

Mapping of Learning Objectives To Courses

The following tables map the department's undergraduate learning objectives to the courses required in the program. Note that different options require different courses. For the association between course and option, see section IV Curriculum. Space limitations required abbreviations for the objectives. The associations are as follows:

pl - Proficient in programming in at least two programming languages

Mastery level knowledge in each of the following core computer science subjects

ps - Principles and practices for problem/solution analysis and design

data - Data structures and algorithms

arch - Computer architecture and organization

lang - Programming languages

os - Operating systems

comp - Theory of computing

se - Software engineering

prod - Possess an understanding of the practices and dynamics required to develop software whether it be a single program or a major software product developed in a team environment

ds - Possess a fundamental knowledge of digital systems, their implementation, and interface requirements

math - Proficient in the use of mathematical tools including discrete mathematics, calculus, elementary statistics, and probability

db - Understand the basics of information and database systems and their implementation

ls - Understand the basics of the life sciences, the scientific method, basic chemistry, and molecular biology

bus - Understand basic business, accounting, and economic practices

tw - Understand the basics of team and organizational leadership principles

net - Understand the basics of networking

sci - Understand the basics of science, and specifically the scientific method

arts - Have an understanding and appreciation for the arts, humanities, and social sciences, and their importance in today's society

ll - Possess sufficient fundamental knowledge of computer science to be a life-long learner

soc - Understand the social and ethical issues which face computer scientists, and thus be able to contribute to society in a

positive and productive manner
 com - Able to communicate information effectively both in writing and orally.

Note that since all courses in the curriculum contribute to the goal of being a life long learner, that objective is not listed in the table.

The levels of competency for an objective are E=exposure, F=familiarity, M=mastery. For required non-computer science classes only the fact that the objective is an element of the class is noted with an X.

Course	pl	ps	data	arch	lang	comp	os	se	prod	ds	math	sci	ls	db	bus	tw	net	arts	net	soc	com	
CS1010	E	E										E									E	
CS1400 CS1700	F	F						E													E	
CS1405 CS1710	F	F						E														
CS1410 CS1720	M	F	E																			
CS2420 CS2200	M	F	M			F																
CS2450 CS2370		M						F	F							F						F
CS2550		F		F		F				E											F	F
CS3000			F	F				F														
CS3100				F			M															
CS3410	M							E														
CS3420	M							E														
CS2850 CS3550	M			M						F												
CS4700	F				M	F																
CS4720				E						F							F					

