

Lists of Technical Supporting Courses

Major: B.S., Artificial Intelligence Methods and Applications

(At least 9 credits; at least 3 credits must be at the 400-level)

AI:

A-I 285 Experiential Learning Skills Lab, 1-3 credits

A-I 494 Research Project, 1-12 credits

A-I 495 Internship, 1-18 credits

CMPSC:

CMPSC/DS 442 Artificial Intelligence or CMPSC 441 Artificial Intelligence

CMPSC 446 Data Mining

CMPSC 432 Exploratory Data Mining

DS:

DS 220 Data management for data sciences

DS 300 Privacy and Security for Data Sciences

DS 320 Data integration

DS 330 Visual analytics for data sciences

DS/CMPSC 410 Programming Models for Big Data

DS 402 Emerging trends in the Data Sciences

DS 420 Network Analytics

DS 441 Information Retrieval and Organization

Math:

MATH 486 Mathematical Theory of Games

MATH 452 Deep Learning Algorithms and Analysis

MATH 429 Introduction to Topology

MATH/STAT 318 Elementary Probability

MATH/STAT 414 Introduction to Probability Theory

MATH 425 Introduction to Operations Research

MATH 430 Linear Algebra and Discrete Models I

MATH 448 Mathematics of Finance

MATH 455 Introduction to Numerical Analysis I

STAT:

STAT 380 Data Science Through Statistical Reasoning and Computation

STAT 462 Applied Regression Analysis

STAT 463 Applied Time Series Analysis

STAT 464 Applied Nonparametric Statistics

EE:

EE 483: Introduction to Automation and Robotics Systems

EE 454: Fundamentals of computer vision

EE 456: Introduction to Neural Networks

HCDD:

IST 140 Introduction to Application Development

IST 240 Introduction to Computer Languages

IST 242 Intermediate & Object-Oriented Application Development

IST 250 Introduction to Web Design and Development

IST 256 Programming for the Web

IST 311 Application Development Design Studio I

IST 331 Foundations of Human-Centered Design

IST 411 Distributed-Object Computing

IST 413 Usability Engineering

Cyber:

CYBER 100 Computer Systems Literacy

IST 220 Networking and Telecommunications

SRA 111 Introduction to Security and Risk Analysis

SRA 221 Overview of Information Security

CYBER 262 Cyber-Defense Studio

Any CYBER course at the 300- or 400-level

IST 451 Network Security

IST 454 Computer and Cyber Forensics

IST 456 Security and Risk Management