

# B.S. COMPUTER SCIENCE

Student: \_\_\_\_\_

GCID#: \_\_\_\_\_

<p><b>AREA F: SCHOOL OF BUSINESS Core (18 s.h.)</b></p> <p><b>All of the following:</b>                  CSCI 1301, Computer Science I _____                  CSCI 1302, Computer Science II. Preq. CSCI 1301 _____                  CSCI 2350, Object Orient. Programing, Preq. CSCI 1302 _____</p> <p><b>All of the following if not taken in Areas A and D:</b>  <b>*Computer Science Majors can take Math 1115 &amp; 1116 or Math 1261</b>                  MATH 1115, Integrated Calculus IA, Preq. 4 yrs highschool math _____                  MATH 1116, Integrated Calculus IB, Preq. "C" or better in Math 1115 _____                    MATH 1261, Calculus I, Preq. "C" or better in Math 1113 &amp; 1114 _____                  MATH 1262, Calculus II, Preq. "C" or better in Math 1261 _____</p> <p><b>Selections from the following:</b>                  CSCI 2680, Discrete Structures, Preq. Math 1113 &amp; CSCI 1302 _____                  MATH 2600, Prob. &amp; Statistics, Preq. Math 1101 or higher _____                  CSCI 2800, Social &amp; Professional Issues, Preq 1302 <b>or</b> _____                  MKTG 3172, Business Ethics, Preq Sophomore standing _____</p>	<p><b>Cognate Area B: Mathematics (2-11 s.h.)</b></p> <p><b>All of the following if not taken in Areas F</b>  <b>*Computer Science Majors can take Math 1115 &amp; 1116 or Math 1261</b>                  MATH 1115, Integrated Calculus IA, Preq. 4 yrs highschool ma _____                  MATH 1116, Integrated Calculus IB, Preq. "C" or better in Math _____                  MATH 1261, Calculus I, Preq. "C" or better in Math 1113 &amp; 111 _____                  MATH 1262, Calculus II, Preq. "C" or better in Math 1261 _____                  MATH 2600 Probability &amp; Stats, Preq. Math 1101 or higher _____                  CSCI 2680 Discrete Structures, Preq. Math 1113 or _____                  higher &amp; CSCI 1302 _____                  CSCI 2800 Social and Professional Issues, Preq 1302 <b>or</b> _____                  MKTG 3172 Business Ethics _____</p> <p style="text-align: center;"><b>Foreign Language Requirement (3 s.h.)</b></p> <p>One 3 Hr Course level 1002 or higher                  1. _____</p>
<p style="text-align: center;"><b>MAJOR REQUIREMENTS (30 s.h)</b></p> <p>CSCI 3410, Introduction to Data Structures, Preq. CSCI 1302 _____                  CSCI 3211, Assem. Lang. &amp; Digital Logic Design, Preq. CSCI 1302 _____                  CSCI 3212, Comp. Organ. &amp; Architecture, Preq. CSCI 3211 _____                  CSCI 3341, Operating Systems, Preq. CSCI 3410 and 3212 _____                  CSCI 3342, Systems &amp; Networks Programming, Preq CSCI 3341 _____                  CSCI 4320, Software Engineering, Preq. CSCI 3410 _____                  CSCI 4520, Analysis of Algorithms, Preq. CSCI 2680 &amp; CSCI 3410 _____                  CSCI 4710, Databases or CBIS 3214 Database Management, _____                  Preq. CSCI 2680 &amp; CSCI 3410 _____                  Choice of other CSCI Course at the 3000-4000 level _____</p>	<p style="text-align: center;"><b>3000 - 4000 Level Electives</b></p> <p>1. _____                  2. _____                  3. _____                  4. _____</p> <p style="text-align: center;"><b>Senior Capstone Experience Hours (1-3 s.h.)</b></p> <p style="text-align: center;"><b>Completion of ONE of the following:</b>                  CSCI 4950, Advanced Special Topics (1 - 3 Hrs) _____                  CSCI 4690, Internship (1 - 3 Hrs) _____                  CSCI 4999, Undergrad Research in Computer Science _____                  CSCI 4980, Study Abroad <b>or</b> other study abroad course _____</p>
<p style="text-align: center;"><b>Cognate Area A: Science (6 - 16 s.h.)</b></p> <p><b>If Not Taken In Area "D"</b>                  CHEM 1211 and Lab, Princ. Of Chemistry I _____                  CHEM 1212 and Lab, Princ. Of Chemistry II, Preq CHEM 1211 _____  <b>OR</b>                  PHYS 2211 and Lab, Princ. Of Physics I, Preq MATH 1261 _____                  PHYS 2212 and Lab, Princ. Of Physics II, Preq MATH 1262 _____</p> <p>Complete two courses in Natural Science:                  ASTR, BIOL, CHEM, ENSC, GEOL, PHYS                  (Must include lab if offered)                  _____                  _____                  _____</p>	<p style="text-align: center;"><b>Other Requirements</b></p> <p>BIDS 1705 or other First Year Academic Seminar _____  <b>NOTE:</b> Students with 29 or more hours are <u>not</u> required to take a first year seminar.</p> <p style="text-align: center;"><b>NOTES:</b></p> <ul style="list-style-type: none"> <li>• A total of (39) 3000 - 4000 level hours required</li> <li>• A grade of C or better is required in all courses counting toward the major.</li> </ul>

\* Total semester hours required for graduation 120 hours

\* 2.0 Institutional GPA required for graduation

\* Application for Graduation (should be filed 3rd semester before graduation)

**Suggested Sequence for B.S. in Computer Science\***  
(Revised 7/21/09)

<b>Freshman Fall</b>	<b>Credit Hrs</b>	<b>Freshman Spring</b>	<b>Credit Hrs</b>
Foreign Language I -- not required FL	3	Foreign Language II – required FL	3
BIDS 1705: Freshman Seminar **	1	POLS 1150: Politics & Society	3
ENGL 1101: English Comp I	3	ENGL 1102: English Comp II	3
CSCI 1301: Computer Science I	3	CSCI 1302: Computer Science II	3
Choice of one:	4	Choice of one:	4
<b>*Students taking Math 1115 must also take Math 1116</b>		*MATH 1262: Calculus II	
MATH 1113 PreCalculus		MATH 1114 Trig and Analytical Geometry	
MATH 1114 Trigonometry		MATH 1116 Integrated Calculus I	
MATH 1115 Integrated Calculus 1A			
MATH 1261: Calculus I			
Choice of one:	2	RGTT: Regents Test	
ARTS 1105: Understanding Visual Cult			
MUSC 1105: Music and Civilization			
THEA 1105: Theatrical Heritage			
<b>Total Semester Hours</b>	<b>16</b>	<b>Total Semester Hours</b>	<b>16</b>
<b>Sophomore Fall</b>	<b>Credit Hrs</b>	<b>Sophomore Spring</b>	<b>Credit Hrs</b>
Lab Science I: (CHEM 1211, PHYS 2211)	4	Lab Science II: (CHEM 1212, PHYS 2212)	4
Choice of one:	2	Choice of one:	3
IDST 2310: The Fine & Applied Art		ENGL 2110: World Literature	
IDST 2315: America's Cult Heritage		IDST 2305: The Humanities and Fine Art	
CSCI 2350: Object Oriented Programming	3	CSCI 3410: Data Structures Major	3
CSCI 2680: Discrete Structures Major	3	Elective Any Level	3
MATH 2600: Probability & Statistics	3	MKTG 3172: Business Ethics	3
<b>Total Semester Hours</b>	<b>15</b>	<b>Total Semester Hours</b>	<b>16</b>
<b>Junior Fall</b>	<b>Credit Hrs</b>	<b>Junior Spring</b>	<b>Credit Hrs</b>
CSCI 3211: Assem Lang & Digital Logic Design	3	CSCI 3212: Comp. Organization and Architecture	3
ECON 2105: Principles of Macroeconomics	3	Elective: 3000-4000 level	3
Choice of one:	3	Choice of one:	3
HIST 1131: World Civilization I		HIST 1131: World Civilization I	
HIST 1132: World Civilization II		HIST 1132: World Civilization II	
		IDST 2505: Interpersonal Relations	
		SOCI 1121: Sociological Perspectives	
Complete 1 course in Natural Science: (ASTR, CHEM, GEOL, BIOL, ENSC,PHYS)	4	Complete 1 course in Natural Science: (ASTR, CHEM, GEOL, BIOL, ENSC,PHYS)	4
		CSCI 4520 Analysis of Algorithms	3
<b>Total Semester Hours</b>	<b>13</b>	<b>Total Semester Hours</b>	<b>16</b>
<b>Senior Fall</b>	<b>Credit Hrs</b>	<b>Senior Spring</b>	<b>Credit Hrs</b>
CSCI 3341: Operating Systems	3	CSCI 3342: Systems & Network Programming	3
CSCI 4320: Software Engineering	3	CSCI 4330: Programming Languages	3
Choice of one:	3	Elective: 3000-4000 level	3
CSCI 4710: Databases Major or		Elective: 3000-4000 level	3
CBIS 3214: Database Management		CSCI Elective: 3000-4000 level	3
MATH 2600: Probability & Statistics	3	Senior Exit Exam	
Choice of one:	2		
IDST 2205: Global Issues and Society			
IDST 2210: Ethics and Society			
IDST 2215: Communications In Society			
<b>Total Semester Hours</b>	<b>14</b>	<b>Total Semester Hours</b>	<b>15</b>

• Total semester hours required for graduation 120 hours

• 2.0 Institutional GPA required for graduation

• Application for Graduation (should be filed 3rd semester before graduation)

## **Suggested Sequence for B.S. in Computer Science\*** (Revised 7/21/09)

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### **NOTES:**

\* This sequence of courses is only a suggestion; because of class availability, some courses may need to be taken in different terms. What is important is that students should complete at least 30 semester hours per year to complete all degree requirements in four years.

\*\*BIDS 1705 does not count in hours for graduation

- Foreign Language I is not required -- only Foreign Language II
- First semester freshman are required to take BIDS 1705. This course does not count in the required 120 hours for graduation.
- The US and Georgia constitution special legislative requirements are satisfied by earning a passing grade in POLS 1150.
- MATH 1261 and 1262 are required courses in the major. MATH 1113 and 1114 are preparatory courses for students needing additional preparation prior to taking the calculus sequence. MATH 1115 and 1116 is an option with “just-in-time” precalculus reviews and satisfies MATH 1261. Students should register for MATH 1262 after completing MATH 1116.
- RGTT Test - Student's must register and sit for the Regent's Test no later than the semester of enrollment immediately following the completing 30 credit hours. Transfer students from outside of the University System of Georgia must complete the Regent's Test within 2 semesters of their arrival.
- US & GA History special legislative requirements (As of Fall 2000) must be satisfied by earning a passing grade in HIST 2111, HIST 2112, or HIST 4415 or by passing an examination (See GCSU Undergraduate Catalog under Special Legislative Requirements). Contact Department of History & Geography for Test.
- Elective Upper Level requirements assume that Natural Science I and II are taken at the lower level. For each hour of Natural Science taken at the upper level, a corresponding number of hours of upper level elective is changed to any level. You must have a total of 39 credit hours taken at the Upper Level (3000 - 4000).
- 120 credit hours are required to graduate excluding BIDS 1705
- A grade of C or better is required in all courses counting toward the major.