

Information Science, Technology & the Arts Minor Checklist

Updated April 2024

Name: SID:

MINOR REQUIREMENTS (19 UNITS)

Core Courses (Take 4)

ISTA 100: Great Ideas of the Information Age		<input type="checkbox"/>
ISTA 116: Statistical Foundations for the Info. Age	Pre-req: MATH 107 or MATH 112	<input type="checkbox"/>
ISTA 130: Computational Thinking & Doing	Recommended Pre-req: MATH 112 <i>CSC 110 can fulfill requirement</i>	<input type="checkbox"/>
ISTA 161: Ethics in a Digital World		<input type="checkbox"/>

Upper Division Elective courses (Take 2)

<input type="checkbox"/>
<input type="checkbox"/>

COMMENTS

IMPORTANT NOTES:

- Students must earn a minimum of a 2.0 (C average) to graduate with this minor.
- ISTA 100, 116 and 161 can be taken in any order and are not required to enroll in Upper Division courses as long as you meet the pre-requisites.
- Students must complete at least 6 units (2 classes) which are Upper Division (300 level or above).
- Students are allowed to use up to 2 courses (typically 6 units) between a major and minor program with departmental approval.

Elective Course Options (Take 2)

Computational Arts

ISTA 301	Computing & the Arts	
ISTA 302	Technology of Sound	
ISTA 303	Creative Coding	Pre-req: ISTA 130 or CSC 110 or ECE 175 or PHYS 105A
ISTA 401	Designing Installations	
ISTA 403	Advanced Creative Coding	Pre-req: ISTA 303

Human-Computer Interactions

ISTA 329	Introduction to Web Design & Development	
ISTA 330	Advanced Web Design	Pre-req: ISTA 329 or CSC 337 AND ISTA 130 or CSC 110 or ECE 175
ISTA 352	Images: Past, Present, Future	
ISTA 416	Introduction to Human-Computer Interactions	

Applied Data Science

ISTA 320	Data Visualization	Pre-req: ISTA 116 or ESOC 214 or DATA 363 or APCV 302, or instructor consent
ISTA 321	Data Mining	Pre-req: ISTA 116 or ESOC 214 or DATA 363 or APCV 302, or instructor consent
ISTA 322	Data Engineering	Pre-req: ISTA 130 or CSC 110 or ECE 175 or PHYS 105A
ISTA 331	Principles & Practices of Data Science	Pre-req: ISTA 131 AND ISTA 116

Classes are subject to change and may be offered in different semesters

Course/Information Options

ISTA 429	Applied Cyberinfrastructure Concepts	<i>Recommend pre-req: ISTA 131 or CSC 110</i>
ISTA 431	Data Warehousing & Analytics in the Cloud	
Programming Foundations		
ISTA 350	Programming for Informatics Applications	Pre-req: ISTA 131 AND ISTA 116
Probability & Inference; Machine Learning; Natural Language Processing		
ISTA 311	Foundations of Information & Inference	Pre-req: ISTA 130 or CSC 110 or ECE 175 or PHYS 105A AND ISTA 116 or ESOC 214 or DATA 363 or APCV 302
ISTA 335	Introduction to Natural Language Processing	Pre-req: ISTA 130 or CSC 110 or ECE 175 AND ISTA 131 or CSC 120 or instructor consent
ISTA 410	Bayesian Modeling	Pre-req: MATH 223, MATH 313, MATH 464 AND ISTA 350 or ISTA 421 or CSC 345 or instructor consent
ISTA 421	Introduction to Machine Learning	Pre-req: MATH 129, MATH 313 and CSC 210
ISTA 450	Artificial Intelligence	Pre-req: ISTA 350 or CSC 245 or MATH 243 or instructor consent
ISTA 455	Applied Natural Language Processing	Pre-req: ISTA 350 or ECE 373 or CSC 335 or CSC 345 or instructor consent
Virtual Reality & Game Development		
GAME 451	Game Development	Pre-req: ISTA 350 or CSC 210 or GAME 351
ISTA 424	Virtual Reality	Pre-req: ISTA 350 or CSC 210 or GAME 351
ISTA 425	Algorithms for Games	Pre-req: ISTA 350 or CSC 210 or GAME 351
Special Topics		
ISTA 495	Special Topics (<i>Topic descriptions will be advertised by the iSchool and in the course description</i>)	