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

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)**
☐ ICSI 213: Data Structures (3)**
☐ ICSI 333: Prog. Hardware-Software Interface (4)**
☐ ICSI 403: Algorithms and Data Structures (3)
* Pre-requisite / Co-requisite AMAT 112
* Pre-requisite ICSI 201
* Pre-requisite ICSI 213 / AMAT 220 recommended
* 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

Intensive System Software Development (3 Credits)
☐ ICSI 402: Systems Programming OR
☐ ICSI 418: Software Engineering
* Pre-requisite ICSI 333 / AMAT 220 recommended
* Pre-requisite ICSI 405

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

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

Advanced Level Statistics (9 Credits)
☐ AMAT 464: Applied Stochastic Processes (3)
☐ AMAT 465: Applied Statistics (3)
☐ ICSI 451: Bayesian Data Analysis and Signal Processing (3)

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: