

# Computer Science, Minor

---

Having a Computer Science Minor can enhance your employment opportunities. Coursework consists of three programming courses, one introductory theory course and one CS elective course. Prior to starting the CS minor courses, students must take (or place out of) precalculus and an introductory programming course. Many of our CS minors come from related fields, such as Engineering, IST, and Math. Students on both Main Campus and Temple University Japan Campus may declare this minor.

## Undergraduate Contact Information:

Dr. Jamie Payton, Chair  
Science Education and Research Center, Room 304  
215-204-8450

Dr. Gene Kwatny, Vice Chair  
Science Education and Research Center, Room 304  
215-204-8450

Sally Kyvernitis, Faculty Advisor  
Science Education and Research Center, Room 330  
215-204-2030  
sallyk@temple.edu

## Minor Requirements

Students desiring a minor in Computer Science are required to satisfy the following:<sup>1</sup>

Code	Title	Credit Hours
Select one of the following: <sup>2</sup>		4
CIS 1051 or CIS 1951	Introduction to Problem Solving and Programming in Python Honors Introduction to Problem Solving and Programming in Python	
CIS 1057	Computer Programming in C	
CIS 1068 or CIS 1968	Program Design and Abstraction Honors Program Design and Abstraction	4
CIS 1166 or CIS 1966	Mathematical Concepts in Computing I Honors Mathematical Concepts in Computing I	4
CIS 2107	Computer Systems and Low-Level Programming	4
CIS 2168	Data Structures	4
Select one of the following: <sup>3</sup>		3-4
CIS 2033	Computational Probability and Statistics	
CIS 2082	Independent Research I	
CIS 2166	Mathematical Concepts in Computing II	
CIS 3203	Introduction to Artificial Intelligence	
CIS 3207	Introduction to Systems Programming and Operating Systems	
CIS 3211	Automata, Computability, and Languages	
CIS 3219	Computer Graphics and Image Processing	
CIS 3308	Web Application Programming	
CIS 3319	Wireless Networks and Security	
CIS 4319	Computer Networks and Communications	
CIS 4331	Principles of Database Systems	
CIS 4350	Seminar on Topics in Computer Science	
CIS 4360	Seminar on Topics in Computer Science	

**Total Credit Hours**

**23-24**

2 *Computer Science, Minor*

- 1 All of the listed CIS courses have Math course prerequisites of MATH 1022 Precalculus or higher.
- 2 Students may earn placement credit for this introductory programming course requirement. Please see the Computer Science faculty advisor for more information.
- 3 Some of the listed electives have prerequisites in addition to the core requirements.

Although the Computer Science minor can be completed in three semesters, it is best to allocate at least four semesters.

**Residency Requirements:** At least 3 courses required for the minor must be completed at Temple.