COMPUTER SCIENCE UNDERGRADUATE PATHWAY

Saint Louis University's Undergraduate Computer Science Pathway will prepare students to enter the next semester of one of our bachelor's degree programs in computer science (https://catalog.slu.edu/colleges-schools/science-engineering/computer-science/#programstext).

Curriculum Overview

The Undergraduate Pathway curriculum consists of English and University courses. Students will satisfy core requirements as they build their language and academic skills.

Program Entry Requirements

One-Semester (Accelerated) Pathway

- · Secondary/high school degree or equivalent
- · 2.50 minimum GPA on a 4.0 scale
- · Language requirement:
 - · TOEFL iBT 75 or
 - IELTS 6.0 or
 - PTEA 50 or
 - · Duolingo 100 or
 - · Completion of Two-Semester (Standard) Pathway

Two-Semester (Standard) Pathway

- · Secondary/high school degree or equivalent
- · 2.50 minimum GPA on a 4.0 scale
- · Language requirement:
 - · TOEFL iBT 60 or
 - IELTS 5.5 or
 - PTEA 44 or
 - Duolingo 90 or
 - Completion of Academic English Level 4 or
 Completion of Three-Semester (Comprehensive) Pathway

Learning Outcomes

- Students will be able to execute a variety of verbal tasks in academic settings using English that can be understood by those unaccustomed to non-native speakers.
- Students will be able to execute a variety of written tasks in academic settings using English that can be understood by those unaccustomed to non-native writers.
- Students will be able to apply a process-driven approach to completing verbal and written academic assignments in multiple disciplines and modes.
- Students will be able to deploy reflective and self-regulated learning strategies.

Requirements

One-Semester (Accelerated) Pathway

| | • | , | , | |
|------------|-------------------|----|---|---------|
| Code | Title | | | Credits |
| Academic E | nglish Requiremer | nt | | |

| Total Credits | | 17-18 |
|---|--|-------|
| CORE 1500 | Cura Personalis 1: Self in Community | 1 |
| Computer Science Elective Requirement (1 course) (p. 2) | | 3 |
| General Elective Requirement (1 course) (p. 1) | | 3 |
| | laced in the appropriate mathematics class based on ement test. MATH 1520 is recommended. | 1 |
| Mathematics Requirements (1 course) (p. 1) | | 3-4 |
| EAP 1010 | Pathway Recitation Lab I | 1 |
| EAP 1220 | Academic Reading and Study Skills II | 3 |

Two-Semester (Standard) Pathway

| Code | Title | Credits | |
|---|--|---------|--|
| Academic English | n Requirement | | |
| EAP 1000 | Academic Writing and Editing Skills I | 3 | |
| EAP 1010 | Pathway Recitation Lab I | 1 | |
| EAP 1020 | Academic Reading and Study Skills I | 3 | |
| EAP 1030 | Academic Presentations and Speaking Skills | 1 | |
| EAP 1200 | Academic Writing and Editing Skills II | 3 | |
| EAP 1220 | Academic Reading and Study Skills II | 3 | |
| Mathematics Requirements (2 courses) (p. 1) | | | |
| Students are placed in the appropriate mathematics class based on | | | |

Students are placed in the appropriate mathematics class based on an online placement test. The recommended mathematics sequence is MATH 1510 and MATH 1520.

| General Elective Requirement (2 courses) (p. 1) | | 6 |
|---|--|-------|
| Computer Scie | nce Elective Requirement (1 course) (p. 2) | 3 |
| CORE 1500 | Cura Personalis 1: Self in Community | 1 |
| Total Credits | | 30-32 |

Mathematics Requirements

| Code | Title | Credits |
|-----------|--|---------|
| MATH 0260 | Intermediate Algebra ¹ | 3 |
| MATH 1200 | College Algebra | 3 |
| MATH 1320 | Survey of Calculus | 3 |
| MATH 1400 | Pre-Calculus | 3 |
| MATH 1510 | Calculus I | 4 |
| MATH 1520 | Calculus II | 4 |
| CORE 3200 | Ways of Thinking: Quantitative Reasoning | 3 |

¹ This course does not count towards the degree.

Supported Core Requirements

Note: These courses are supported by EAP 1010 Recitation Lab. Pathway students are required to take one to two of these courses and their associated lab courses.

| Code | Title Cred | lits |
|-----------|--|------|
| ASTD 1000 | Intro to American Culture: Movements, Myths, and Methods | 3 |
| FPA 1000 | Intro to the Arts | 3 |
| POLS 1600 | Introduction to International Politics | 3 |
| WGST 1900 | Introduction to Women's and Gender Studies | 3 |
| CORE 1600 | Ultimate Questions: Theology | 3 |

Computer Science Elective Requirement

| Code | Title | Credits |
|-----------|--|---------|
| CSCI 1010 | Introduction to Computer Science: Principles | 3 |
| CSCI 1030 | Introduction to Computer Science: Game Desig | ın 3 |
| CSCI 1040 | Introduction to Computer Science: Mobile Computing | 3 |
| CSCI 1050 | Introduction to Computer Science: Multimedia | 3 |
| CSCI 1060 | Introduction to Computer Science: Scientific Programming | 3 |
| CSCI 1060 | Introduction to Computer Science: Scientific Programming | 3 |
| CSCI 1070 | Introduction to Computer Science: Taming Big Data | 3 |
| CSCI 1080 | Introduction to Computer Science: World Wide Web | 3 |

Continuation Standards

Earn a 2.70 overall grade point average (GPA) with no grades below a "C."

Progression Requirements

- Minimum 2.70 cumulative grade point average (GPA).
- · Grade of "B" or better in all classes counting toward major
- No C-/D/F/W/I/P/NP/S/U grades
- · Successful completion of Program Portfolio

Roadmap

Roadmaps are recommended semester-by-semester plans of study for programs and assume full-time enrollment unless otherwise noted.

Courses and milestones designated as critical (marked with !) must be completed in the semester listed to ensure a timely graduation. Transfer credit may change the roadmap.

This roadmap should not be used in the place of regular academic advising appointments. All students are encouraged to meet with their advisor/mentor each semester. Requirements, course availability and sequencing are subject to change.

One-Semester (Accelerated) Pathway

| Course | Title | Credits |
|----------------|--|---------|
| Year One | | |
| Fall | | |
| EAP 1200 | Academic Writing and Editing Skills II | 3 |
| EAP 1220 | Academic Reading and Study Skills II | 3 |
| MATH 1510 | Calculus I | 4 |
| CSCI 1000-1099 | Introduction to Computer Science | 3 |
| CORE 1600 | Ultimate Questions: Theology | 3 |
| EAP 1010 | Pathway Recitation Lab I | 1 |
| CORE 1500 | Cura Personalis 1: Self in Community | 1 |
| | Credits | 18 |
| | Total Credits | 18 |

Two-Semester (Standard) Pathway

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|-------------------|---|---------|
| Course | Title | Credits |
| Year One | | |
| Fall | | |
| EAP 1000 | Academic Writing and Editing Skills I | 3 |
| EAP 1020 | Academic Reading and Study Skills I | 3 |
| EAP 1030 | Academic Presentations and Speaking Skills | 1 |
| MATH 1510 | Calculus I (or higher) | 4 |
| Select one of the | following Core requirements: | 3 |
| POLS 1600 | Introduction to International Politics | |
| ASTD 1000 | Intro to American Culture: Movements, Myths, and Methods | |
| CORE 1600 | Ultimate Questions: Theology | |
| EAP 1010 | Pathway Recitation Lab I | 1 |
| CORE 1500 | Cura Personalis 1: Self in Community | 1 |
| | Credits | 16 |
| Spring | | |
| EAP 1200 | Academic Writing and Editing Skills II | 3 |
| EAP 1220 | Academic Reading and Study Skills II | 3 |
| MATH 1520 | Calculus II (or higher) | 4 |
| CSCI 1000-1099 | Introduction to Computer Science | 3 |
| Select one of the | following Core requirements: | 3 |
| FPA 1000 | Intro to the Arts | |
| WGST 1900 | Introduction to Women's and Gender Studies | |
| EAP 1010 | Pathway Recitation Lab I | 1 |
| | Credits | 17 |
| | Total Credits | 33 |