

# Computer Science (Data Science Option) Graduation Requirements

University of Washington

The graduation requirements shown below are subject to change.

For more information, see the CSE undergraduate webpages at  
<https://www.cs.washington.edu/academics/ugrad/current-students/degree>

## General Education Component

### Language Skills (5-20 credits)

- ☐ \*English Composition (5)
- ☐ Foreign Language through 3<sup>rd</sup> quarter (0-15)

### Diversity Requirement (5 credits)

- ☐ UW Diversity Requirement (5)

Note: These credits may overlap with other requirements.

### Reasoning and Writing in Context (15 credits)

- ☒ Reasoning (5)
- ☐ UW approved writing course (W courses) and/or additional composition (10)

Note: These credits may overlap with other requirements.  
Required courses in CSE and MATH fulfill the Reasoning requirement.

### Areas of Inquiry (75 credits)

- ☐ Arts & Humanities (20)
- ☐ Social Sciences (20)
- ☐ Natural Sciences (20)
- ☐ Additional coursework (15)

Note: All Mathematics & Sciences courses below (20-23 credits) as well as CSE 121, 122, and 123 (up to 12 credits) count toward the 20 credits of Natural Sciences and 15 credits of Additional Coursework requirements.

## Mathematics & Science Component

### Mathematics (15-18 credits)

- ☐ \*MATH 124, 125, 126 or 134, 135, 136 (honors) (15)  
Calculus with Analytical Geometry
- ☐ MATH 208 (waived if MATH 136 taken) (3)

### Natural Science (5 credits)

- ☐ \*One course from the list of [approved Natural Science courses](#) (5)

## Computer & Data Science Component

### Fundamentals (24-25 credits)

- ☐ \*CSE 123 Intro to Computer Programming III (4)  
**OR**
- ☐ \*CSE 143 Computer Programming II (5)
- ☐ CSE 311 Foundations of Computing I (4)
- ☐ CSE 312 Foundations of Computing II (4)
- ☐ CSE 331 Software Design & Implementation (4)
- ☐ CSE 332 Data Structures and Parallelism (4)
- ☐ CSE 351 The Hardware/Software Interface (4)

### Data and Society (3-5 credits)

- ☐ SOC 225 Data and Society (3/5)

### Core & Electives (33 credits)

At least 33 additional credits, including at least:

- ☐ CSE 421 Intro to Algorithms (3)
- ☐ CSE 444 Database Internals (4)
- ☐ CSE 446 Machine Learning (4)
- ☐ CSE 442 Data Visualization (4)
- ☐ 1 additional course chosen from the (3-4)  
[Data Science Electives](#)
- ☐ 1 additional course from the CSE [Core Courses](#) list (3-4)
- ☐ Either 1 additional [CSE Core Course](#) or 1 course (3-5)  
from the CSE [CSE Capstone list](#)
- ☐ Additional courses from either the CSE (5-9)  
[Core Courses](#) list or the [CSE Elective list](#)  
to bring total CSE Elective credits to 33

### Free Electives to bring total credits up to the 180 required for graduation

Note: A student's cumulative GPA must not fall below a 2.0.

\* Denotes prerequisites that must be fully completed before applying to the major. This does not apply to direct-to-major freshmen applicants.