

# Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

To: University of California, San Diego  
2022-2023 General Catalog, Quarter

From: De Anza College  
2022-2023 General Catalog, Quarter

## Cognitive Science B.S. with Specialization in Machine Learning and Neural Computation

### GENERAL INFORMATION

DATED MATERIAL, SUBJECT TO CHANGE. PLEASE CONSULT CURRENT UCSD GENERAL CATALOG FOR ANY ADDITIONAL INFORMATION.

#### Special Advising Note:

Transfer students are strongly advised to complete as many preparatory courses as soon as possible for their major before enrolling at UC San Diego. Preparing well for the major helps students move efficiently toward graduation.

Cognitive science is a diverse field which is unified and motivated by a single basic inquiry: What is cognition? How do people, animals, or computers 'think', act, and learn? In order to understand the mind/brain, cognitive science brings together methods and discoveries from neuroscience, psychology, linguistics, philosophy, and computer science. UCSD has been at the forefront of this exciting field and our Cognitive Science Department was the first of its kind in the world. It is part of an exceptional scientific community and remains a dominant influence in the field it helped create. In addition to preparing undergraduates for careers in a variety of sciences, the major also provides an excellent background for many professional fields, including medicine, clinical psychology, and information technology.

Students must choose one of the following Math sequences: MATH 10ABC and 18 or MATH 20AB and 18. \* Machine Learning and Neural Computation students are strongly advised to take MATH 20-A-B-C-E, MATH 18, and COGS 18 or CSE 8A or CSE 11, as they are pre-requisites for upper-division electives. For more information, please visit <http://www.cogsci.ucsd.edu/undergraduates/major/index.html>

UC San Diego Advanced Placement (AP) and International Baccalaureate (IB) credit policies are detailed in the links below:

Advanced Placement (AP) <https://www.ucsd.edu/catalog/pdf/APC-chart.pdf>

International Baccalaureate (IB) [https://catalog.ucsd.edu/\\_files/international-baccalaureate-credits-chart.pdf](https://catalog.ucsd.edu/_files/international-baccalaureate-credits-chart.pdf)

**MATH 10A** - Calculus I (4.00)

← No Course Articulated

--- And ---

**MATH 10B** - Calculus II (4.00)

← No Course Articulated

--- And ---

**MATH 10C** - Calculus III (4.00)

← No Course Articulated

--- And ---

**MATH 18** - Linear Algebra (4.00)

← **MATH 2B** - Linear Algebra (5.00)

--- Or ---

**MATH 2BH** - Linear Algebra - HONORS (5.00)

--- Or ---

**MATH 20A** - Calculus for Science and Engineering (4.00)

← **MATH 1A** - Calculus (5.00)

--- Or ---

**MATH 1AH** - Calculus - HONORS (5.00)

--- And ---

**MATH 20B** - Calculus for Science and Engineering (4.00)

← **MATH 1B** - Calculus (5.00)

--- Or ---

**MATH 1BH** - Calculus - HONORS (5.00)

--- And ---

**MATH 18** - Linear Algebra (4.00)



**MATH 2B** - Linear Algebra (5.00)

--- Or ---

**MATH 2BH** - Linear Algebra - HONORS (5.00)

**COGS 14A** - Introduction to Research Methods (4.00)



**PSYC 2** - Research Methods in Psychology (6.00)

**COGS 14B** - Introduction to Statistical Analysis (4.00)



**MATH 10** - Introductory Statistics (5.00)

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**PSYC 15** - Statistics and Research Methods in Social Science (4.00)  
Same-As: SOC 15

**COGS 1** - Introduction to Cognitive Science (4.00)



This course must be taken at the university after transfer

**COGS 10** - Cognitive Consequences of Technology (4.00)



No Course Articulated

--- Or ---

**DSGN 1** - Design of Everyday Things (4.00)



No Course Articulated

**COGS 13** - Field Methods: Studying Cognition in the Wild (4.00)



No Course Articulated

**COGS 17** - Neurobiology of Cognition (4.00)



**PSYC 24** - Introduction to Psychobiology (4.00)

**BILD 62** - Introduction to Python for Biologists (4.00)



No Course Articulated

--- Or ---

**COGS 18** - Introduction to Python (4.00)



**CIS 40** - Introduction to Programming in Python (4.50)

--- Or ---

**CSE 6R** - Introduction to Computer Science and Object-Oriented Programming: Python (4.00)



**CIS 41A** - Python Programming (4.50)

--- Or ---

**CSE 8A** - Introduction to Programming and Computational Problem Solving I (4.00)



**CIS 22A** - Beginning Programming Methodologies in C++ (4.50)

--- Or ---

**CIS 36A** - Introduction to Computer Programming Using Java (4.50)

--- Or ---

**CIS 40** - Introduction to Programming in Python (4.50)

--- Or ---

**CSE 11** - Introduction to Programming and Computational Problem Solving - Accelerated Pace (4.00)



**CIS 35A** - Java Programming (4.50)

--- Or ---

**CIS 36A** - Introduction to Computer Programming Using Java (4.50)

--- And ---

**CIS 36B** - Intermediate Problem Solving in Java (4.50)

**END OF AGREEMENT**