

Fundamentals of Programming, Certificate

Learn more about the undergraduate certificate in Fundamentals of Programming (<https://www.temple.edu/academics/degree-programs/fundamentals-of-programming-certificate-undergraduate-st-fprg-cert>).

This certificate is appropriate for anyone interested in adding technology to their existing studies. Computer Science, Information Science and Technology, Math and Computer Science, or Math and Computer Science with Teaching majors cannot get this certificate. The certificate provides knowledge and skills in two programming languages as well as database knowledge.

Undergraduate Contact Information:

Dr. Slobodan Vucetic, 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

Dr. Cindy Li, Undergraduate Faculty Advisor
Science Education and Research Center, Room 353
215-204-2940
xli@temple.edu

Certificate Requirements

This certificate program is not open to Computer Science, Information Science and Technology, Math and Computer Science, or Math and Computer Science with Teaching majors. Students desiring a certificate in Fundamentals of Programming are required to satisfy the following:

Code	Title	Credit Hours
CIS 1051 or CIS 1057	Introduction to Problem Solving and Programming in Python Computer Programming in C	4
CIS 1068 or CIS 1968	Program Design and Abstraction Honors Program Design and Abstraction	4
CIS 2109	Database Management Systems	4
Total Credit Hours		12

- If a student has taken CIS 1068 and CIS 2168, CIS 2168 should be substituted for CIS 1051/CIS 1057 to prevent backtracking.
- Additional courses needed to complete a CS minor are CIS 1166, CIS 2107, CIS 2168, and one CS elective.
- Additional courses needed to complete an IS&T minor are any two of CIS 1166, CIS 2168, CIS 2229 or a CIS 3xxx class approved by the IS&T Advisor.

Residency Requirements: At least 2 courses required for the certificate must be completed at Temple. At least 2 CIS courses must be completed at Temple.