1. **MAJOR REQUIREMENTS**– complete the table below by listing the major requirements, including required number of units, required core, electives, and any special requirements, including emphases\* (sub-plans), thesis, internships, etc. Note: information in this section must be consistent throughout the proposal documents (comparison charts, four-year plan, curricular/assessment map, etc.). Delete the EXAMPLE column before submitting/uploading. Complete the table in Appendix A if requesting a corresponding minor.   
     
   **UNDERGRADUATE**

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| **Total units required to complete the degree** |  | EXAMPLE  120 |
| **Upper-division units required to complete the degree** |  | 42 |
| **Foundation courses** |  |  |
| [Second language](http://catalog.arizona.edu/policy/second-language-requirement-undergraduate-degrees) |  | 2nd Semester Proficiency |
| [Math](http://catalog.arizona.edu/policy/mathematics-requirements-foundations) |  | G-Strand |
| [General education requirements](http://catalog.arizona.edu/policy/general-education-tier-one-and-tier-two) |  | Entry Course (1 unit)  Exploring Perspectives (4 courses, 12 units) (one course from each domain required)  -Artist  -Humanist  -Natural Scientist  -Social Scientist  Building Connections (3 courses, 9 units)  Exit Course (1 unit) |
| **Pre-major? (Yes/No). If yes, provide requirements. Provide email(s)/letter(s) of support from home department head(s) for courses not owned by your department.** |  | Yes. Complete the following coursework:  -CHEM 151 (4) General Chemistry I  -CHEM 152 (4) General Chemistry II  Complete 1 course from the following:  -PHYS 140 (3) Introductory Mechanics  -PHYS 141 (4) Introductory Mechanics |
| **List any special requirements to declare or gain admission to this major (completion of specific coursework, minimum GPA, interview, application, etc.)** |  | -Complete all pre-major coursework with 2.5 GPA.  -Complete interview with department.  -Submit career path vision statement. |
| **Major requirements** |  |  |
| **Minimum # of units required in the major (units counting towards major units and major GPA)** |  | 56 |
| **Minimum # of upper-division units required in the major (upper division units counting towards major GPA)** |  | 38 |
| [**Minimum # of residency units to be completed in the major**](https://catalog.arizona.edu/policy/graduation-grade-averages-and-credit-requirements) |  | 18 |
| **Required supporting coursework (courses that do not count towards major units and major GPA, but are required for the major). Courses listed must include prefix, number, units, and title. Include any limits/restrictions needed (house number limit, etc.). Provide email(s)/letter(s) of support from home department head(s) for courses not owned by your department.** |  | List all required supporting coursework.  -MATH 129 (3) Calculus II  Complete 1 of the following:  -PHYS 240 (3) Introductory Electricity and Magnetism  -PHYS 241 (4) Introductory Electricity and Magnetism |
| **Major requirements. List all major requirements including core and electives. If applicable, list the emphasis requirements for each proposed emphasis\*. Courses listed count towards major units and major GPA. Courses listed must include prefix, number, units, and title. Mark new coursework (New). Include any limits/restrictions needed (house number limit, etc.). Provide email(s)/letter(s) of support from home department head(s) for courses not owned by your department.** |  | List all required major coursework.  For example:  Fire Services Core: Complete 2 courses (6 units)  -(New)FIRE 345 (3) Introduction to Fire  -(New) FIRE 346 (3) Advanced Fire  Fire Management Electives: Complete 18 units from the following. Limit of 6 units from house-numbered coursework may be used towards this requirement :  Select one emphasis from:  Fire Management  Fire Safety Education  General |
| **Internship, practicum, applied course requirements (Yes/No). If yes, provide description.** |  | Yes. Complete 6 units:  FIRE 493 (6) Fire Fighting Internship. Students complete internship at a fire station. |
| **Senior thesis or senior project required (Yes/No). If yes, provide description.** |  | Yes. Complete 6 units:  FIRE 498 (6) Fire Senior Thesis |
| **Additional requirements (provide description)** |  | -Present Senior Thesis and Internship experience at departmental conference. |
| **Minor (specify if optional or required)** |  | Optional |
| **Any** [**double-dipping restrictions**](https://catalog.arizona.edu/policy/double-use-courses-double-dipping) **(Yes/No)? If yes, provide description.** |  | Yes, major core courses not permitted to double-dip. |

**GRADUATE**

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| **Total units required to complete the degree** |  | EXAMPLE  60 |
| **Pre-admissions expectations (i.e., academic training to be completed prior to admission)** |  | Earned bachelor’s degree; training in field; statement of purpose |
| **Major requirements. List all major requirements including core and electives. If applicable, list the emphasis requirements for each proposed emphasis\*. Courses listed must include course prefix, number, units, and title. Mark new coursework (New). Include any limits/restrictions needed (house number limit, etc.). Provide email(s)/letter(s) of support from home department head(s) for courses not owned by your department.** |  | Complete 12 units of core coursework:  -ECOL 547 (3) Introduction to Theoretical Ecology  -ARE 631 (3) Arts-based Research  -MAS 587 (3) Chicana Gender Perspectives  -DNC 500 (3) Dance and Culture  Complete 18 units of electives from the following list. At least 3 units must be internship or practicum. Limit of 9 units of independent study may be used towards this requirement.:  Complete 12 units of theory and method coursework from the following list:  Complete 18 units of dissertation |
| **Research methods, data analysis, and methodology requirements (Yes/No). If yes, provide description.** |  | Yes. Students complete 12 units of theory and method in the field. |
| **Internship, practicum, applied course requirements (Yes/No). If yes, provide description.** |  | Yes. Students complete 3 units of an internship or practicum in the field. |
| **Master thesis or dissertation required (Yes/No). If yes, provide description.** |  | Yes. Students complete 18 units of dissertation. |
| **Additional requirements (provide description)** |  | Written and oral comprehensive examinations  Oral dissertation defense |
| **Minor options (as relevant)** |  | No required minor options. Open options. |

\*Emphases are officially recognized sub-specializations within the discipline. [ABOR Policy 2-221 c. Academic Degree Programs Subspecializations](https://public.azregents.edu/Policy%20Manual/2-221-Academic%20Degree%20Programs.pdf) requires all undergraduate emphases within a major to share at least 40% curricular commonality across emphases (known as “major core”). Total units required for each emphasis must be equal. Proposed emphases having similar curriculum with other plans (within department, college, or university) may require completion of an additional comparison chart. Complete the table found in Appendix B to indicate if emphases should be printed on student transcripts and diplomas.

1. **CURRENT COURSES**–using the table below, list all existing courses included in the proposed major. You can find information to complete the table using the [UA course catalog](https://uaccess.schedule.arizona.edu/psp/pubsaprd/UA_CATALOG/HRMS/h/?tab=DEFAULT)  or [UAnalytics](https://analytics.uaccess.arizona.edu/analytics/saw.dll?dashboard&PortalPath=%2Fshared%2FStudent%2F_portal%2FCatalog%20and%20Schedule) (Catalog and Schedule Dashboard> “Printable Course Descriptions by Department” On Demand Report; right side of screen). If the courses listed belong to a department that is not a signed party to this implementation request, upload the department head’s permission to include the courses in the proposed program and information regarding accessibility to and frequency of offerings for the course(s). Upload letters of support/emails from department heads to the “Letter(s) of Support” field on the UAccess workflow form. Add or remove rows to the table, as needed.

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| **Course prefix and number (include cross-listings)** | **Units** | **Title** | **Pre-requisites** | **Modes of delivery (online, in-person, hybrid)** | **Typically Offered**  **(F, W, Sp, Su)** | **Dept signed party to proposal? (Yes/No)** |
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1. **NEW COURSES NEEDED** – using the table below, list any new courses that must be created for the proposed program. If the specific course number is undetermined, please provide level (i.e., CHEM 4XX). Add rows as needed.

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| **Course prefix and number (include cross-listings)** | **Units** | **Title** | **Pre-requisites** | **Modes of delivery (online, in-person, hybrid)** | **Status\*** | **Anticipated first term offered** | **Typically Offered**  **(F, W, Sp, Su)** | **Dept signed party to proposal? (Yes/No)** | **Faculty members available to teach the courses** |
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\*In development (D); submitted for approval (S); approved (A)

1. **FACULTY INFORMATION-** complete the table below. If UA Vitae link is not provided/available, add CVs to a Box folder and provide that link. UA Vitae profiles can be found in the [UA directory/phonebook](https://directory.arizona.edu/phonebook).Add rows as needed. Delete the EXAMPLE rows before submitting/uploading. **NOTE: full proposals are distributed campus-wide, posted on committee agendas and should be considered “publicly visible”. Contact** [**Office of Curricular Affairs**](mailto:curricular_affairs@list.arizona.edu) **if you have concerns about CV information being “publicly visible”.**

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| Faculty Member | Involvement | UA Vitae link or Box folder link |
| EX: Joan Smith | Teach FIRE 388 | Box folder link |
| EX: Mike Smith | Teach FIRE 387, Faculty advisor, Internship supervisor | UA Vitae link |
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1. **GRADUATION PLAN –** provide a sample degree plan, based on your program that includes all requirements to graduate with this major and takes into consideration course offerings and sequencing. *Undergraduate programs: please complete* [*Addendum D: 4-Year Plan*](https://arizona.box.com/s/8dyd6ze3d0efv5mpf1wo3zui9hqskk7x) *for Degree Search. Use generic title/placeholder for requirements with more than one course option (e.g., Upper Division Major Elective, Minor Course, Second Language, GE).* Add rows as needed.

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| **Semester 1** | | **Semester 2** | | **Semester 3** | | **Semester 4** | |
| **Course prefix and number** | **Units** | **Course prefix and number** | **Units** | **Course prefix and number** | **Units** | **Course prefix and number** | **Units** |
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| **Semester 5** | | **Semester 6** | | **Semester 7** | | **Semester 8** | |
| **Course prefix and number** | **Units** | **Course prefix and number** | **Units** | **Course prefix and number** | **Units** | **Course prefix and number** | **Units** |
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| **Total** |  | **Total** |  | **Total** |  | **Total** |  |

1. **Curriculum Map and Assessment Map** - Complete this table as a summary of your learning outcomes and assessment plan, using these examples as a model. If you need assistance completing this table and/or the Curriculum Map, please contact the [University Center for Assessment, Teaching and Technology](https://ucatt.arizona.edu/assessment/learning-outcomes-assessment/academic-program-learning-assessment). Attach your Curriculum Map here.

**Program**: MS Clinical Research

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| --- |
| **Learning Outcome #1:** Design and conduct clinical research within regulatory and ethical guidelines. |
| **Concepts:** Clinical research, Ethics, Regulations. |
| **Competencies:** Design and conduct clinical research within regulatory and ethical guidelines. |
| **Assessment Methods:** This outcome will be assessed in the thesis (clinical research) project. |
| **Measures:** Direct measures will include rubric-scored thesis defense and committee evaluation of written thesis (clinical research project). Indirect measures will include a student self-assessment at the end of the program. |
| **Learning Outcome #2:**  Utilize biomedical informatic functions and analyses in a clinical setting. |
| **Concepts:** Biomedical informatics, Informatics analysis. |
| **Competencies:** Effectively utilize biomedical informatics to analyze clinical research data. |
| **Assessment Methods:** This outcome will be assessed in course homework and thesis projects. |
| **Measures:** Direct measures will include objective grading of homework by course instructors and rubric-scored thesis defense and committee evaluation of written thesis (clinical research project). Indirect measures will include a student self-assessment at the end of the program. |
| **Learning Outcome #3:** Demonstrate appropriate statistical analysis of clinical research data, and interpretation of results from clinical research projects. |
| **Concepts:** Statistical analysis, Data interpretation. |
| **Competencies:** Applying knowledge of statistical analysis and interpretation of results from clinical research projects. |
| **Assessment Methods:** This outcome will be assessed in homework, exams, and student projects, including the thesis. |
| **Measures:** Direct measures will include objective grading of homework and exams by course instructors and rubric-scored thesis defense and written thesis by the thesis committee. Indirect measures will include a student self-assessment at the end of the program. |
| **Learning Outcome #4:**  Apply developed knowledge derived from clinical research meetings and the medical literature. |
| **Concepts:** Research data and information, Peer-reviewed medical literature. |
| **Competencies:** Effectively demonstrate and utilize knowledge derived from clinical research meetings and medical literature. |
| **Assessment Methods:** This outcome will be assessed in classroom interaction and student projects, including the thesis. |
| **Measures:** Direct measures will include feedback on classroom interaction by course instructors and rubric-scored thesis defense and written thesis by the thesis committee. Indirect measures will include a student self-assessment at the end of the program. |
| **Learning Outcome #5:**  Ability to advance the development of better treatments and outcomes for patients. |
| **Concepts:** Patient treatments, Medical care, Patient outcomes. |
| **Competencies:** Using acquired knowledge and research findings to provide better treatments and clinical outcomes. |
| **Assessment Methods:** This outcome will be assessed in thesis projects. |
| **Measures:** Direct measures will include rubric-scored thesis defense and committee evaluation of the written thesis (clinical research project). Indirect measures will include a student self-assessment at the end of the program. |

1. **PROGRAM ASSESSMENT PLAN-** using the table below, provide a schedule for program evaluation 1) while students are in the program and 2) after completion of the major. Add rows as needed. Delete EXAMPLE rows.

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| **Assessment Measure** | **Source(s) of Evidence** | **Data Collection Point(s)** |
| EXAMPLE: Job Placement Statistics | Student/Alumni Survey | At graduation and as part of alumni survey |
| EXAMPLE: Academic Program Review | Reviewers’ responses | Every 7 years |
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1. **ANTICIPATED STUDENT ENROLLMENT**-complete the table below. What concrete evidence/data was used to arrive at the numbers?

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| **5-YEAR PROJECTED ANNUAL ENROLLMENT** | | | | | |
|  | 1st Year | 2nd Year | 3rd Year | 4th Year | 5th Year |
| Number of Students |  |  |  |  |  |

Data/evidence used to determine projected enrollment numbers:

1. **ANTICIPATED DEGREES AWARDED**- complete the table below, beginning with the first year in which degrees will be awarded. How did you arrive at these numbers? Take into consideration departmental retention rates. Use [National Center for Education Statistics College Navigator](https://nces.ed.gov/collegenavigator/) to find program completion information of peer institutions offering the same or a similar program.

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| **PROJECTED DEGREES AWARDED ANNUALLY** | | | | | | |
|  | 1st Year | 2nd Year | 3rd Year | 4th Year | 5th Year |
| Number of Degrees |  |  |  |  |  |

Data/evidence used to determine number of anticipated degrees awarded annually:

**Appendix A. Minor Requirements.** Complete if requesting a corresponding minor. Delete EXAMPLE column and verbiage as it applies to your level degree (i.e., undergraduate vs graduate) before submitting.

**MINOR**

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| **Minimum total units required** |  | EXAMPLE  18 |
| **Minimum upper-division units required** |  | 9 |
| **Total transfer units that may apply to the minor** |  | 9 |
| **List any special requirements to declare/admission to this minor (completion of specific coursework, minimum GPA, interview, application, etc.)** |  | -Meet with departmental interview committee  -Complete all pre-requisite coursework |
| **Minor requirements. List all minor requirements including core and electives. Courses listed must include course prefix, number, units, and title. Mark new coursework (New). Include any limits/restrictions needed (house number limit, etc.). Provide email(s)/letter(s) of support from home department head(s) for courses not owned by your department.** |  | List all required coursework.  For example:  **Actuary core:**  **Complete 2 courses (6 units):**  -(NEW) ACTU 123 (3) Introduction to Actuarial Sciences  -(NEW) ACTU 345 (3) Advanced Actuarial Methods  **Actuary Electives:** Complete 12 units from the following: |
| **Internship, practicum, applied course requirements (Yes/No). If yes, provide description.** |  | Yes. Complete 3 units of internship or practicum with a local firm. |
| **Additional requirements (provide description)** |  | Complete and submit “Actuary Minor Reflection Paper” |
| **Any** [**double-dipping restrictions**](https://catalog.arizona.edu/policy/double-use-courses-double-dipping) **(Yes/No)? If yes, provide description.** |  | Yes, minor coursework may not double dip with another minor. |

**Appendix B. Emphasis Print Information**-if applicable, complete the table below to indicate if proposed emphases should be printed on transcript and diploma. Add rows as needed. Note: emphases are displayed on transcript and diplomas as “ \_\_\_\_\_\_\_ Emphasis”. Delete EXAMPLE row before submitting.

|  |  |  |
| --- | --- | --- |
| Emphasis | Print on transcript | Print on diploma |
| EX: Fire Safety | Yes | Yes |
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