CSI & Applied Mathematics Planning Checklist (CSMAT)

GENERAL CONCENTRATION

NAME: ______________________________________

ID: ______________________________________

General Education

- Arts
- Challenges for the 21st Century
- Foreign Language
- Humanities
- International Perspectives
- Mathematics & Statistics
- Natural Sciences
- Social Sciences
- US History
- Writing and Critical Inquiry

Computer Systems and Science Core (18 Credits)

- ICSI 201: Intro to Computer Science (4)
- ICSI 210: Discrete Structure (4)** * Pre-requisite / Co-requisite AMAT 112
- ICSI 213: Data Structures (3)** * Pre-requisite ICSI 201
- ICSI 333: Prog. Hardware-Software Interface (4)** * Pre-requisite ICSI 213 / AMAT 220 recommended
- ICSI 403: Algorithms and Data Structures (3) * Pre-requisite ICSI 210 & ICSI 333 / AMAT 220 recommended

** Grade of C required to count in major

Mathematics (15 Credits)

- AMAT 112 (4): Calculus I
- AMAT 113 (4): Calculus II
- AMAT 214 (4): Calculus of Several Variables
- AMAT 220 (3): Linear Algebra

Programming Language Principles (3 Credits)

- ICSI 311: Principles of Programming Languages (3) * Pre-requisite ICSI 210 & ICSI 213

Intensive Software Development (3 Credits)

- ICSI 402: Systems Programming (3) * Pre-requisite ICSI 333 / AMAT 220 recommended

Mathematics and Computational Science (21 Credits)

- AMAT 367: Discrete Probability (3) * Pre-requisite AMAT 113 & 6+ credits of 200+ level MAT/CSI
- ICSI 401: Numerical Methods for Digital Comp. (3) * Pre-requisite AMAT 220 & CSI 213
- ICSI 404: Computer Organization (3) * Pre-requisite AMAT 333 & ICSI 210 / AMAT 220 recommended
- ICSI 409: Automata and Formal Languages (3) * Pre-requisite ICSI 210
- AMAT 300+
- AMAT 300+
- AMAT 300+

Computer Science or Mathematics Electives (6 Credits)

Choose two courses from the following list:

- ICSI _______
- ICSI _______

*Courses numbered 300-470, 500-550, or specially approved by the department

- A PHY 353: Microprocessor Applications
- A PHY 454: Microprocessor Applications Lab
- A PHY 432: Completeness and Decidability