Temple CIS Programs for Students Who Already Have a Bachelor’s Degree

What Masters Programs does Temple's CIS Department offer?

- Temple offers an **MS in Computer Science (MS/CS)**. This program requires extensive programming and the application of advanced math and statistics. Most of the graduate CS elective courses are in the areas of Networking or Intelligent Systems (e.g., robotics, artificial intelligence, vision recognition, data mining).
- Temple offers an **MS in Information Systems and Technology (MS/IST)**. Graduate courses focus on the application of computer hardware/software. No math is required, but students must have a background in programming and database management.

Which program is for me?

- If you lack background in CS (or IST), you may be considering a **second bachelor’s degree** instead of a master’s degree. To do this, you would apply to Temple as an undergraduate transfer student. While you could skip all of the general education course requirements, you would have to take (or transfer in) all of the CS (or IST) major requirements (in English, Math, Science, and CIS - approximately 70 credits for the BS, 55 for the BA). To see the list of courses that are required for the CS or IST, BS or BA, google “Temple CST advising sheets”. It is usually better (just a few more credits) to take the undergraduate pre-req courses, then get an MS degree. See the flow charts (on the next pages) for the undergraduate pre-req courses that are required by our graduate programs.
- If you are **undecided** between CS and IST, probably it is because you have never programmed. Start by taking the **common undergraduate pre-req courses** that are on the flow charts below (Java programming, data structures, and math). Once you have programmed, you will know which program is right for you.
- You can **take undergraduate prerequisite courses at Temple** through Temple's Office of Continuing Studies (215 204-2500). They will verify your math background then register you. **Please note that Temple does not offer Upper Level UG prerequisite courses at night.**
- You can **take pre-req courses elsewhere** (but only before being admitted to Temple) at any accredited 2 or 4 year college. Here are some course equivalencies:

<table>
<thead>
<tr>
<th>Temple</th>
<th>C.C. of Philadelphia</th>
<th>Montgomery County C. C.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math 1041 Calc I</td>
<td>Math 171 Calc I</td>
<td>Math 190 Calc I</td>
</tr>
<tr>
<td>Math 1042 Calc II</td>
<td>Math 172 Calc II</td>
<td>Math 201 Calc II</td>
</tr>
<tr>
<td>CIS 1068 Programming Design &amp; Abstraction (Java)</td>
<td>CSCI 112 Java II</td>
<td>CIS 111B</td>
</tr>
<tr>
<td>CIS 2168 Data Structures</td>
<td>CSCI 211 Data Structures</td>
<td>CIS 112 Data Structures</td>
</tr>
<tr>
<td>CIS 2109 Database Management Systems (not required for MS/CS)</td>
<td>CSCI 205 Databases</td>
<td>CIS 245 Database Mgt Systems</td>
</tr>
</tbody>
</table>

- For current **Temple tuition** rates, visit [http://temple.edu](http://temple.edu) and enter “tuition” in the search box. Our rates are listed under the College of Science and Technology.

Who do I contact if I have additional questions?

- For questions about taking undergraduate prerequisite courses at Temple, contact the Continuing Studies Office at 215 204-2500.
- For questions about the application process, read the admissions information at [CIS Graduate Admissions](http://www.temple.edu) then contact Julie.Skrocki@temple.edu
- For questions about graduate course requirements, read the program information (same link) then contact the CIS Graduate Adviser, sallyk@temple.edu
- For Temple's Course Catalog and Class Schedules, visit [http://www.temple.edu](http://www.temple.edu) then click (under "Academics") on "Courses and Schedules"
**MS / CS Program Requirements with Pre-Requisites** (unofficial document, 2015-2016)

For official program requirements and information about applying, visit [CIS Graduate Admissions](http://www.temple.edu).

For Temple Course Catalog and Class Schedules, visit [http://www.temple.edu](http://www.temple.edu). Under "Academics", click on "Courses and Schedules".

Before applying, you must have taken Calculus II and [the CIS courses shaded below - or - one year experience as a full time programmer]

* Before applying, you can take UG prerequisite courses through Temple's Office of Continuing Studies (215 204-2500) or you may take equivalent courses at another accredited college. Please note that Temple does not offer Upper level UG prerequisite courses at night.

* For questions about admissions, email [Julie.Skrocki@temple.edu](mailto:Julie.Skrocki@temple.edu). For questions about program requirements or pre-requisites, email [sallyk@temple.edu](mailto:sallyk@temple.edu).

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**Undergraduate Prerequisites for the MS / CS Program**

(most courses offered during the day)

**MS / CS Program: 10 Courses**

(most courses offered at night)

* Most Graduate CS elective courses are either in “Intelligent Systems” or “Networking”:

  — “Intelligent System” electives require a statistics background. Students lacking such background can take Stat 8001 (counts as a Grad CS elective).

  — “Networking” electives require a background in networking. Students lacking such background can take CIS 4319 (not a Grad CS elective) or CIS 5617 (counts as a Grad CS elective).

For current Temple tuition rates, visit [http://temple.edu](http://temple.edu) and enter “tuition” in the search box. Our rates are listed under the College of Science and Technology.
MS/IST Program Requirements with Pre-Requisites (unofficial document, 2015-2016)

For official program requirements and information about applying, visit CIS Graduate Admissions

For Temple Course Catalog and Class Schedules, visit http://www.temple.edu Under “Academics”, click on “Courses and Schedules”

Before applying, you must have taken (or be taking) ALL the undergraduate prerequisite courses shown below (left side).

• Before applying, you can take UG prerequisite courses through Temple's Office of Continuing Studies (215 204-2500) or you may take equivalent courses at another accredited college (compare their course descriptions with ours). Please note that Temple does not offer Upper level UG prerequisite courses at night.

• For questions about admissions, email Julie.Skrocki@temple.edu For questions about program requirements or pre-requisites, email sallyk@temple.edu

Before applying, you must have taken (or be taking) ALL the undergraduate prerequisite courses shown below.

Math 1021 College Algebra or math placement
Math 1022 Pre-Calculus or math placement
CIS 1068 OO Program Design or 1 year programming experience (typically offered at night)
CIS 1166 Math Concepts I (day only)

CIS 2109 DataBase Mgt Systems or experience (typically offered at night)
CIS 2168 Data Structures or 1 year programming experience (typically offered at night)
CIS 2229 NW & Operating Systems or experience (day only)
CIS 2308 Web Application Development or CIS 3515 Mobile App Development or [CIS 3309 & CIS 3342 NW App Sys] (all offered day only) or equivalent web programming experience

CIS 3329 Network Architectures or experience (day only)

CIS 3308 Web Application Development or CIS 3515 Mobile App Development or [CIS 3309 & CIS 3342 NW App Sys] (all offered day only) or equivalent web programming experience

CIS 5106 System Development Process (core, spring)

CIS 5107 Computer Systems Security (core, fall)
CIS 5105 IT Process Management (core, fall)
CIS 5108 Emerging Technologies (core, every)

Undergraduate Prerequisites (most offered during the day)
Graduate Courses (30 credits, most offered at night)

Math 1022 Pre-Calculus or math placement
CIS 1068 OO Program Design or 1 year programming experience (typically offered at night)
CIS 1166 Math Concepts I (day only)
CIS 2109 DataBase Mgt Systems or experience (typically offered at night)
CIS 2168 Data Structures or 1 year programming experience (typically offered at night)
CIS 2229 NW & Operating Systems or experience (day only)
CIS 2308 Web Application Development or CIS 3515 Mobile App Development or [CIS 3309 & CIS 3342 NW App Sys] (all offered day only) or equivalent web programming experience
CIS 3329 Network Architectures or experience (day only)
CIS 3308 Web Application Development or CIS 3515 Mobile App Development or [CIS 3309 & CIS 3342 NW App Sys] (all offered day only) or equivalent web programming experience

CIS 5106 System Development Process (core, spring)
CIS 5107 Computer Systems Security (core, fall)
CIS 5105 IT Process Management (core, fall)
CIS 5108 Emerging Technologies (core, every)

Elective
Elective
Elective
Elective
Elective
Elective
Elective
Elective

* Graduate Electives can include up to 2 independent study courses. Students take core courses before taking Electives.

** For Project course, the prerequisite is all 4 core courses and 3 or more graduate electives.

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