

## Computer Science and Computer Information Systems

**Faculty:** M. Branton, H. ElAarag, D. Plante, H. Pulapaka

The computer science major at Stetson University provides students a flexible curriculum where they can concentrate in one of two defined degree tracks, Computer Science and Computer Information Systems, or create one of their own with the help of the faculty. The student receives either a Bachelor of Science degree in Computer Science or in Computer Information Systems, as appropriate.

The Computer Science track gives students a broad overview of the field of computer science and prepares them for graduate study in Computer Science or a career in industry that emphasizes the student's technical expertise in the entire field. The Computer Information Systems track is designed for students who are interested in applying today's technologies to the solution of business problems. Students choosing this latter track are prepared for graduate study in Information Technology, Computer Information Systems or Software Engineering, or a career in industry that emphasizes application development. By taking a number of courses that emphasize network and web-based application development, and combining this knowledge with a minor in business, students obtain not only an exceptional foundation in Computer Information Systems, but also understand how technology is applied in business. Students that have an interest in a particular subject area within Computer Science, or interdisciplinary related fields such as Cognitive Science, Biotechnology, or Computational Science, have the option of working with the computer science faculty to define their own curriculum in the Computer Science major. One such interdisciplinary major involves digital media. The department supports this through an interdisciplinary major in Digital Arts. See **Digital Arts** elsewhere in this bulletin for more information.

Regardless of the track, students are prepared to enter a vital and rapidly changing field, either by pursuing graduate study or through leadership in a challenging industry career. The major incorporates the Object Oriented paradigm, the theoretical aspects of computer science, and the skills of software engineering into a challenging curriculum modeled after the nationally-recognized guidelines of the Joint IEEE Computer Society/ACM Task Force on the "Year 2001 Model Curricula for Computing" (CC-2001). The emphasis is on a hands-on learning environment where students learn important concepts as they work on real-world projects. Besides course related projects, majors have the opportunity to work one-on-one with faculty members on commercial projects through the Stetson Software Institute, a practicum formed by the faculty.

<b>Bachelor of Science - Computer Science</b>	
General Education Requirements. The students must complete the General Education requirements for the College of Arts and Sciences for the Bachelor of Science degree.	
<b>Lower-Division Major Requirements</b>	
Computer Science 101, 102	6
Computer Science 201	3
Computer Science 211	3
Computer Science 221	3
Lower-Division Total	<b>15</b>
<b>Upper-Division Major Requirements</b>	
Computer Science 301	3
Computer Science 311	3
Computer Science 321	3
Computer Science 497, 498, 499	8
Upper-Division Total	<b>17</b>
<b>Electives</b>	
Any 3 upper-division CS Courses	<b>9</b>

<b>Other</b>	
Mathematics 201, 202	8
Mathematics 245	3
Probability/Statistics*	3
Physics 201, 202	10
Other Total	<b>24</b>
<b>Total hours required for the Computer Science</b>	<b>65</b>
*Any probability/statistics course approved by the department satisfies this requirement.	
Electives: Hours to total	120
Only one independent study course may count towards the fulfillment of the Computer Science requirements.	

<b>Bachelor of Science - Computer Information Systems</b>	
General Education Requirements. The students must complete the General Education requirements for the College of Arts and Sciences for the Bachelor of Science degree.	
<b>Lower-Division Major Requirements</b>	
Computer Science 101, 102	6
Computer Science 211	3
Computer Science 221	3
Lower-Division Total	<b>12</b>
<b>Upper-Division Major Requirements</b>	
Computer Science 304, 305	6
Computer Science 321, 395(Advanced IT)	6
Computer Science 497, 498, 499	8
Upper-Division Total	<b>20</b>
<b>Electives</b>	
Choose 9 hours from: EBT397 or EBT494 or any upper division CS courses	<b>9</b>
<b>Other</b>	
Any Business minor (except EBT)	<b>15-18</b>
<b>Total hours required for Computer Information Systems</b>	<b>56-59</b>
Electives: Hours to total	120
Only one independent study course may count towards the fulfillment of the Computer Information Systems requirements	

<b>Minor in Computer Science</b>	
<b>Lower-Division Major Requirements</b>	
Computer Science 101, 102	6
Computer Science 211	3
Computer Science 221	3
<b>Other Requirements</b>	
At least six (6) semester hours selected from any upper-division computer science courses	6
<b>Total hours required for the Computer Science minor</b>	<b>18</b>