

COMPUTER SCIENCE (BS)

BS: COMPUTER SCIENCE DEGREE PLAN (CS)

UNIVERSITY REQUIREMENTS

Please see the University Requirements section of this catalog (page 38).

MAJOR REQUIREMENTS

Computer Science

CS 120 Programming I	3
CS 130 Programming II: Data Structures	3
CS 220 Computer Organization and Single-User Systems	3
CS 230 Object-Oriented Programming	3
CS 332 Design and Analysis of Algorithms	3
CS 374 Software Engineering	3
IT 220 Introduction to Databases and DBMS	3
IT 221 Fundamentals of Networking and Data Communications...	3
ITC 110 Intro to Information, Technology, and Computing	3
ITC 460 Managing Technical Projects (writing-intensive and capstone)	3
TOTAL	30

MAJOR SELECTION OR CONCENTRATION

Advanced CS electives	12
Advanced CS, IT, DET, ITC, Math; IS 405	9
CS, IT, DET, IS, ITC, MATH or specified set from support area:	9
Business/Entrepreneurship, Math, Biology, Chemistry, Engineering, Physics	
TOTAL	30

Selections may be used toward one of the following concentrations:

Computing Theory

CS 341 Numerical Methods	3
CS 352 Programming Languages	3
CS 355 Compiler Construction	3
CS 356 Operating Systems	3
CS 365 Theory of Computation	3
CS 495 Senior Seminar (may substitute for ITC 460 above)	(3) ¹

Select 3 hours from: CS 320, 420, 467, 474, or ITC..... 3

[MATH 186](#) Calculus II..... 3

[MATH 187](#) Calculus Computer Laboratory 1 |

Select 6 hours from: MATH 286, 325, 334, 361, 432

Select 8 hours from: CHEM 131, 132, 133, 134; PHYS 110, 111, 112, 113..... (8)^{1*}

*Up to 6 hours may count toward general education requirements

TOTAL

30

Game Development

DET 210 Intro to Digital Entertainment.....	3
DET 310 Digital Entertainment Technology II.....	3
DET 350 Game Development.....	3
DET 410 Digital Entertainment Technology III	3
CS 330 Human-Computer Interface.....	3

Deleted: [CS 352](#) Programming Languages . 3 .
[CS 355](#) Compiler Construction . 3 .
[CS 356](#) Operating Systems . 3 .

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Deleted: [CS 495](#) Computer Science Senior Seminar ¶
(writing-intensive course)

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Deleted: /IT selections (including IS 405 and PHYS 342/343) ¶
(300-499)

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Deleted: Computer

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Deleted: CS 320 Database Programming and Design

Deleted: [CS 467](#) Introduction to Artificial Intelligence

CS 474 Object-Oriented Design.....	3
Select 6 hours from: CS 315, 316, 381, 467	6
Select 6 hours from: CS, DET, IT, ITC, Math, IS 405.....	6
TOTAL	30
Software Engineering	
CS 315 Mobile Computing I	
CS 320 Database Programming and Design	
CS 474 Object-Oriented Design	
CS 355 Compiler Construction	
IT 225 Web Development I	
Select 6 hours from: CS 316, 330, 352, 341, 381; IT 325	
Select 9-hour block from the following choices:	
*MGMT 305, 430, 432 (Entrepreneurship) or Business	
*DET 210, 310, 350	
*Any 3 from CS 300 +; IS 405; IT 330, 410, 420; ITC	
TOTAL	30
Hours (in parentheses) may also fulfill university requirements and are not included in total major hours	
SUPPLEMENT FOR MAJOR	
Mathematics	
MATH 185 Calculus I	(3) ¹
MATH 227 Discrete Mathematics	3
MATH 377 Statistical Methods I	3
TOTAL	6
Hours (in parentheses) may also fulfill university requirements and are not included in total major hours	
ELECTIVES	
Open Electives	6
TOTAL MAJOR HOURS	72
OTHER GRADUATION REQUIREMENTS	
Minimum grade in CS 111, 120, 130, 220, 230; IT 220, 221; MATH 227	C
Minimum GPA in major and concentration courses	2.00
Minimum GPA for graduation	2.00
Minimum advanced hours	33
Minimum total hours	128
Courses numbered 0** do not count in minimum hours required for degree.	

Deleted: (9 hours)

Deleted: IT 325 Web Development II

Deleted: IS 405 Systems Analysis and

Deleted: Design

Deleted: Information Technology

IT 220 Introduction to Databases and Database Management Systems 3
IT 221 Fundamentals of Networking and Data Communications 3

Science
PHYS 335/336 Introduction to Electronics with Lab (3)

Social Sciences/Humanities
PHIL 486 Ethics (3)

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Deleted: MATH 186 Calculus II 3

Deleted: MATH 325 Linear Algebra 3
MATH 361 Ordinary Differential Equations or

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