



2009-2011 (Revised: 12/5/10)

csis.murraystate.edu

Career Outlook

Careers in the information technology/computing arena are going to abound far into the future. The Bureau of Labor Statistics (www.bls.gov) projects tremendous growth and high salaries for those seeking careers in computer-related disciplines. Seven of the top 10 fastest growing occupations fall in this category and six of these require bachelor's degrees. Our graduates are successfully placed in a variety of managerial and technical positions as Software Engineers, Programmer/Analysts, Voice Over IP (VOIP) architects, Network Architects, Game programmers, Quality control Specialists and numerous other computer-related professionals at small, medium and large businesses and/or non-profit organizations.

Program Summary

The **major** (minor required) in Computer Science (CSC) at Murray State University lays a strong foundation in problem-solving and programming skills to prepare students to be key players in a variety of technology-intensive industries. Students may choose to specialize in one of **four** *threads of emphases*: Graphics and Visual Computing, Net-Centric Computing, Embedded Systems Programming, or Applications programming. Students earn a Bachelor of Science or Bachelor of Arts in Computer Science. As part of the requirements for graduation, a minor program of study must be completed. The choice of a minor depends on future plans and intellectual curiosity. Among the most common minors: Mathematics, Business Administration, Computer Information Systems, Art, and Technical Writing.

The **area** (no minor required) in Computer Science (CSC) encompasses all the courses in the Computer Science major plus other courses, with approval of advisor, that define an appropriate area of concentration. It is a bit more flexible as it allows the student to sample courses from other disciplines. Those considering an MBA or the MSIS for graduate education may choose suitable business courses to prepare them for such a future.

Resources

Our faculty is drawn from both academia and industry and is well-equipped to prepare students for careers that could span several decades. Due to the size of our upper division classes, our students and teachers get to know each other very well. Faculty are easily accessible and have often gone out of their way to motivate and encourage the students. They are also nationally and internationally recognized for their research in a wide variety of areas from learning styles and knowledge management to robotics.

The department provides access to modern well-equipped computer laboratories with an extensive collection of state-of-the-art software and hardware to provide a rich and practical classroom experience.

The department also supports an ACM chapter for the students. The club is very active and meets several times a month. They also play a big part in the hosting of the Regional programming competition each November..





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Suggested Schedule for completing the Baccalaureate degree (BS) in 4 years. The course titles and descriptions are available in the 2009-2011 Undergraduate Bulletin.

MAJOR or AREA	Fall	Hrs	Spring	Hrs
FR	BPA 099	1	HUM 211	3
	COM 161	3	CSC 145	4
	CSC 101	3	MAT 250	5
	ENG 105	4	University Studies (U.S) Elective	3
	MAT 135	4		
		15		15
SO	CSC 235	3	CSC 301	3
	CSC 345	4	CSC 340 ¹	3
	CIV 201 or 202	3	CIS 407	3
	Lab Science	4	U.S. Elective	3
			U.S. Elective	3
		14		15
JR	CSC 302	3	CSC 410	3
	CSC 342 ¹	3	CSC 530	3
	CSC 405	4	U.S. Elective	3
	U.S. Elective	3	Area Elective	3
	U.S. Elective	3	Elective	3
		16		15
SR	CSC 415	3	CSC 445	3
	CSC 420	3	CSC 540	3
	Area Elective	3	Area Elective	3
	Area Elective	3	Area Elective	3
	Elective	3	Elective	3
		15		15

Interpretation of "Elective": Must apply towards one of the following

Area electives: 15 hours (Need Advisor approval)

Minor: 21-24 hours (required only for those pursuing a Major in Computer Science)

Free electives: Take as many as needed to bring total curriculum to 120 hours

Total (minimum) curriculum requirements: 120 hours

The B.A. in Computer Science is similar except for the following additions: A sequence of four courses in a single foreign language, an additional Humanities/Fine arts class. Most students with prior foreign language education can take a placement test and earn 6-9 credit hours, thus taking roughly the same number of courses as the BS students and finishing in the same time period while earning more credits overall.

¹ Take either CSC 340 or CSC 342 (Only one is required – the other could count as "area elective")