

SIUE Computer Science B.S. Degree Requirements



Student: _____

SID: _____

Computing Requirements

Computer Science Core

CS 111	(3)	Concepts of Computer Science ¹	_____	_____
CS 140	(4)	Introduction to Computing I	_____	_____
CS 150	(3)	Introduction to Computing II	_____	_____
CS 240	(3)	Introduction to Computing III	_____	_____
CS 275	(3)	Interaction Programming	_____	_____
CS 312	(3)	Intro to Organization & Architecture	_____	_____
CS 314	(3)	Operating Systems	_____	_____
CS 321	(3)	Human-Computer Interaction Design	_____	_____
CS 325	(3)	Software Engineering ²	_____	_____
CS 330	(3)	Programming Languages	_____	_____
CS 340	(3)	Algorithms & Data Structures	_____	_____
CS 425	(3)	Senior Project: Software Design	_____	_____
CS 499	(3)	Senior Project: Software Implementation	_____	_____
ECE 282	(4)	Digital Systems Design	_____	_____

Computing Electives (5 required³)

CS 382	(3)	Game Design, Development, & Tech	_____	_____
CS 423	(3)	Compiler Construction	_____	_____
CS 434	(3)	Database Management Systems	_____	_____
CS 438	(3)	Artificial Intelligence	_____	_____
CS 447	(3)	Networks & Data Communications	_____	_____
CS 454	(3)	Theory of Computation	_____	_____
CS 456	(3)	Algorithms & Complexity	_____	_____
CS 482	(3)	Computer Graphics	_____	_____
CS 490	(3)	Topics in CS: _____	_____	_____
CS 490	(3)	Topics in CS: _____	_____	_____
CS 495	(3)	Independent Study	_____	_____
ECE 483	(3)	Computer Design ⁴	_____	_____
_____	(3)	_____	_____	_____
_____	(3)	_____	_____	_____

Note: At most two non-CS courses not listed above may count as Computing Electives (with departmental approval).

1: CS 111 is not required for students beginning before Fall 2003.

2: CS 325 counts as a Computing Elective for students beginning before Fall 2003; it is a CS Core requirement for students beginning in Fall 2003 or afterwards.

3: Four Computing Electives are required for students beginning before Fall 2004; five are required for students beginning in Fall 2004 or afterwards.

4: ECE 483 is a CS Core requirement for students beginning before Fall 2003; it counts as a Computing Elective for students beginning in Fall 2003 or afterwards.

Science & Mathematics Requirements

Mathematics & Statistics

MATH 150	(5)	Calculus I	_____	_____
MATH 152	(5)	Calculus II	_____	_____
MATH 224	(3)	Discrete Mathematics	_____	_____
STAT 380	(3)	Statistics for Applications	_____	_____

One of the following:

(Note: MATH 321 or 423 complete a MATH minor)

MATH 250	(4)	Calculus III	_____	_____
MATH 321	(3)	Linear Algebra	_____	_____
MATH 423	(3)	Combinatorics & Graph Theory	_____	_____

Laboratory Science

PHYS 151 & 151L	(5)	University Physics I	_____	_____
PHYS 152 & 152L	(5)	University Physics II	_____	_____
<i>or</i>				
CHEM 121a & 125a	(5)	General Chemistry I	_____	_____
CHEM 121b & 125b	(5)	General Chemistry II	_____	_____
Plus one additional laboratory course from:				
BIOL 120	(4)	Biology I	_____	_____
CHEM 121a & 125a	(5)	General Chemistry I	_____	_____
CHEM 131 & 135	(5)	Engineering Chemistry	_____	_____
PHYS 151 & 151L	(5)	University Physics I	_____	_____
PHYS 302 & 312	(7)	Modern Physics	_____	_____

General Education Requirements

English

ENG 101	(3)	English Composition I	_____	_____
ENG 102	(3)	English Composition II	_____	_____

Skills

One of the following:

SPC 103	(3)	Interpersonal Communication Skills	_____	_____
SPC 104	(3)	Oral Argumentation Skills	_____	_____
SPC 105	(3)	Public Speaking	_____	_____

One of the following:

FL 106	(3)	Word Analysis: Latin & Greek Roots	_____	_____
IME 106	(3)	Engineering Problem Solving	_____	_____
MATH 106	(3)	Deductive Reasoning/Prob. Solving	_____	_____
PHIL 106	(3)	Critical Thinking	_____	_____

Introductory Courses

1 Social Sciences and 2 Fine Arts & Humanities or vice-versa

_____	(3)	<input type="checkbox"/> Soc. Sci. <input type="checkbox"/> F.A. & H.	_____	_____
_____	(3)	<input type="checkbox"/> Soc. Sci. <input type="checkbox"/> F.A. & H.	_____	_____
_____	(3)	<input type="checkbox"/> Soc. Sci. <input type="checkbox"/> F.A. & H.	_____	_____

Distribution Courses

1 Social Sciences and 1 Fine Arts & Humanities

_____	(3)	<input type="checkbox"/> Soc. Sci. <input type="checkbox"/> F.A. & H.	_____	_____
_____	(3)	<input type="checkbox"/> Soc. Sci. <input type="checkbox"/> F.A. & H.	_____	_____

Interdisciplinary Studies

_____	(3)	_____	_____	_____
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Intergroup Relations

_____	(3)	_____	_____	_____
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International Issues & Culture

_____	(3)	_____	_____	_____
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GER Courses

Fine Arts and Humanities

Intro: ART 111, DANC 111, ENG 111, FL 111,

MUS 111, PHIL 111, SPC 111, THEA 111

Distrib: ART 202c, 202h, 225, 424, 447, 448, 449, 453, 454, 455, 468, 469, 470, 473, 475, 476, 480, 481, 483; CHIN 201, 202; DANC 114, 214, 240, 260, 270, 460, 470, 499; ENG 201, 202, 203, 204, 205, 207, 208, 209, 211, 212, 290, 301, 303, 304, 306, 307, 308, 309, 310, 315, 340, 341, 342, 343, 344, 345, 370, 392, 393, 394, 400, 403, 404, 406, 408, 409, 413, 421, 422, 423, 424, 426, 427, 428, 431, 432, 434, 435, 437, 439, 440, 441, 443, 446, 454, 455, 456, 457, 458, 460, 461, 462, 471, 473, 478, 490, 495; FAC 350, 450, 495; FL 121, 230, 330, 345, 350, 390, 401, 486, 491; FR 201, 202, 220, 301, 302, 304, 305, 308, 311, 351, 352, 353, 402, 451, 452, 453, 454, 455, 456, 457, 461, 491, 499; GER 201, 202, 220, 301, 302, 303, 304, 311, 351, 352, 353, 401, 402, 411, 452, 453, 491, 499; GRK 201, 202, 499; HUM 310, 400, 450, 470; ITAL 201, 202, 311; LAT 201, 202, 499; MC 201, 202, 203, 204, 321, 322, 323, 324, 325, 326, 330, 331, 332, 333, 334, 335, 342, 351, 353, 401, 402, 403, 421, 423, 424, 431, 440, 441, 451, 452, 453, 454, 471; MUS 115, 124, 125, 225, 300, 305, 309, 312, 326, 330, 331, 338, 357, 395, 412, 442, 461; PHIL 213, 220, 233, 245, 300, 301, 302, 303, 305, 306, 308, 309, 310, 314, 320, 321, 322, 323, 325, 326, 328, 330, 331, 333, 334, 336, 340, 343, 345, 346, 347, 350, 390, 411, 415, 440, 441, 481, 496; PAPA 245; RUSS 201, 202, 220, 499; SPAN 201, 202, 220, 301, 302, 304, 305, 306, 307, 308, 311, 312, 351, 352, 353, 412, 451, 452, 453, 454, 457, 461, 471, 491, 492, 499; SPC 200, 201, 203, 210, 213, 261, 300, 305, 313, 315, 323, 329, 330, 331, 403, 410, 411, 413, 414, 419, 423, 430, 431, 433, 434, 464; THEA 112, 114, 141, 150, 160, 170, 201, 205, 210, 215, 220, 241, 250, 309, 312, 350, 360, 370, 394, 399, 410, 412, 420, 480, 482; WMST 200, 331, 341, 345, 346, 351, 390, 456, 473, 478

Social Sciences

Intro: ANTH 111, CJ 201, ECON 111, GEOG 111, HIST 111, POLS 111, PSYC 111, SOC 111

Distrib: ANTH 301, 302, 305, 306, 307, 310, 311, 312, 313, 315, 325, 331, 332, 333, 334, 335, 340, 350, 373, 375, 400, 401, 402, 404, 408, 410, 411, 420, 432, 435, 452, 470, 473, 475; CJ 272, 422, 472; ECON 112, 221, 301, 302, 327, 331, 341, 345, 361, 435, 445, 461; ENSC 402; GEOG 201, 205, 230, 300, 301, 330, 331, 332, 333, 334, 400, 401, 402, 406; HIST 111, 112, 113, 114, 130, 200, 201, 219, 300, 302, 303, 304, 305, 306, 308, 313, 314, 315, 318, 320, 321, 322, 330, 334, 338, 340, 342, 344, 345, 352, 354, 356, 358, 360, 400, 403, 404, 408, 410, 412, 413, 415, 416, 418, 420, 422, 423, 424, 426, 427, 428, 430, 431, 434, 440, 442, 443, 447, 454, 460, 470; HUM 310, 400, 450, 460, 470; POLS 112, 300, 320, 340, 341, 342, 343, 344, 345, 346, 350, 351, 352, 354, 355, 356, 370, 371, 385, 386, 390, 424, 429, 445, 449, 459, 472, 473, 479, 484, 485, 489, 495, 496, 497, 499; PSYC 201, 203, 204, 206, 208, 305, 314, 320, 340, 365, 431, 442; PAPA 499; SOCW 200, 201, 370, 380, 386, 388, 390, 487, 488, 495; SOC 200, 272, 300, 301, 302, 303, 304, 308, 309, 335, 338, 373, 390, 391, 394, 420, 421, 422, 431, 441, 444, 447, 470, 472, 474, 481, 490; WMST 200, 305, 308, 313, 315, 391, 394, 402, 428, 440, 444

Interdisciplinary Studies

IS 302, 322, 324, 326, 328, 331, 332, 334, 335, 336, 340, 341, 342, 343, 345, 350, 352, 353, 360, 361, 363, 364, 375, 376, 377, 380, 385, 386, 387, 388, 399, 400, 401

Intergroup Relations

ANTH 305, 311, 312, 313; BIOL 450; ECON 327; ENG 205, 341, 342, 343, 344, 345, 446, 457, 478; EPFR 451; HIST 130, 219, 340, 423, 427, 440, 442; IS 345, 350, 352, 375; MGMT 341; MC 351; PHIL 344, 346, 347; POLS 354, 440, 441; PSYC 305, 407; SOCW 390; SOC 304, 308, 335, 394, 444; SPAN 292, 492; SPC 103, 210, 331; SPE 200; THEA 312; WMST 200, 305, 308, 313, 331, 341, 344, 346, 350, 351, 352, 354, 394, 440, 441, 444, 450, 451, 478

International Issues and Culture

ANTH 111, 301, 302, 306, 307, 310, 315, 331, 332, 333, 334, 340, 350, 402, 404, 410, 411, 452; ART 225, 424, 447, 448, 449, 468, 469, 473; BIOL 204, 365, 371; CHIN 102; ECON 361, 450, 461; ENG 304, 340, 462; FIN 450; FL 111, 230, 330, 345, 350, 491; FR 102, 104, 311, 351, 352, 353, 451, 452, 453, 456, 457, 491; GEOG 111, 201, 205, 300, 301, 330, 331, 332, 333, 334, 401, 406; GER 102, 104, 311, 351, 352, 353, 411, 452, 453, 491; GRK 102; HIST 111, 112, 113, 114, 219, 302, 303, 304, 305, 306, 308, 314, 315, 318, 322, 352, 354, 356, 358, 360, 403, 404, 408c, 412, 413, 415, 420, 422, 424, 426, 427, 428, 454, 460; HUM 310; IS 324, 326, 336, 340, 352, 353, 363, 364, 375, 377, 400, 401; ITAL 102, 104, 311; LAT 102; MGMT 461; MKTG 476; MC 453; PHIL 233, 300, 301, 302, 303, 308, 334, 440, 441; POLS 111, 350, 351, 355, 356, 370, 459, 472, 473, 479, 484, 485; RUSS 102, 104; SOC 481; SPAN 102, 104, 292, 311, 312, 351, 352, 451, 452, 453, 457, 471, 491, 492; THEA 310b; WMST 314, 315, 352, 353, 402, 428, 456, 473

Prerequisite Chart

