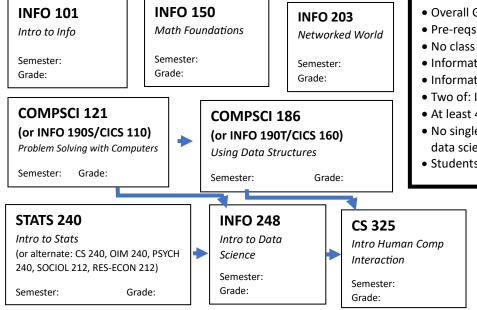
10/18/2024 BS Tracking Form for Informatics Major Requirements (for students starting fall 2021 -summer 2023) Informatics Core Requirements: Students must complete all Core Requirements



- Overall GPA of 2.0 is required for major courses
- Pre-regs must be completed with a grade of C or better
- No class counted for the major may be taken pass/fail
- Informatics majors must complete 60 units within CICS/CNS
- Informatics majors may be CS minors but may NOT double major in CS
- Two of: INFO 248, CS 345, DS Elective, STATS 240 must be taken at UMass Amherst
- At least 4 of the 6 electives must be taken at UMass Amherst
- No single course can fulfill two different major requirements. For example, INFO 348 cannot fulfill data science concentration requirement AND count as an elective requirement for DS concentration
- Students can propose an elective, but it must be approved by the program

Integrative Exp

Primary Majors:

CS 326*(pre-regs are CS 220/CS 230)

Or INFO 490PI* pre-regs: INFO 248 (or COMPSCI 240) and CICS 210 (or COMPSCI 186 or COMPSCI 187)

OR Secondary Majors: IE in Primary Major

Semester: Grade:

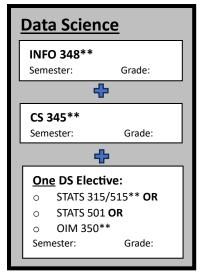
Junior Year Writing

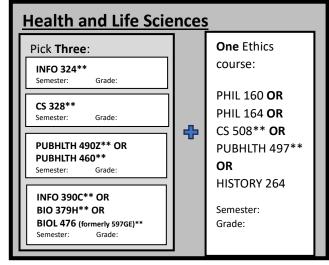
Primary Majors: CICS 305 (Pre-reg INFO 248) Secondary Majors: JYW in Primary major

Semester: Grade:

Concentration Requirements:

Choose Data Science OR Health & Life Sciences:





Course: Semester: Grade: Flective pre-regs (if any):	Course: Semester: Grade: Elective pre-regs (if any):	Course: Semester: Grade:
Course:	Course:	Course:
Semester: Grade:	Semester: Grade:	Semester: Grade:

^{**}Check SPIRE for most updated pre-requisite information

10/18/2024 BS Tracking Form for Informatics Major Requirements (for students starting fall 2021 -summer 2023)

Pre-Approved Informatics Electives (choose 6):

- All electives count for both concentrations; electives well suited to Health and Life Sciences noted with HLS.
- Posted pre-reqs are waived for informatics majors <u>ONLY</u> for those elective courses that are underlined, although most of these classes do require "Junior" status. For all other courses, posted pre-requisites as listed in Spire apply.

BIOL 379H: Genomics and Bioinformatics (HLS) BIOL 383H: Gene and Genome Analysis (HLS)

BIOL 478: Human Genome Analysis (formerly BIOL 497G) (HLS) BIOL 479: Genomics and Data Science (formerly BIOL 497D) (HLS)

BIOL 597GE: Evolutionary Genomics & Bioinformatics (HLS)

BIOSTATS 535: Data Handling and Analysis Using SAS

BIOSTATS 683: Intro to Causal Inference in a Big Data World (HLS)

BIOSTATS 690T: Applied Statistical Genetics (HLS)

BIOSTATS 690TO: Topics in Biostatistics and Data Science (HLS)

CLASSICS 390STA: Visualizing Archaeological Data CLASSICS 396A (IS): Poggio Civiate Field School

COMM 408: Survey of Digital Behavioral Data (formerly COMM 497DB) COMM 540: Internet Gov & Information Policy (formerly COMM 497GB)

COMPSCI 320: Software Engineering COMPSCI 326: Web Programming

COMPSCI 328: Mobile Health Sensing and Analytics (HLS)

COMPSCI 365: Digital Forensics COMPSCI 383: Artificial Intelligence COMPSCI 389: Intro to Machine Learning COMPSCI 420: Software Entrepreneurship

COMPSCI 426: Scalable Web Systems (formerly COMPSCI 490STA/497S)

COMPSCI 490U: Introduction to User Experience Research

COMPSCI 508: Ethical Considerations in Computing (req CICS 305)

COMPSCI 571: Data Visualization and Exploration

ECE 579: Math Tools for Data Science & Machine Learning

ECON 309: Game Theory

ECON 337: Economics in the Age of Big Data

ECON 452: Econometrics

ENGLISH 379: Professional Writing course

ENGLISH 391C: Web Design (email instructor to join waiting list)

ENGLISH 491DS: Data Science for the Humanities (Seminar)

GEOGRAPH 493W / NRC 588 (formerly 597GW): Web GIS (Seminar)

GEOGRAPH 484: Geographic Computation (formerly 497A)

INFO 324: Intro to Clinical Health Informatics (HLS)

INFO 348: Data Analytics with Python

INFO 390C: Introduction to Computational Biology and Bioinformatics

INFO 490C: Intro to Social and Cultural Analytics

INFO 490PI: Personal Health Informatics

LEGAL 342: Machine Bias and Law

MARKET 413: Social Media and Marketing Analytics

MARKET 455: Internet Marketing
MATH 456: Mathematical Modeling
MATH 551: Intro to Scientific Computing

MATH 605: Probability Theory I

MI-ENG 272: Fundamentals of Data Visualization (formerly 397DH)

NRC 585: Intro to Geographic Information Systems

OIM 350: Business Intelligence and Analytics

OIM 454: Advanced Business Analytics

PUBHLTH 413: Intro to Epi Mgmt & Analysis (formerly 490KR) (HLS)

PUBHLTH 460: Telling Stories with Data: Stats, Modeling, &

Visualization (HLS)

PUBHLTH 490Z: Statistical Modeling for Health Data Science (HLS) PUBHLTH 497R: Research Ethics (formerly PUBHLTH 497) (HLS)

SOCIOL 313: Survey Design and Analysis (HLS)

SOCIOL 351: Social Network Analysis

STATISTC 315: Statistics I (formerly STATISTC 515)

STATISTC 501: Meth Applied Stats

STATISTC 516: Statistics II

STATISTC 525: Regression & Analysis of Variance

STATISTC 526: Design of Experiment