

# B.S. in C.S - Artificial Intelligence Track

(22 Courses, 7 Credits, 4 Years)

## *Semester-By-Semester Schedule*

Year on Campus	Fall Semester	Spring Semester
1st	Intro to C.S. (COM 1300)	Data Structures (COM 1320)
	<i>Calculus I (MAT 1412)</i>	<i>Calculus II (MAT 1413)</i>
	YC Core #1	Mathematics for Computer Science (COM 1310)
		YC Core #2
2nd	Introduction to Algorithms (COM 2545)	Design & Analysis of Algorithms (COM 2546)
	<i>Linear Algebra (MAT 2105)</i>	<i>Multivariable Calculus (MAT 1510)</i>
	Computer Organization (COM 2113)	<i>Probability Theory (MAT 2461)</i>
	YC Core #3	YC Core #4
3rd	Artificial Intelligence (COM 3760)	Machine Learning (COM 3920)
	<i>Mathematical Statistics (MAT 2462)</i>	Modern Data Mgmt (COM 3580)
	Programming Languages (COM 3640)	Operating Systems (COM 3610)
	YC Core #5	YC Core #6
4th	Introduction to Distributed Systems (COM 3800)	Natural Language Processing (COM 3930)
	Machine Learning Applied (COM 4010)	Capstone Project (4020)
	Parallel Algorithms & Programming (COM 3820)	YC Core #8 - ELECTIVE
	YC Core #7 - ELECTIVE	

# Non-C.S. Requirements for the B.S. and B.A. Degrees

- All students need a total of 128 credits to graduate
- Students in the B.A. track have the same non-C.S. requirements as all other B.A. students in Yeshiva College
- Students in either B.S. track have the non-C.S. requirements show in the table below.
- B.S. Computer Science programs require no less than 8 full time terms, including 8 terms of UTS. Students must be full time students for 8 terms at Yeshiva College to receive the degree.

<u>Requirement</u>	<u>Credits</u>	<u>Number of Courses</u>
First Year Writing	3	1
BIB, JHI, JST, or JTP	4	2
Choose from Contemporary World Cultures (COWC) or Cultures Over Time (CUOT)	3	1
Interpreting the Creative (INTC)	3	1
Human Behavior and Social Institutions (HBSI)	3	1
Electives: choose from any of the following Y.C. departments: ART, BIO, BIB, CHE, ECO, ENG, HEB, HIS, JHI, JST, JTP, MUS, PHI, PHY, POL, PSY, SOC, SPA	6	2
<b>TOTALS</b>	<b>22</b>	<b>8</b>

For more details regarding what the various categories (COWC, HBSI, etc.) mean, what Y.C. courses count towards them, etc. please consult Y.C.'s web site or academic advising.

Since B.S. students must be on campus for 8 semesters and there are 8 non-C.S. requirements, B.S. students can take one non-C.S. requirement each semester to pace themselves and evenly distribute their workload. We caution against waiting until late in your college career to fulfill these requirements, as you may not find all the courses you need being offered exactly when you would need them if you procrastinate.

For answer to frequently asked questions about the requirements, please visit

<https://www.yu.edu/yeshivacollege/ug/computer-science/requirements>.