CSI & Applied Mathematics Planning Checklist (CSMAT)
DATA ANALYTICS CONCENTRATION
66 CREDIT PROGRAM

NAME: ______________________________________
ID: _______________________________________

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

Computer Systems and Science Core (18 Credits)
☐ ICSI 201: Intro to Computer Science (4) ☐ Pre-requisite / Co-requisite AMAT 112
☐ ICSI 210: Discrete Structure (4)** * Pre-requisite ICSI 201
☐ ICSI 213: Data Structures (3)** * Pre-requisite ICSI 213 / AMAT 220 recommended
☐ ICSI 333: Prog. Hardware-Software Interface (4)** * Pre-requisite ICSI 210 & ICSI 213 / AMAT 220 recommended
☐ ICSI 403: Algorithms and Data Structures (3)
** 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

Intensive System Software Development (3 Credits)
☐ ICSI 499: Capstone Project in CSI (3) * Pre-requisite at least 9 credits of 400 coursework

Data Mining (6 Credit)
☐ ICSI 410: Database Systems (3)
☐ ICSI 431: Data Mining (3) * Pre-requisite ICSI 213 / AMAT 220 recommended

Probability for Statistics (6 Credits)
☐ AMAT 308 (3) [Spring] & AMAT 367 (3) OR Topics in Statistical Inference and Discrete Probability OR
☐ AMAT 362 (3) and AMAT 363 (3) Probability for Statistics and Statistics

Advanced Level Statistics (9 Credits)
☐ ICSI 451: Bayesian Data Analysis (3) * Pre-requisite AMAT 214 and CSI 201
☐ AMAT 464: Applied Stochastic Processes (3) [Spring] * Pre-requisite One of AMAT 362 or 367 or 467
☐ AMAT 465: Applied Statistics (3) [Fall] * Pre-requisite AMAT 220 and one of A MAT 308, 363, or 468

Internship (3 Credits)
☐ ICSI 490: Internship in Computer Science (3)

Electives (6 Credits)
☐ ICSI/ AMAT ____________
☐ ICSI/ AMAT ____________

ICSI Courses numbered 300-470 or 500-550, AMAT courses numbered 300 or above or other science courses approved by Computer Science and Math departments
STUDENT INFORMATION

ID: ______________________________________

AVN: ______________________________________

Advisor: ______________________________________

COURSE RECOMMENDATIONS: