

**CLARION UNIVERSITY OF PENNSYLVANIA  
COLLEGE OF BUSINESS ADMINISTRATION AND INFORMATION SCIENCES  
REQUIREMENT SHEET**

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**REQUIREMENTS FOR MINOR IN COMPUTER SCIENCE: 18 CREDITS**

	<u>CR.</u>	<u>GR.</u>	<u>SEMESTER COMPLETED</u>
1. Required Courses (9 credits)			
CIS 202: Intro. to Programming and Algorithms I	3	—	_____
CIS 244: Intro. to Programming and Algorithms II	3	—	_____
CIS 254: Data Structures	3	—	_____
2. Additional Required Courses (9 credits)			
CIS 208: Introduction to Robotics Programming	3	—	_____
CIS 253: Computer Organization and Assembly Language	3	—	_____
CIS 270: Client Side Web Programming	3	—	_____
CIS 301: Computer Systems Analysis	3	—	_____
CIS 303: Local Area Networks	3	—	_____
CIS 305: Artificial Intelligence in Decision Making	3	—	_____
CIS 306: Object-Oriented Programming	3	—	_____
CIS 312: Special Topics in Computing	3	—	_____
CIS 318: Autonomous Robotics Programming Algorithms	3	—	_____
CIS 330: Information Systems Programming	3	—	_____
CIS 355: Operating Systems	3	—	_____
CIS 356: Analysis of Algorithms	3	—	_____
CIS 370: Server Side Web Programming	3	—	_____
CIS 375: Software Engineering	3	—	_____
CIS 377: Computer Graphics	3	—	_____
CIS 402: Database Management Systems	3	—	_____
CIS 406: Mobile Application Development	3	—	_____
CIS 412: Parallel Processing	3	—	_____
CIS 435: Machine Learning	3	—	_____
CIS/MGMT 470: Project Management	3	—	_____

\* All courses taken in the minor must be taken for a grade as stated in the CCPS Guidelines, page 15.

\* A student must present a quality point average of 2.0 on a 4.0 scale in the minor.

\* All courses should be checked for prerequisites.

Signatures (upon completion of the minor requirements):

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Minor Advisor

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Date

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Department Chairperson

\_\_\_\_\_

Date

**No Changes Since Fall 2020**