Academic Advisement Report
For **MATHBS MATHBS (*APPL)** prepared on **03/17/2022**
Requested by **Laurie Varecka**

Graduation Requirements

Academic level	Required GPA	Actual GPA	GPA Status	Requirement Term
Undergraduate Career	2.000		**Not Satisfied**	Fall 2022
Mathematics Major (BS)	2.000		**Not Satisfied**	Fall 2022
Applied Emphasis				Fall 2022

Unit Requirements	Required Units	Total Units *	In Progress Units	Unit Status
Units Required for this Degree	120.00	0.00	0.000	**Not Satisfied**
Upper Division Units	42.00	0.00	0.000	**Not Satisfied**
Units in Residence	30.00	0.00	0.000	**Not Satisfied**
Upper Division Units in Residence	18.00	0.00	0.000	**Not Satisfied**

*Total Units and Requirement Status include In Progress Units. In Progress Units are comprised of all ungraded coursework, including future enrollments. Credit from repeated courses is excluded from the In Progress and Total Units unless the student has filed a Grade Replacement Opportunity (GRO) request. If a GRO request has been filed the GRO units will be excluded when the course is graded. Credit from developmental courses (e.g. MATH/SAS 100AX) is only temporarily included in the In Progress and Total Units and will also be excluded when graded. Note: Credit for a course can only be given once, unless otherwise specified in the course catalog.

Credit Type – **EN=Enrollment at UA, IP=In Progress, TR=Transfer Credit, TE=Test Credit**

Undergraduate Graduation Requirements *(RG511)*

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 their 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) Candidates for a second bachelor's degree at The University of Arizona with a different award date than the first must earn no fewer than 30 units of University Credit in addition to the units required for the first degree, and must meet all requirements for the second degree.

Correspondence and/or Exam Credit Limit *(R2075/L10)*
    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 *(R838/L10)*
    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.

Non-Community College Units   *(R1227/L10)*
Not Satisfied: Non-Community College Units: While there is no limit to the total number of units of course work that may be transferred from an accredited community college to The University of Arizona, no more than 64 units from a 2-year institution may be applied toward the requirements for a bachelor's degree. Therefore, to reach the required 120 units for a bachelor's degree, a minimum of 56 units must be completed from 1) coursework at a 4-year institution, 2) approved credit by examination (refer to UA Catalog for approved examinations and scores), or 3) any combination thereof.

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

Success Course Limit   *(R3297/L15)*
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   *(R3297/L25)*
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.

General Education Entry Course   *(RG18614)*
Not Satisfied: General Education Entry Course

Introduction to General Education course   *(R16657/L10)*
Not Satisfied: Introduces students admitted to the university as First-Year students to General Education, reflecting on learning, and developing an ePortfolio. (1 unit)

· **Units:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

UNIV 101

General Education Foundation Mathematics   *(RG1434)*
Not Satisfied: General Education Foundation Mathematics

GE Substantial Math Strand   *(R2612)*
Not Satisfied: Complete 1 course.

GE Substantial Math Strand   *(R2612/L10)*
Not Satisfied: Complete 1 course.

· **Units:** 2.67 required, 0.00 completed, 2.67 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

MATH 122B, MATH 125, MATH 129, MATH 215, MATH 223, MATH 254, MATH 313

General Education Foundation Composition & Second Language *(RG507)*
Not Satisfied: Undergraduate General Education Foundation Composition & Second Language

Foundation Composition *(R532)*
Not Satisfied: Complete 1 of the following 4 Foundation Composition options:
1. 3 Course Foundation Composition Sequence
2. 2 Course Foundation Composition Sequence
3. Honors Composition with grade of C or higher
4. 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: Foundation Composition - 3 Course Sequence *(R532/L10)*
  Not Satisfied: Complete 3 courses. Complete ENGL 106 AND ENGL 101/107 AND ENGL 102/108.

   · **Courses:** 3.00 required, 0.00 completed, 3.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

ENGL 1EIB, ENGL 101, ENGL 101A, ENGL 107, ENGL 107A, (***) (###), ENGL 102, ENGL 108, ENGL 106

OR Option 2: Foundation Composition - 2 Course Sequence *(R532/L20)*
  Not Satisfied: Complete 2 courses. Complete ENGL 101/107 AND ENGL 102/108

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

ENGL 1EIB, ENGL 101, ENGL 101A, ENGL 107, ENGL 107A, (***) (###), ENGL 102, ENGL 108

OR Option 3: Honors Composition *(R532/L40)*
  Not Satisfied: Complete 1 course with a C or better.

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type
	ENGL	109H						

Courses Available

ENGL 109H

Foundation Second Language - Second Semester Proficiency (R521)
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 (R521/L10)
Not Satisfied: Complete 1 course with a grade of C or better.

Not from: FREN 325, 391, 393, 396H, 399, 399H, 414, 425, 432, 433, 434, 442, 443, 448, 453, GRK 412, 422, HIST 465D, ITAL 330A, 330B, 330C, 330D, 393, 393H 399, 399H, 410, 431, 496A, 498H, LAT 411, 413, 414, 415, 421, 425, 426, PORT 325A, 430, 440, 449, RSSS 305, 405A, 405B, SPAN 204C, 303, 305, 340, 343, 350, 360, 371A 371B 375, 381, 382, 397W, 399, 400, 401, 402, 403, 406A, 410, 411, 412, 414, 423A, 423B, 433, 435, 436, 437, 438, 441, 442, 445, 446, 447, 448, 452, 453, 455A, 457, 458, 459, 465A, 465C, 465D, 465E, 471, 472, 473, 482, TTE 414.

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

AIS 104B, AIS 307B, ARB 102, CHN 102, CRL 102, FREN 102, FREN 112, GER 102, GRK 102, GRK 104, GRK 112, ITAL 102, ITAL 102Z, JPN 102, JUS 103B, KOR 102, LAS 305A, LAT 102, LAT 112, LING 104B, LING 307B, MENA 103B, PORT 102, PORT 305A, PORT 325A, PRS 102, RSSS 102, SERP 370B, SPAN 102, SPAN 103, SPAN 205, TURK 102

General Education Core Requirements (RG18630)
Not Satisfied: General Education Core Requirements

GE Exploring Perspectives (R16656)
Not Satisfied: Choose one course from each domain.

Artist (R16656/L10)
Not Satisfied: Complete 1 course, 3 units total. Transfer students with quarter system credits may satisfy requirement with 1 course and 2.67 units.

· **Units:** 2.67 required, 0.00 completed, 2.67 needed
· **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

ART 242, ART 358, DNC 100, ENGL 209, FTV 352, MUS 109, (***) (###)

Humanist   *(R16656/L50)*
   Not Satisfied: Complete 1 course, 3 units total. Transfer students with quarter system credits may satisfy requirement with 1 course and 2.67 units.

   · **Units:** 2.67 required, 0.00 completed, 2.67 needed
   · **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

AFAS 160A1, AIS 212, ENGL 160D2, HIST 160C1, RELI 212, RELI 325, RSSS 160C2, RSSS 325, (***) (###)

Natural Scientist   *(R16656/L90)*
   Not Satisfied: Complete 1 course, 3 units total. Transfer students with quarter system credits may satisfy requirement with 1 course and 2.67 units.

   · **Units:** 2.67 required, 0.00 completed, 2.67 needed
   · **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

BE 170A1, CHEM 151, CHEM 152, CHEM 161, CHEM 162, ECOL 170C2, GEOG 230, GEOS 170A1, (***) (###)

Social Scientist   *(R16656/L130)*
   Not Satisfied: Complete 1 course, 3 units total. Transfer students with quarter system credits may satisfy requirement with 1 course and 2.67 units.

   · **Units:** 2.67 required, 0.00 completed, 2.67 needed
   · **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

ANTH 339, ECON 200, LAS 150B1, PSY 150A1, SERP 200, TLS 150B1, (***) (###)

GE Building Connections   (R16658)
Not Satisfied: Building Connections brings together knowledge and modes of thinking from two or more disciplines and/or perspectives. Choose three courses (9 units minimum).

Building Connections   *(R16658/L10)*
   Not Satisfied: Complete 3 courses, 9 units total. Transfer students with quarter system credits may satisfy requirements with 3 courses and 8.01 units.

   · **Units:** 8.01 required, 0.00 completed, 8.01 needed

· **Courses:** 3.00 required, 0.00 completed, 3.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

ACBS 160D1, ARC 160D1, ART 360, CLAS 150C1, CLAS 305, CLAS 346, ENVS 310, GER 150B1, GER 160A1, GWS 150B2, HNRS 160D4, HNRS 170A1, HPS 150C1, HUMS 205, LAR 150B1, LAW 360, LING 150A1, PSY 240, RELI 305, RELI 367, RNR 150C1, (***) (###)

GE 32 unit check _(R16786)_

Not Satisfied: Students must complete 32 units in General Education coursework while satisfying the requirements.

Check for 32 units of GE _(R16786/10)_

Not Satisfied: Students must complete 32 units in General Education coursework while satisfying the requirements.

· **Units:** 32.00 required, 0.00 completed, 32.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

General Education Portfolio _(Exit Course) (RG18704)_

Not Satisfied: General Education Portfolio (Exit Course)

General Education Portfolio _(Exit Course) (R16659/L10)_

Not Satisfied: Students admitted to the university as First-Year students reflect on their General Education experience and complete their ePortfolio in the GE Capstone course. (1 unit)

· **Units:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

UNIV 301

Additional Coursework _(RG521)_

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 *(RG772)*

Not Satisfied: Will appear fully satisfied when student satisfies Mathematics Supporting Laboratory Science Coursework, Mathematics Application Coursework, Mathematics Computer Science, Math Major Core Requirements, and selects an emphasis. All emphases require a minimum of 15 units of 400-level coursework in the major.

The Bachelor of Science in Mathematics requires the same Core Mathematics courses as the BA; BS students must satisfy specialized supporting laboratory science and application course requirements.

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

Mathematics Supporting Laboratory Science Coursework *(R1192)*

Not Satisfied: Will appear fully satisfied when student has satisfied two of the approved laboratory science courses.

Students seeking a BS in Mathematics must complete 2 of the following requirements. Choose from Chemistry, Physics, Biology, Physiology, and/or Geosciences.

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

Chemistry I *(R1192/L2)*

Not Satisfied: Complete 4 units from Chemistry 141 & 143, 151, 161 & 163

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

CHEM 141, CHEM 143, CHEM 151, CHEM 161, CHEM 163, Approved Transfer Course

Chemistry II *(R1192/L5)*

Not Satisfied: Complete 4 units from Chemistry 142 & 144, 152, 162 & 164

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

CHEM 142, CHEM 144, CHEM 152, CHEM 162, CHEM 164, Approved Transfer Course

Geosciences *(R1192/L10)*

Not Satisfied: Complete 1 course

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type
	GEOS	251						

Courses Available

GEOS 251

Geosciences *(R1192/L15)*
  Not Satisfied: Complete 1 course

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

GEOS 255, GEOS 302, GEOS 304, GEOS 308, GEOS 322

Biology I *(R1192/L20)*
  Not Satisfied: Complete 4 units

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

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

Biology II *(R1192/L25)*
  Not Satisfied: Complete 4 units

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

ECOL 182L, ECOL 182R, Approved Transfer Course

Physiology I *(R1192/L27)*
  Not Satisfied: Complete 1 course

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type
	PSIO	201						

Courses Available

PSIO 201

Physiology II _(R1192/L30)_
  Not Satisfied: Complete 1 course

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type
	PSIO	202						

Courses Available

PSIO 202

Introductory Mechanics _(R1192/L40)_
  Not Satisfied: Complete Introductory Mechanics Lecture with Lab

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

PHYS 139, PHYS 140, PHYS 141, PHYS 161H

Intro Optics and Thermodynamics _(R1192/L50)_
  Not Satisfied: Complete Introductory Thermodynamics & Optics with Lab

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

PHYS 142, PHYS 162H

Introductory Electricity and Magnetism with Lab _(R1192/L60)_
  Not Satisfied: Complete Introductory Electricity and Magnetism with Lab

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

PHYS 239, PHYS 240, PHYS 241, PHYS 261H

Mathematics Application Coursework (R1217)

Not Satisfied: Will appear fully satisfied when student has satisfied 3 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 Emphasis.

Courses with Calculus Prerequisite (R1217/L10)

Not Satisfied: Consult with the advisor to discuss approved courses. Up to 3 units of internship credit (MATH 493) may apply to the application course requirement.

· **Units:** 3.00 required, 0.00 completed, 3.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

AREC 304, AREC 464, AREC 479, ASTR 250, ATMO 430, ATMO 436A, ATMO 469A, ATMO 469B, BAT 201, BE 201, BE 284, BE 428, BE 481A, BE 481B, BIOC 462A, BIOC 462B, BIOC 466, BME 214, BME 481B, CE 214, CHEE 201, CHEE 202, CHEE 297, CHEE 481A, CHEE 481B, CHEM 161, CHEM 162, CHEM 325, CHEM 404A, CHEM 480A, CHEM 480B, CHEM 481, CSC 345, CSC 422, CSC 433, CSC 436, CSC 437, CSC 444, CSC 445, CSC 453, CSC 460, CSC 477, CSC 483, CSCV 345, ECE 201R, ECE 404, ECOL 302, ECOL 419, ECOL 447, ECOL 496N, ECON 332, ECON 361, ENGR 211C, ENGR 211E, ENGR 211P, ENGR 265, ENVS 420, ENVS 470, ENVS 479, GEOG 463, GEOS 322, GEOS 356, GEOS 419, GEOS 432, GEOS 434A, GEOS 440, GEOS 469, GEOS 479, HWRS 349A, HWRS 421, HWRS 431, HWRS 460A, HWRS 479, ISTA 421, ISTA 450, MATH 493, MCB 303, MCB 480, MSE 222, MSE 345, MSE 404, MSE 415, OPTI 201R, OPTI 404, OPTI 495B, PHYS 140, PHYS 143, PHYS 240, PHYS 241, PHYS 261H, PSIO 303, PSIO 305, PSIO 472, PTYS 407, RCSC 216, RNR 479, SIE 250, SIE 265, WFSC 444, WFSC 445, WSM 460A, PHYS 142, PHYS 162H, PHYS 141, PHYS 161H

Mathematics Supporting Computer Science (R15810)

Not Satisfied: Will appear fully satisfied when student satisfies Computer Science requirements.

Computer Science (R15810/L10)

Not Satisfied: Complete 1 course. One of the following courses is recommended for most students: CSC 110, ISTA 130, ECE 175, or CHEE 205; other options may require additional prerequisites and/or a major or minor declared in another subject.

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

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

CSC 110, CSC 120, CSC 250, ISTA 130, CHEE 205

Math Major Core Requirements (R1173)

Not Satisfied: Will appear fully satisfied when student satisfies Calculus I and other Core Courses.

Calculus I (R1173/L10)

Not Satisfied: Complete 1 course

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

MATH 122B, MATH 125

Core Courses   *(R1173/L50)*
   Not Satisfied: Complete 5 courses. Credit allowed for only one course in each pair: MATH 313 or MATV 313, MATH 323 or MATV 323, MATH 355 or MATV 355. MATV courses are only available to UA South students.

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

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

Emphasis in Applied Mathematics   *(RG17553)*
Not Satisfied: Will appear fully satisfied when student satisfies Applied Emphasis course requirements, Graduation Requirements, and declares a minor.

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

Applied Emphasis Options   (R16646)
Not Satisfied: Will appear fully satisfied when student satisfies Option 1, 2, OR 3.

Option 1: Differential Equations   *(R16646/L20)*
   Not Satisfied: Complete Math 454 and 456

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type
	MATH	454						
	MATH	456						

Courses Available

MATH 454, MATH 456

OR Option 2: Probability and Statistics   *(R16646/L30)*
   Not Satisfied: OR Complete Math 464 and 466

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type
	MATH	464						
	MATH	466						

Courses Available

MATH 464, MATH 466

OR Option 3: Numerical Analysis   *(R16646/L40)*
  Not Satisfied: OR Complete Math 475A and one course from the list below

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type
	MATH	475A						

Courses Available

MATH 475A

AND Option 3: Courses to Pair With Numerical Analysis   *(R16646/L50)*
  Not Satisfied: Complete MATH 475A and one course from MATH 413, 424, 443, 445, 447, 454, 456, 464, 475B

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

MATH 413, MATH 424, MATH 443, MATH 445, MATH 447, MATH 454, MATH 456, MATH 464, MATH 475B

Applied Emphasis Requirements   (R1180)
Not Satisfied: Will appear fully satisfied when student satisfies the Required Applied Modeling course, the Applied required courses, and one advisor approved course.

Required Applied Math Modeling Course   *(R1180/L10)*
  Not Satisfied: Complete 1 course.

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

MATH 481, MATH 485

Applied Required Course   *(R1180/L15)*
  Not Satisfied: Complete 1 course.

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type
	MATH	422						

Courses Available

MATH 422

Additional Course (R1180/L50)

Not Satisfied: Complete one 400-level MATH course in consultation with your math faculty advisor. You may choose from the pre-approved list. If you prefer to select another course, you may do so ONLY if approved by your math faculty advisor.

· **Units:** 3.00 required, 0.00 completed, 3.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Courses Available

DATA 468, MATH 413, MATH 424, MATH 454, MATH 456, MATH 464, MATH 468, MATH 475A, MATH 481, MATH 485, MATH 488

Major 400-level Upper Division (R1180/L60)

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Applied Emphasis Graduation Requirements (R1181)

Not Satisfied: Will appear fully satisfied when student satisfies Mid Career Writing Assessment, Major GPA, Residency requirement, and Major Upper Division unit requirement.

Mid Career Writing Assessment (R1181/L3)

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

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Major GPA (R1181/L10)

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

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

Major Units *(R1181/L15)*
  Not Satisfied: A minimum of 34 units must be completed in the major.

   · **Units:** 34.00 required, 0.00 completed, 34.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Major Residency *(R1181/L20)*
  Not Satisfied: A minimum of 18 units in the major must be taken at the University of Arizona.

   · **Units:** 18.00 required, 0.00 completed, 18.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Major Upper Division *(R1181/L30)*
  Not Satisfied: A minimum of 18 units of upper-division major coursework must be completed.

   · **Units:** 18.00 required, 0.00 completed, 18.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Minor Required (R16193)
Not Satisfied: A minor outside of the Mathematics Department is required for this major. Consult with your advisor to select a minor or discuss other options such as selecting a second major.