School of Computer and Information Sciences	CSC	Computer Science	BULLETIN
Undergraduate Check Sheet			2009-2010

Last Name: _____ First: _____ JAG ID: J00

Date of Entry: _____ Advisor: _____

Compositon/Communication (12 Sem Hrs)

	Sem	USA	Trans	COURSE
PC				EH 101-English Comp 1
PC				EH 102-English Comp 2
PC				CA 275 Small Group Comm
W				EH 372 Technical Writing

Fine & Performing Arts/Humanities (15 Sem Hrs)

Two courses in the SOCIAL SCIENCES or HUMANITIES must be either a Literature or History sequence as enumerated below[1]

	Sem	USA	Trans	COURSE
PC				CA 110 Public Speaking
				(1) Literature[1]
				(1) Art, Drama, Music[2]
				(2) Fine/Per Arts/Hum electives

Social Sciences (12 Sem Hrs)

Two courses in the SOCIAL SCIENCES or HUMANITIES must be either a Literature or History sequence as enumerated below[3]

	Sem	USA	Trans	COURSE
				(1) History†
				(3) Electives from AN, ECO, GEO, HY, PSY, SY, PSC, or CJ

Natural Sciences (16 Sem Hrs)

One sequence from	*AND*
PH 201 & PH 202 Cal-based Physics, CH 131 & CH 132 Chemistry, GY 111 & GY 112 Geology, OR BLY 121 & BLY 122 Biology	*2 additional Natural Sciences Courses with Labs--MAY NOT be from the same area as that chosen for the sequence!*

	Sem	USA	Trans	COURSE

Mathematics and Statistics (17 Sem Hrs)

	Sem	USA	Trans	COURSE
PC				MA 125 Calculus I
PC				MA 126 Calculus II
PC				MA 267 Discrete Math Struct or MA 367 Combinatorial Enum
				ST 315 Statistical Analysis
				(1) Approved Math Elective

[1] Approved Lit Courses & Sequences: EH 215-216, 225-226, 235-236

[2] Approved Courses: ARS 101, DRA 110, MUL 101, ARH 100, ARH 103, ARH 123, ARH 240, or ARH 242

[3] Approved History Courses and Sequences: HY 101-102, HY 135-136

CIS Core (53-56 Sem Hrs)

Core Courses WITHOUT PC prerequisite (29 Sem Hrs)

	Sem	USA	Trans	COURSE
PC				CIS 100 Info Tech in Society
PC				CIS 101 Freshman Seminar
PC				CIS 120 Prob Solving, Prog I
PC				CIS 121 Prob Solving, Prog II
PC				CSC 228 Dig Logic & Com Arch
PC				CIS 230 Adv Data & File Struct
				CSC 311 Data Comm & Net
W				CSC 331 Software Engr
				CIS 322 Operating Systems
				CSC 324 Database Design

CORE Courses WITH PC prerequisite (12 Sem Hrs)

	Sem	USA	Trans	COURSE
				CSC 320 Comp Org & Arch
				CSC 333 Prog & Lang Theory
				CSC 432 Perf Eval of Algorithms
W				CIS 497 Senior Project[4]
				CIS 498 Senior Seminar[4]

CIS Electives (12 Sem Hrs)

Choose three (4) electives from the list below

	Sem	USA	Trans	COURSE
				CSC 410 Compiler Design & Construction
				CSC 411 Comm & Network Analysis
				CSC 412 Real Time Software Systems
				CSC 413 Computer Graphics
				CSC 414 Modeling & Simulation
				CSC 415 Numerical Analysis
				CSC 416 AI Theory & Programming
				CIS 439 Windows Programming
				CSC 434 Lang & Automata
				ITE 474 Human Computer Interface

General Electives (Min 128 sem hrs for degree)

	Sem	USA	Trans	COURSE

Special Symbols Used

PC **Professional Component Course**

W **Writing Intensive Course**

[4] Must be taken during the last semester in the program.

CSC SUGGESTED FOCUS AREAS

Students interested in the following areas of Computer Science should consider taking the suggested electives and supporting courses listed below. ALL CS majors should consider a minor in Math which will contribute to the ability to succeed in any area. This is not meant to be a requirement but a suggestion for electives taken. Where more than 4 are listed the 4 of most interested should be selected. When fewer than 4 are listed, more courses of interest should be selected. Also, from time to time special topics courses will be offered when interest demands. Students are not required to take any sequence specified and are free to select any 4 approved electives on the CSC Check Sheet based on interest.

0) **Game Development**: PH 201/202, MA 237 (Linear Alg), MA 311 (Num Theory), CSC 490 (Game Dev – soon to defined as CSC 417), CSC 413, CIS 439, CSC 412, CSC 416. Appropriate Art/Graphic Design courses.

1) **Robotics**: PH 201/202, MA 237, MA 311, CSC 416, CSC 412, CSC 413, CSC 414

2) **Hardware**: PH 201/202, MA 238 (Diff Eq), CSC 411, CSC 415, CSC 414, CSC 412, CIS 439.

3) **Graphics**: PH 201/202, MA 237, MA 311, CSC 413, CIS 439, ITE 474, plus other electives of interest. Appropriate Art/Graphic Design courses.

4) **Real-Time Systems**: PH 201/202, MA 237, MA 238 (Diff Eq), CSC 411, CSC 415, CSC 414, CSC 412, CSC 413, ITE 474.

5) **Networks**: MA 237, MA 481(Cryptography), CSC 411, CSC 412, CIS 439, CSC 434.

6) **Data Forensics**: MA 367 (Comb Enum), MA 481, CSC 411, CSC 412, CSC 410, CSC 415, CSC 416, ITE 473 (Digital Forensics)

7) **Programming Language Theory**: CSC 410, CSC 434, CIS 439.

8) **AI:** PH 201/202, MA 237, MA 367, PHL 121, CSC 416, CSC 412, CSC 414, CSC 434.

9) **Data Mining**: CSC 416, CSC 414, CIS 439, ITE 472 or ISC 457.