

# ENGINEERING UNDERGRADUATE PATHWAY

Saint Louis University's Engineering Undergraduate Pathway prepares students to enter the next semester of a bachelor's degree program in engineering at SLU. This undergraduate pathway leads to one of the following degrees: biomedical engineering, civil engineering, computer engineering, electrical engineering, engineering physics, mechanical engineering or physics.

## 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

1. 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.
2. 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.
3. Students will be able to apply a process-driven approach to completing verbal and written academic assignments in multiple disciplines and modes.
4. Students will be able to deploy reflective and self-regulated learning strategies.

## Requirements One-semester (Accelerated) Pathway

Code	Title	Credits
<b>Academic English Requirement</b>		
EAP 1200	Academic Writing and Editing Skills II	3
EAP 1220	Academic Reading and Study Skills II	3
<b>Mathematics Requirements (1 course) (p. 1)</b>		<b>3-4</b>
CORE 1600	Ultimate Questions: Theology	3
EAP 1010	Pathway Recitation Lab I	1
SE 1700	Engineering Fundamentals	2
<i>Students are placed in the appropriate mathematics class based on an online placement test. MATH 1520 is recommended.</i>		
<b>Discipline Specific Introductory Requirement (1 course) (p. )</b>		<b>1</b>
CORE 1500	Cura Personalis 1: Self in Community	1
<b>Total Credits</b>		<b>17-18</b>

## Two-semester (Standard) Pathway

Code	Title	Credits
<b>Academic English Requirement</b>		
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
<b>Mathematics Requirements (2 courses) (p. 1)</b>		<b>6-8</b>
<i>Students are placed in the appropriate mathematics class based on an online placement test. The recommended mathematics sequence is MATH 1510 and MATH 1520.</i>		
<b>Supported Core Requirement (1 course) (p. 1)</b>		<b>3</b>
SE 1700	Engineering Fundamentals	2
CORE 1500	Cura Personalis 1: Self in Community	1
<b>Total Credits</b>		<b>26-28</b>

## Mathematics Requirements

Code	Title	Credits
MATH 1000	Intermediate Algebra	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

## 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	Credits
ASTD 1000	Intro to American Culture: Movements, Myths, and Methods	3
VPA 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

## Continuation Standards

Fulfillment of the continuation standards of the receiving degree program

## Progression Requirements

- Fulfillment of the continuation standards of the receiving degree program
- No D/F/I/NP/U grades
- Successful completion of pathway 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
<b>Year One</b>		
<b>Fall</b>		
EAP 1200	Academic Writing and Editing Skills II	3
EAP 1220	Academic Reading and Study Skills II	3
MATH 1510	Calculus I (or higher)	4
CORE 1600	Ultimate Questions: Theology	3
EAP 1010	Pathway Recitation Lab I	1
CORE 1500	Cura Personalis 1: Self in Community	1
Engineering Elective		2-3
<b>Credits</b>		<b>17-18</b>
<b>Total Credits</b>		<b>17-18</b>

## Two-semester (Standard) Pathway

Course	Title	Credits
<b>Year One</b>		
<b>Fall</b>		
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

CORE 1500	Cura Personalis 1: Self in Community	1
<b>Credits</b>		<b>12</b>
<b>Spring</b>		
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
Engineering Elective		3
Supported Core Requirement		3
EAP 1010	Pathway Recitation Lab I	1
<b>Credits</b>		<b>17</b>
<b>Total Credits</b>		<b>29</b>