 301, MSE 350, PHYS 305

Core Courses

**Not Satisfied:** Complete 5 courses

- **Courses:** 5.00 required, 0.00 completed, 5.00 needed

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Courses Available

MATH 129, MATH 129-CC, MATH 223, MATH 223-CC, MATH 313, MATH 323, MATH 355, MATV 355

**Option in Comprehensive Mathematics**

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**Overall Requirement Not Satisfied:** Option in Comprehensive Mathematics

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

**Comprehensive Option Requirements**

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**Overall Requirement Not Satisfied:** Comprehensive Option Requirements

**Comprehensive Required Courses**

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**Not Satisfied:** Complete 4 courses

- **Courses:** 4.00 required, 0.00 completed, 4.00 needed
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**Courses Available**

MATH 413, MATH 424, MATH 425A, MATH 425B

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: Differential Equations

*Not Satisfied*: OR Complete MATH 454 and MATH 456

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

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**Courses Available**

MATH 454, MATH 454-CC, MATH 456

**Comprehensive Math Option Graduation Requirements**

*Overall Requirement Not Satisfied*: Comprehensive 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

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.