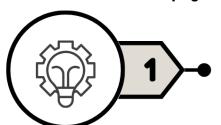
# ASRE PATHWAY OF DISTINCTION IN COMPUTER SCIENCE

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:

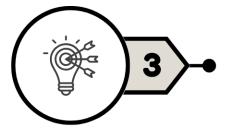
- UNIV 100 "First Year Seminar"
- CMPS 150 "Introduction to Computer Science"

# **BUILDING SKILLS**

Build skills through:

- CMPS 261 "Advanced Data Structures & Software Engineering"
- CMPS 340 "Design & Analysis of Algorithms"
- One (1) research related workshop<sup>1</sup>





# **MASTERING SKILLS**

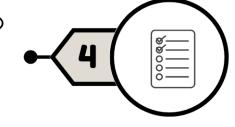
Master skills through:

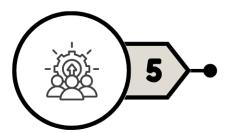
- CMPS 390 "Junior Project"
- CMPS 453 "Introduction to Software Methodology"
- CMPS 460 "Database Management Systems"
- CMPS 450 "Programming Language"

#### PROFESSIONAL DEVELOPMENT

Develop professionally through:

- CMPS 455 "Operating Systems"
- The professional development experience: either mentored research<sup>2</sup> OR complete an <u>internship<sup>3</sup> OR</u> complete <u>professional training</u><sup>4</sup> OR complete an REU<sup>5</sup>





# **DISSEMINATION**

Disseminate through:

- CMPS 490 "Senior Project"
- The dissemination experience: either a <u>presentation</u> at a departmental, university, regional, national, or international conference OR co-author a <u>manuscript submission</u><sup>2</sup>

# OF EXCELLENCE IN COMPUTER SCIENCE

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

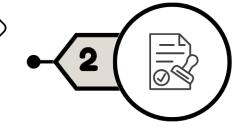
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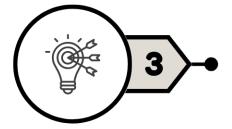
- UNIV 100 "First Year Seminar"
- CMPS 150 "Introduction to Computer Science"

# **BUILDING SKILLS**

Build skills through:

- CMPS 261 "Advanced Data Structures & Software Engineering"
- CMPS 340 "Design & Analysis of Algorithms"
- Two (2) research related workshops<sup>1</sup>





# **MASTERING SKILLS**

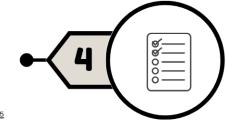
Master skills through:

- CMPS 390 "Junior Project"
- CMPS 453 "Introduction to Software Methodology"
- CMPS 460 "Database Management Systems"
- CMPS 450 "Programming Language"
- <u>Leadership Experience<sup>6</sup></u>

#### PROFESSIONAL DEVELOPMENT

Develop professionally through:

- CMPS 455 "Operating Systems"
- The professional development experience: either mentored research<sup>2</sup> OR complete an <u>internship<sup>3</sup> OR</u> complete <u>professional training<sup>4</sup> OR complete</u> an <u>REU<sup>5</sup></u>





# **DISSEMINATION**

Disseminate through:

- CMPS 490 "Senior Project"
- The dissemination experience: either a <u>presentation</u> at a regional, national, or international conference OR co-author a <u>manuscript submission</u><sup>2</sup> OR complete an <u>honors thesis</u>

# STUDENT VIEW

See the next page for superscript notes with more information.

Advance SRE Pathway of <u>Distinction</u> Curricular and Co-curricular Events Required	Advance SRE Pathway of <u>Excellence</u> Curricular and Co-curricular Events Required
Curricular	Curricular
1. UNIV 100 2. CMPS 150 3. CMPS 261 4. CMPS 340 5. CMPS 390 6. CMPS 453 7. CMPS 460 8. CMPS 450 9. CMPS 455 10. CMPS 490  Co-curricular	1. UNIV 100 2. CMPS 150 3. CMPS 261 4. CMPS 340 5. CMPS 390 6. CMPS 453 7. CMPS 460 8. CMPS 450 9. CMPS 455 10. CMPS 490  Co-curricular
11. One (1) approved workshop <sup>1</sup> 12. Professional Development Mentored research <sup>2</sup> OR	11. Two (2) approved workshops <sup>1</sup> 12. Professional Development  Mentored Research <sup>2</sup> OR
Internship <sup>3</sup> OR Professional training <sup>4</sup> OR REU <sup>5</sup>	Internship <sup>3</sup> OR Professional training <sup>4</sup> OR REU <sup>5</sup>
13. <u>Dissemination</u> Presentation at a departmental, university, regional, national, or international conference  OR Peer-reviewed manuscript submission <sup>7</sup>	13. <u>Leadership Experience</u> <sup>6</sup> 14. <u>Dissemination</u> Presentation at a departmental, university, regional, national, or international conference  OR Peer-reviewed manuscript submission <sup>7</sup> OR Honors thesis

# Computer Science 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 School of Computing and Informatics.

<sup>2</sup>Mentored research includes but is not limited to volunteer, scholarship, paid form faculty grants, MUREs (mentored undergraduate research experience), SUREs (summer undergraduate research experience).

<sup>3</sup>Internship could be internal or external to UL Lafayette. The interns are encouraged to complete CMPS 497 or CMPS 498.

<sup>4</sup>Professional training could include 2-week summer schools or research laboratory visits.

<sup>5</sup>REU is a 10-week research intensive experience for undergraduates sponsored by the National Science Foundation or other Federal agencies/laboratories.

<sup>6</sup>Leadership experience includes but is not limited to departmental service events, officership in departmental club, or student tutor/mentorship.

<sup>7</sup>Must be co-authored. A faculty mentor can petition for an exception to this requirement, for instance, if a manuscript is in preparation. The School of Computing and Informatics faculty will evaluate these requests.