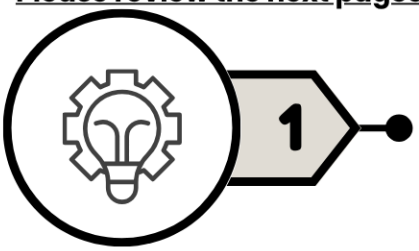
ASRE PATHWAY OF DISTINCTION IN MATHEMATICS

This is a general idea of the steps to complete an ASRE Pathway. The goal of this program is for students to begin during their freshman year and complete requirements throughout their college career. There is flexibility in the timeframe, but all requirements must be complete prior to graduation.

Please review the next pages for superscript notes with further information.



INITIATION

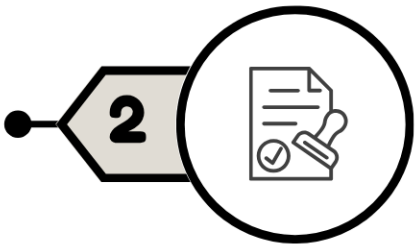
Begin by completing:

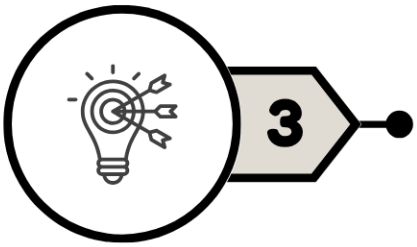
- UNIV 100 "First Year Seminar"

BUILDING SKILLS

Build skills through:

- MATH 360 "Fundamentals of Mathematics"
- MATH 462 "Linear Algebra"
- One (1) research related workshop[1]





MASTERING SKILLS

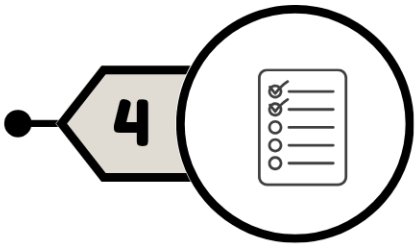
Master skills through:

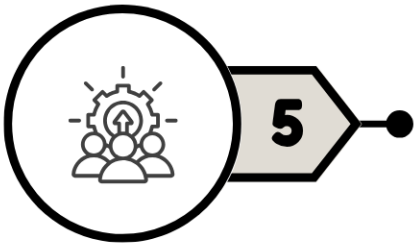
- STAT 425 "Introduction to Probability Theory"

PROFESSIONAL DEVELOPMENT

Develop professionally through:

- The professional development experience: either a leadership experience[3] OR mentored research[4] OR complete an internship[5] OR complete an REU[6]





DISSEMINATION

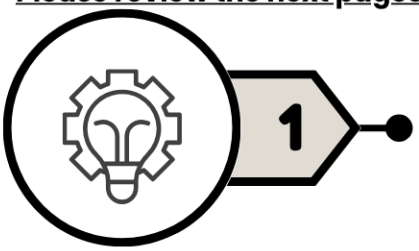
Disseminate through:

- The dissemination experience: either a presentation at a departmental, university, regional, national, or international conference[7] OR participate in a departmental, university, regional, national, or international competition[8]

ASRE PATHWAY OF EXCELLENCE IN MATHEMATICS

This is a general idea of the steps to complete an ASRE Pathway. The goal of this program is for students to begin during their freshman year and complete requirements throughout their college career. There is flexibility in the timeframe, but all requirements must be complete prior to graduation.

Please review the next pages for superscript notes with further information.



INITIATION

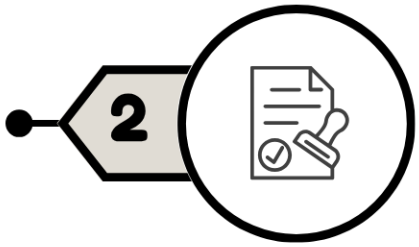
Begin by completing:

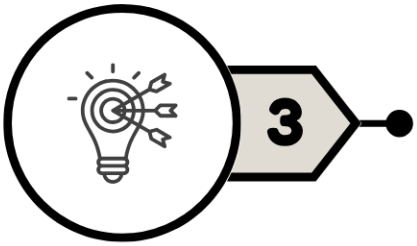
- UNIV 100 "First Year Seminar"

BUILDING SKILLS

Build skills through:

- MATH 360 "Fundamentals of Mathematics"
- MATH 462 "Linear Algebra"
- Two (2) research related workshops[1]





MASTERING SKILLS

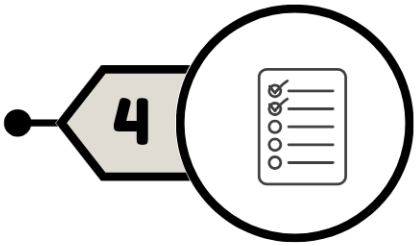
Master skills through:

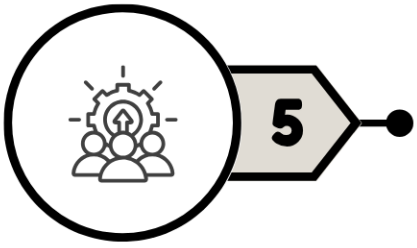
- STAT 425 "Introduction to Probability Theory"
- Two (2) of the approved MATH/STAT courses from list[2]

PROFESSIONAL DEVELOPMENT

Develop professionally through:

- The professional development experience: either a leadership experience[3] OR mentored research[4] OR complete an internship[5] OR complete an REU[6]





DISSEMINATION

Disseminate through:

- The dissemination part 1 experience: either a presentation at a departmental or university conference[7] OR participate in a departmental, university, regional, national, or international competition[8]
- The dissemination part 2 experience: either a presentation at a regional, national, or international conference[7] OR complete an honors thesis[9] OR author or co-author a manuscript submission[10]

Mathematics ADVANCE SRE Pathways

STUDENT VIEW

See the next page for superscript notes with more information.

Advance SRE Pathway of **Distinction** Curricular* and Co-curricular Events Required	Advance SRE Pathway of **Excellence** Curricular* and Co-curricular Events Required
Curricular 1. UNIV 100 2. MATH 360 3. MATH 462 4. STAT 425 **Co-curricular** 5. One (1) approved workshop[1] 6. Professional Development Leadership Experience[3] **OR** Mentored Research[4] **OR** Internship[5] **OR** REU[6] 7. Dissemination Presentation at a departmental, university, regional, national, or international conference[7] **OR** Competition[8]	**Curricular** 1. UNIV 100 2. MATH 360 3. MATH 462 4. STAT 425 5. Two (2) of the approved MATH/STAT courses[2] **Co-curricular** 6. Two (2) approved workshops[1] 7. Professional Development Leadership Experience[3] **OR** Mentored Research[4] **OR** Internship[5] **OR** REU[6] 8. Dissemination Part 1 Presentation at a departmental or university conference[7] **OR** Competition[8] 9. Dissemination Part 2 Presentation at a regional, national, or international professional conference[7] **OR** Honor's thesis[9] **OR** Peer reviewed manuscript submission[10]

Mathematics ADVANCE SRE Pathways
Superscript Notes:

*ASRE-approved courses only. Students who have earned credits for a course that is not ASRE approved may petition to substitute that course with a 300 or 400 level course. The SCRCS Advance office will review the petition for approval. Approved substitutions are only for the purpose of completing an Advance Pathway and are not approved as substitution for the degree.

[1]Approved workshops can include, but are not limited to SCRCS, library, or university workshops. SCRCS Advance Workshops can be found on the UL Lafayette SCRCS website. One (1) in-person SCRCS workshop is equivalent to two (2) virtual SCRCS workshops. Other workshops focused on research skills are possible with approval from the Mathematics Undergraduate Research Committee.

[2]Choose from MATH 497, MATH 498, MATH 499, STAT 497, STAT 498, or STAT 499

[3]Leadership experience includes but is not limited to, departmental service events, officership in departmental club, SGA officership, or student tutor/mentor. For departmental service events to count as leadership experience, students must assume a leadership role, such as planning, organizing, or implementing the event or activity. Credit will not be given for attendance only. Examples of departmental service events include Science Day, STEM Saturdays, Preview Days, or other outreach activities.

[4]Mentored research includes, but is not limited to, MUREs, SUREs.

[5]Internship could be internal or external to UL Lafayette. The Advance committee must approve all internships.

[6]An REU is a research-intensive experience for undergraduates sponsored by the National Science Foundation or other Federal agencies/laboratories. The Advance committee will evaluate the mentored research based on the research product submitted by students and input from their mentor.

[7]Presentation includes but is not limited to, participation in a poster session or an oral presentation for the department, college, university or a conference.

[8]Competition participation at a departmental, university, regional, national, or international event. Participation is required. Credit will not be given or attendance only.

[9]Honors Thesis or Thesis defended in the Department of Mathematics (minimum of two faculty).

[10]Must be author or co-authored. A faculty mentor can petition for an exception to this requirement, for instance, if a manuscript is in preparation. The Advance committee will evaluate these requests.