SPECIALIZATION IN COMPUTING

FOR COGNITIVE SCIENCE MAJORS

The Specialization in Computing is available for Cognitive Science majors *only*. While not a major/minor itself, it provides an extensive education in computer science and an introduction to its applications in cognitive psychology and neuroscience.

Cognitive Science majors may petition to declare the Specialization in Computing once you have major standing. Please contact the Psychology Undergraduate Advising Office via Message Center if you would like to add the specialization.

Cognitive Science majors may earn a Specialization in Computing by completing the following requirements (six courses total) with **a grade of C or better** in each course:

Four (4) Courses from the following:

Program in Computing 10A .... Introduction to Programming
Program in Computing 10B .... Intermediate Programming
Program in Computing 10C .... Advanced Programming
Program in Computing 15 .... Introduction to Lisp and Symbolic Computation
Program in Computing 16A .... Python with Applications I
Program in Computing 16B .... Python with Applications II
Program in Computing 20A .... Principles of Java Language with Applications
Program in Computing 40A .... Introduction to Programming for Internet
Psychology 20A ....MATLAB Programming for Behavioral Sciences
Psychology 20B ....Advanced Topics in MATLAB Programming for Behavioral Sciences
Psychology 30.......................................Web Programming for Psychology
Statistics 20...Introduction to Statistical Programming with R
Statistics 21...Python and Other Technologies for Data Science

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Two (2) courses from the following:

Psychology 85 .... Introduction to Cognitive Science
Psychology 119D .... Learning in Biological and Artificial Neural Networks
Psychology 121 .... Laboratory in Cognitive Psychology
Psychology 142H................................. Advanced Statistical Methods in Psychology (Honors)
Psychology 186A .... Cognitive Science Laboratory: Introduction to Theory and Simulation
Psychology 186B .... Cognitive Science Laboratory: Neural Networks
Psychology 186C................................. Cognitive Science Laboratory: Psychophysical Theories and Methods
Psychology 186D .... Laboratory in Functional Neuroimaging
Psychology 199* .... Directed Individual Research and Study

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*Project must be approved by the Vice Chair.

Note that Computer Science 31 & 32 can be used to satisfy PIC 10A, 10B, and 10C for the specialization. Please contact the Psych Advising Office to submit a petition upon completion of the courses.

Various majors at UCLA offer the Specialization in Computing, but requirements may differ. The requirements listed above are for Cognitive Science majors only.

Courses for the major may be applied to the Specialization in Computing. Unlike minors or double majors, there is no cap on overlapping courses. The Specialization in Computing will be indicated on your transcript and diploma after you complete all requirements.