## ASRE PATHWAY OF DISTINCTION IN ELECTRICAL & COMPUTER ENGINEERING

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.

<u>Please review the next pages for superscript notes with further information.</u>



#### INITIATION

Begin by completing:

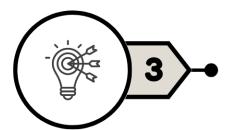
• UNIV 100 "First Year Seminar"

#### **BUILDING SKILLS**

Build skills through:

- EECE 340 "Microprocessors"
- <u>EECE 260</u> "Computational Methods in Electrical Engineering"





#### **MASTERING SKILLS**

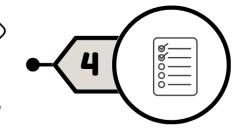
Master skills through:

- ENGR 220 "Fundamentals of Engineering Innovation"
- EECE 447 "Electrical Machines & Power"
- EECE 460 "Design Lab II"

#### PROFESSIONAL DEVELOPMENT

Develop professionally through:

 The professional development experience: either participate in a departmental, university, regional, national, or international <u>competition</u><sup>2</sup> OR complete an REU<sup>3</sup> OR complete an R&D COOP/Internship<sup>5</sup>





#### DISSEMINATION

Disseminate through:

- EECE 423 "Seminar I"
- <u>Presentation</u> at a departmental, university, regional, national, or international conference<sup>6</sup>

# ASRE PATHWAY OF EXCELLENCE IN ELECTRICAL & COMPUTER ENGINEERING

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.

<u>Please review the next pages for superscript notes with further information.</u>



#### INITIATION

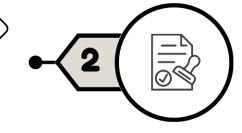
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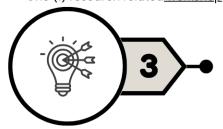
• UNIV 100 "First Year Seminar"

#### **BUILDING SKILLS**

Build skills through:

- EECE 340 "Microprocessors"
- <u>EECE 260</u> "Computational Methods in Electrical Engineering"
- One (1) research related workshop 1





#### **MASTERING SKILLS**

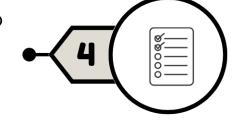
Master skills through:

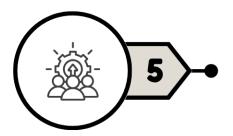
- ENGR 220 "Fundamentals of Engineering Innovation"
  - EECE 447 "Electrical Machines & Power"
- EECE 443 "Design Lab I"
- EECE 460 "Design Lab II"
- EECE 353 "Electronic Circuits"

#### PROFESSIONAL DEVELOPMENT

Develop professionally through:

 The professional development experience: either participate in a departmental, university, regional, national, or international <u>competition</u><sup>2</sup> OR complete an <u>REU</u><sup>3</sup> OR <u>mentored research</u><sup>4</sup> OR complete an <u>R&D COOP/Internship</u><sup>5</sup>





#### DISSEMINATION

Disseminate through:

- EECE 423 "Seminar I"
- <u>Presentation</u> at a departmental, university, regional, national, or international conference<sup>6</sup>
- The dissemination experience: either author or coauthor a <u>publication submission</u> OR <u>presentation</u> at a regional, national, or international conference<sup>7</sup>

### Electrical & Computer Engineering ADVANCE SRE Pathways <u>STUDENT VIEW</u>

See the next page for superscript notes with more information.

Curricular  1. UNIV 100 2. EECE 340 3. EECE 260 4. ENGR 220 5. EECE 447 6. EECE 460 7. EECE 423 7. EECE 423 7. EECE 423 8. Professional Development Competition² OR REU³ OR R&D COOP/Internship⁵ 9. Presentation at a departmental, university, regional, national, or international conference6  11. Professional Development Competition² OR R&D COOP/Internship⁵ 12. Presentation at a departmental, university, regional, national, or international conference6  13. Dissemination Peer reviewed publication submission (author or coauthor) OR Presentation at regional, national, or international conference6
2. EECE 340 3. EECE 260 4. ENGR 220 5. EECE 447 6. EECE 460 7. EECE 423 Co-curricular 8. Professional Development Competition² OR REU³ OR R&D COOP/Internship⁵ OR 9. Presentation at a departmental, university, regional, national, or international conference6  Presentation at a departmental, university, regional, national, or international conference6  12. Presentation at a departmental, university, regional, national, or international conference6  13. Dissemination Peer reviewed publication submission (author or coauthor) OR Presentation at regional, national, or international

### Electrical & Computer Engineering 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 identified as providing research skill. 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.

<sup>1</sup>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. 1 in person SCRCS workshop is equivalent to 2 virtual SCRCS workshops. Other workshops focused on research skills are possible by approval from the Electrical & Computer Engineering department.

<sup>2</sup>Participation in competition required. Departmental, university, regional, national, or international competitions will count. Examples: IEEE, LES, E&T week

<sup>3</sup>REU is a 10-week research intensive experience for undergraduates sponsored by the National Science Foundation.

<sup>4</sup>Student should be involved in 1 year of mentored research at UL Lafayette. Mentored research includes, but is not limited to, volunteer, scholarship, paid from faculty grants, MUREs (mentored undergraduate research experience), or SUREs (summer undergraduate research experience).

<sup>5</sup>COOP or internship must be external to UL Lafayette.

<sup>6</sup>Presentation may be poster or oral presentation.

<sup>7</sup>Presentation may be poster or oral presentation. Must be different conference presentation from requirement 12.