# Bachelor of Arts in Cognitive Science

Program Director: Professor Barbara Malt

## College distribution requirements

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<th>Requirement</th>
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<tr>
<td>College Seminar</td>
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<tr>
<td>Composition &amp; Literature (2 semesters)</td>
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<tr>
<td>Mathematics (at least 3 credits)</td>
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<tr>
<td>Natural Science (at least 8 credits; must include 1 lab)</td>
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<tr>
<td>Social Science (at least 8 credits)</td>
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<tr>
<td>Arts and Humanities (at least 8 credits)</td>
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<td>Writing Intensive course (may be a major course, one of the above, or any elective)</td>
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## Required Collaterals.

- CSE 003 & 004 or CSE 007

## Research Methods and Tools

- PSYC 201, PSYC 202 (pre-req PSYC 201), ECO 045, SOAN 111, CSE 160 or BIOS 130

## Required Introductory Course

- COGS 007 [typically offered yearly in the spring]

## Disciplinary Core Courses

- COGS/PSYC 117 [typically offered yearly in the fall; pre-req PSYC 001 or COGS 007]
- COGS/PSYC 176 [typically offered yearly in the spring; pre-req PSYC 001 or COGS 007]
- COGS/PHEL 250 [typically offered every other year; pre-req any 100-level PHEL course]
- COGS/CSE 127 or COGS/CSE 327 [typically offered alternate years in the spring. CSE 127 pre-req CSE 002 or CSE 003 & 004 or CSE 007. CSE 327 pre-req CSE 17 and CSE 140]

## Major Electives. A minimum of five electives, with at least one course from each of the three tracks.

<table>
<thead>
<tr>
<th>Track: Artificial Intelligence and Formal Models</th>
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<tr>
<td>Track: Cognition, Culture and Meaning</td>
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<tr>
<td>Track: Cognitive Neuroscience</td>
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## Research Experience. Optional but encouraged. Students planning to do Honors are encouraged to have at least two semesters before enrolling in COGS 391

- COGS 161 and/or COGS 361

## Senior Project: proposal (fall) and execution (spring) [start thinking about this junior year!]

- COGS 301 (project) or COGS 391 (Honors)
- COGS 302 (project) or COGS 392 (Honors)

Please see reverse for important notes
**Major Notes**

➢ Students are encouraged to take research credits (COGS 161) beginning in the sophomore year or even earlier, especially if planning to do Honors. Students are encouraged to continue with research and enroll in COGS 361 after several semesters of COGS 161.

➢ Students planning to do a senior project or Honors involving experimental design are strongly encouraged to take PSYC 203 after completing PSYC 201 and 202.

➢ Additional coursework in mathematics is recommended (particularly CSE 140 or CSE 261/MATH 261). Also recommended are the non-major courses ANTH 011, ECO 001, and PSYC 001 which provide valuable background.

➢ Students intending to take behavioral neuroscience BIOS courses in the Cognitive Neuroscience track need to take the prerequisite sequence CHM 030 or CHM 040, and BIOS 041, with their associated laboratory courses, by the end of the sophomore year.

➢ Majors seeking honors in Cognitive Science must have a 3.30 GPA in the major and a 3.30 GPA overall, and must complete COGS 391 & COGS 392. Theses submitted for honors will be evaluated by a committee of at least three cognitive science faculty.

➢ Transfer credits and Study Abroad course work may be applied toward the major with appropriate approvals. However, students must take a minimum of COGS 007 and six other major courses including the two-semester senior project/Honors thesis at Lehigh.

**General Notes**

➢ Students must earn a minimum of 120 credits to earn a bachelor’s degree from Lehigh.

➢ Courses from the major can be used to satisfy CAS distribution requirements in only one area (but may fully satisfy that area, i.e. all 8 SS credits). Because of this rule, a student using COGS/PSYC 176 for NS distribution must use non-major courses for SS.

➢ No more than one course can be double-counted toward a major and a minor, AND no more than one course can overlap between two minors. Three courses may overlap for double majors.

➢ For a dual degree (B.A. plus B.S. or two B.S. degrees), the student must satisfy major requirements for both degrees and earn a minimum of 30 credits in the second major that do not overlap with those required for the first degree. There is no limit on the number of overlapping courses but there must be 30 non-overlapping credits.

➢ For a dual degree across colleges (e.g., CAS and RCEAS), the student must also satisfy college distribution requirements for both degrees, except for the CAS “college seminar” (first-year seminar). For RCEAS students, ENGR 05 is used to fulfill this CAS requirement.