# Information Science & Arts
## 2019-20 Catalog Checklist

### UA GENERAL EDUCATION

#### COMPOSITION (Select ONE pair)
- ENGL 101 & ENGL 102
- ENGL 107 & 108 or
- ENGL 109H

#### MATH
- MATH 107 or MATH 112 or higher

#### TIER ONE (select two courses from each)
- Individuals and Societies (150)
- Traditions & Cultures (160)
- Natural Sciences (170)

#### TIER TWO (select one course from each)
- Humanities
- Individuals and Societies
- Natural Sciences
- Diversity (can be fulfilled with GE course)

**4th Semester of SECOND LANGUAGE**

### INFORMATION SCIENCE & ARTS MAJOR

#### ISTA Core (TAKE ALL FIVE)
- ISTA 100: Great Ideas of the Information Age
- ISTA 116: Statistical Foundations for the Information Age
- ISTA 130*: Computational Thinking and Doing
- ISTA 131: Dealing with Dataa  
  *Typically offered in Fall*
- ISTA 161: Ethics in a Digital World

*CSC 110 can sub for ISTA 130*

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*ISTA 131 is typically offered in Fall semester and requires ISTA 130. The rest of the core may be taken in any order.*

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### MINOR Required

A minor is required for this major. Typically, Minors are 18 units (6 classes), 9 units of which are typically required to be Upper Division (300 level or greater)

#### RESEARCH METHODS (TAKE ONE)
- ESOC 302: Quantitative Methods for the Digital Marketplace
- ESOC 301: Qualitative Internet Research

#### COMPUTATIONAL ARTS & MEDIA (TAKE FOUR COURSES)

#### INTENSIVE COMPUTING (TAKE ONE COURSE)

#### SOCIETY (TAKE ONE COURSE)

#### ENGAGEMENT/INDIVIDUAL STUDIES/PROJECTS (TAKE BOTH):
- Independent Study, Directed Research, or Internship (3 units)
- Senior Capstone

ISTA 498 (3 units)

#### Electives (if needed to reach 120 total units/42 UD)

Total Units ______ / 120
Upper Division Units ______ / 42
University Level ______ / 56
Minimum GPA of 2.0 is required!

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Crosslisted (non-iSchool classes, or classes without an ISTA/ESOC/LIS prefix) may have restrictions or pre-requisites.

Computational Arts & Media (TAKE FOUR)
ISTA 230: Introduction to Web Design and Development
ISTA 251: Introduction to Game Design
ISTA 301: Computing and the Arts
ISTA 302: Technology of Sound
ISTA 303: Introduction to Creative Coding*
  *ISTA 130 or CSC 110 or ECE 175 required
ISTA 403: Advanced Creative Coding Not offered in Fall
ISTA 401: Designing Installations Not offered in Fall
ART/FA 432A: Interactivity
ART/FA 437A: Foundation Digital 3D Modeling, Rendering and Rapid Prototyping
ESOC 300: Digital Storytelling and Culture
ESOC 340: Information, Multimedia Design, and the Moving Image

Intensive Computing (TAKE ONE)
ISTA 416/516: Introduction to Human Computer Interaction* Not offered in Fall
  *ISTA 130 or CSC 110 or ECE 175 required.
  ISTA 350 or CSC 120 recommended.

ISTA 424: Virtual Reality*
**A “C” or higher in ISTA 130 or CSC 110 or ECE 175 required. ISTA 350 or CSC 120 recommended.
  Knowledge of object-oriented programming essential.

ISTA 425: Algorithms for Games*
  *ISTA 130 or CSC 110 or ECE 175 required.
  ISTA 350 or CSC 120 recommended

ISTA 451/551: Game Development*
  *ISTA 130 or CSC 110 or ECE 175 required.
  ISTA 350 or CSC 120 recommended.

LIS 470: Database Development and Management
Typically offered in Fall

Society (TAKE ONE)
ISTA 263: Learning in the Information Age
ESOC 213: The Past and New Media
ESOC 313: Digital Discourse and Identity
ESOC 314: Theories of New Media
ESOC 315: From Publishing to Papyrus
ESOC 316: Digital Commerce
ESOC 317: Digital Crime
ESOC 318: Disruptive Technologies
ESOC 330: Digital Dilemmas
ESOC 477: Information Security
ESOC 488: Special Topics

Other coursework available to fulfill Intensive Computing Requirement:
GEOG 417: Geographic Information Systems for Natural and Social Sciences
LING 388: Language and Computers
CSC 120/CSC 127B: Introduction to Computer Programming
  *Requires CSC 110/127A
CSC 337: Web Development
MATH 129: Calculus II
MATH 313: Linear Algebra