Students may apply for certification into the Bachelor of Arts in Computer Science degree program after completion of the following courses with a grade of C or better: CptS 121, 122, 223; Math 201 (or 171), 202 (or 172), 216; Phil 201. Required for certification, apply at advise.eecs.wsu.edu

No courses listed in this schedule of study may be taken on a pass/fail basis. All listed CptS courses, pre-requisites to these courses, and required electives must be completed with a grade of C or better. This policy applies to transfer courses as well as courses completed at WSU.

Course descriptions, including pre-requisites, are available in the WSU catalog: http://catalog.wsu.edu.

Requests for transfer credit for EECS courses must include a complete syllabus from the transfer institution.

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**First Semester 16 credits**
- CptS 121 Program Design & Development 4
- Engl 101 Composition [WRTG] 3
- Hist 105 [ROOT] 3
- Math 201 Math for Business & Economics 3
- Phil 201 Elementary Logic [QUAN] 3

**Second Semester 16 Credits**
- CptS 122 Data Structures (Prereq CptS 121) 4
- Math 202 Calc for Business & Econ 3
- Creative and Professional Arts [ARTS] 3
- Social Science [SSCI] 3
- Math 216 Discrete (Prereq Math 107, philo 201) 3

**Third Semester 14 Credits**
- CptS 223 Advanced Data Structures (Prereq CptS 122; Math 216 or equiv, or c//) 3
- Biological Science w/ lab [BSCI] 4
- Math 212 Intro to Statistical Methods 4
- CptS 260 Intro Computer Architecture (Prereq CptS 223 or c//) 3

**Fourth Semester 15 Credits**
- CptS 224 Programming Tools (Prereq CptS 122; rec 223 or equiv) 2
- Math Elective 3
- Minor Elective 3
- Minor Elective 3
- Physical Science w/lab [PSCI] 4

**COMPLETE WRITING PORTFOLIO**  
→ after 60 credit hours

**Fifth Semester 16 Credits**
- CptS 322 Software Eng Principles I [M] 3  
  (Prereq Math 216)
- CptS 355 Program Language Design (Prereq CptS 223) 3
- Engl 402/403 Communication [COMM] or Written Communication [WRTG] 3  
  (Prereq English 101/105)
- Science Elective [BSCI] or [PSCI] 4
- Minor Elective 3

**Sixth Semester 15 Credits**
- CptS 323 Principles of Software Design (Prereq CptS 223; CptS 322 or c//) 3
- Advanced Computer Science Elective 4
- Minor Elective 3
- Diversity [DIVR] 3
- Science Elective [BSCI] or [PSCI] 3

**Seventh Semester 15 Credits**
- CptS 422 Software Eng Principles II [M] 3  
  (Prereq CptS 323)
- Advanced Computer Science Elective 4  6
- Humanities [HUM] 3
- Minor Elective 3

**Eighth Semester 15 Credits**
- CptS 402 Social & Professional Issues (Prereq CptS 121) 3
- Advanced Computer Science Elective 4  6
- Minor Elective 3
- Integrative Capstone [CAPS] 3
- Complete CPT A Exit Survey and Interview

**COMPLETE EXIT INTERVIEW AND SURVEY**  
→ must be complete for degree to be awarded
1) Either math sequence listed below will satisfy the math requirement for this degree. Sequence B will allow a broader selection of advanced computer science electives. The course work in mathematics must total at least sixteen semester hours (including Math 216.)

- **Sequence A:** Math 201, 202, 212 and a math elective chosen from the following list: Math 364, Math 416, or Stat 412.

- **Sequence B:** Math 171, 172, 220, and Math 212 or Math 360.

A combination of these sequences is also possible. For example, students wishing to take CptS 442 Computer Graphics could take Math 171, 220, 212 and 416. (Credit is not granted for both Math 171 and 202, or Math 220 and 201.)

2) Science electives must include a year-long sequence (two semesters including a laboratory in each semester), and two additional science courses, one of which must have a laboratory component. Acceptable science courses are those designated [BSCI] OR [PSCI] courses with lab component have an (L) designation. At least one science course from each of the [BSCI] and [PSCI] categories is required. Honors students are encouraged to take Scit 198 and Sci 199 to fulfill the year-long sequence requirement.

3) Elective credits must include a minor program. Completion of a minor is a graduation requirement. If a minor in a science or engineering discipline is contemplated, Math Sequence B should be taken (see note 1).

4) Advanced computer science electives must be chosen to contain advanced work in at least three separate computer science areas. Note that some courses listed below have pre-requisites that are not required in the degree program. Eligible courses and areas are:

   a) Theory: CptS 317, 450, 453 (requires Math 171 and 220)
   b) Scientific Computing: CptS 430 (requires Math 172 and 315), CptS 438 (requires Math 172), 470
   c) Programming Languages: CptS 355, 452, 481
   d) Hardware Systems: CptS 360, 460, 466; EE 324, 334 (requires EE 214, 234)
   e) Graphics and Multimedia: CptS 442 (requires Math 171 and 220), 443
   f) Software Systems: CptS 425, 427, 451, 455, 464
   g) Intelligent Systems: CptS 440, 434
   h) Software Engineering: CptS 421, 422, 423
   i) Selected offerings of CptS 483 could fit in one or more of the categories above.

Upper-level classes in other disciplines can be counted as advanced computer science electives only with prior approval from the Academic Coordinator.

5) Minors vary in the number of credits required. Any elective credits not required for the minor are filled with advanced computer science electives.