Curriculum (updated January 2020)

Bachelor of Science in Computer Science

UNIVERSITY CORE REQUIREMENTS

	Sch	Hr	Gr	QP
EN 1103 English Composition I		3		
EN 1113 English Composition II		3		
MA (See Dept Req)				
Natural Sciences (See Dept Req)				
Humanities Elective		3		
Humanities Elective		3		
Fine Art Elective		3		
Social Science Elective		3		
Social Science Elective		3		
CO 1003 or CO 1013		3		
GE 3513 (Writing)		3		
Computer Literacy (See Dept Req)				

DEPARTMENTAL REQUIREMENTS

	Sch	Hr	Gr	QP
MA 1713 Calculus I		3		
MA 1723 Calculus II		3		
MA 3113 Linear Algebra		3		
Math elective: MA 2733 Calculus III, MA 3053 Foundations of Math., MA 4143 Graph Theory, MA 4173 Number Theory		3		
IE 4613 Engineering Statistics I		3		
BIO 1134 Biology I		4		
CH 1213 Chemistry I		3		
CH 1211 Chemistry Lab		1		
PH 2213 Physics I		3		
Science Elective: PH 2223 Physics 2 CH 1223 Chemistry 2 & CH 1221 BIO 1144 Biology 2		3-4		

DEPARTMENTAL REQUIREMENTS

	Sch	Hr	Gr	QP
CSE 1002 Intro to CSE		2		
CSE 1284 Intro Comp Programming		4		
CSE 1384 Inter Comp Programming		4		
CSE 2383 Data Struc & Anal of Alg.		3		
CSE 2813 Discrete Structures		3		
CSE 3324 Dist Client Server Program.		4		
CSE 3813 Formal Languages		3		
CSE 4763 Legal & Ethical Issues in Com		3		
CSE 4503 Database Mgmt Systems		3		
CSE 4713 Programming Languages		3		
CSE 4733 Operating Systems I		3		
CSE 4833 Intro. to Anal. of Alg.		3		
CSE Elective (Group 1)		3		
CSE Elective (Group 1)		3		
CSE Elective (Group 2)		3		
CSE Elective (Group 2)		3		
ECE 3714 Digital Devices		4		
ECE 3724 Microprocessors I		4		
ECE 4713 Computer Architecture		3		
Technical Electives		6		
7 Hours of Free Electives		7		

Note: All electives are listed on the reverse side of this page.
Note: Total hours must be 128 or greater

* last date the curriculum was updated

DEPARTMENTALLY APPROVED ELECTIVES

Fine Arts: (3 hours)
See http://www.catalog.msstate.edu/ for most up-to-date listing of core curriculum (academic policies/general education requirements)

Humanities: (6 hours)
See http://www.catalog.msstate.edu/ for most up-to-date listing of core curriculum (academic policies/general education requirements)

Social/Behavioral Science: (6 hours)
See http://www.catalog.msstate.edu/ for most up-to-date listing of core curriculum (academic policies/general education requirements)

Technical Electives: (6 hours)

Any upper level course in the following areas that is not already required in the CS curriculum: CS, ECE, MA

IE 3913 Engineering Economy
IE 4113 Human Factors Engineering
IE 4123 Psychology of HCI
IE 4333 Production Control Systems I
IE 4513 Engineering Administration
IE 4573 Process Improvement Engineering
IE 4623 Engineering Statistics II
IE 4653 Industrial Quality Control I
IE 4713 Operations Research I
IE 4733 Linear Programming I
IE 4773 Systems Simulation I
BIS 4523 Business Programming w/COBOL
BIS 4533 Decision Support Sys

Computer Science Electives (Group 1): (6 hours)

CSE 4153 Data Communications and Computer Networks
CSE 4163 Designing Parallel Algorithms
CSE 4214 Intro to Software Engineering
CSE 4253 Secure Software Engineering
CSE 4413 Principles of Computer Graphics
CSE 4453 Game Design
CSE 4633 Artificial Intelligence
CSE 4643 AI Robotics
CSE 4743 Operating Systems II

Computer Science Electives (Group 2): (6 hours)

Any upper level CSE course*

* No more than six hours of directed individual study may be counted as CSE Electives.