

# Bachelor of Arts in Computer Systems

The Bachelor of Arts (BA) in Computer Systems program emphasizes the application of principles to practical problem solving in a domain of interest. Students complete a core set of foundation courses and courses in one of the following concentrations: system administration, game development, and general interdisciplinary.

## Requirements (60-67 units)

Total units required for graduation: 120

## Requirements for the B.A. in Computer Systems

### Lower-division requirements (21)

CSE 2010	Computer Science I	4
CSE 2020	Computer Science II	4
CSE 2130	Machine Organization	3
MATH 2210	Calculus I	4
MATH 2720	Discrete Mathematics	3
MATH 2265	Statistics with Applications	3

### Upper-division requirements (12)

CSE 4050	Web Application Development	3
CSE 4500	Platform Computing	3
CSE 4550	Software Engineering	3
CSE 4880	Ethics Senior Seminar	3

Ethics Senior Seminar will count towards the GE Writing Intensive Requirement.

### Electives (9)

Nine units chosen from CSE courses numbered 3000 and above.	9
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### Concentration (18-25)

Students must satisfy the requirements of one of the concentrations 18-25 listed below:

**Total Units** 60-67

## Concentrations (18-25 units)

### General Interdisciplinary Concentration (18 units)

(Program Code: CSGI)

Three units chosen from CSE courses numbered 3000 and above.	3
Fifteen units of coursework in another discipline such as a minor or other cohesive program of study; subject to approval by the School of Computer Science and Engineering.	15

**Total Units** 18

### Game Development Concentration (25 units)

(Program Code: CSGD)

PHYS 2500	General Physics I	4
or PHYS 2000	Introduction to Physics I	
MATH 2220	Calculus II	4

MATH 2310	Applied Linear Algebra	4
PHYS 2500L	General Physics I Lab	1
or PHYS 2000L	Introduction to Physics I Lab	
CSE 4200	Computer Graphics	3
CSE 4410	Game Programming	3
CSE 4400	Game Design	3
Three units of supporting coursework such as 3D modeling, animation, level design, image editing, and other coursework related to game development. Subject to approval by the School of Computer Science and Engineering.		3
<b>Total Units</b>		<b>25</b>

### System Administration Concentration (23 units)

(Program Code: CSSA)

CSE 3100	Digital Logic	4
CSE 3650	Systems Administration I	3
CSE 3660	Systems Administration II	3
CSE 4010	Contemporary Computer Architecture	4
CSE 4600	Operating Systems	3
CSE 5720	Database Systems	3
Three units chosen from CSE courses numbered 3000 and above.		3
<b>Total Units</b>		<b>23</b>