CS Program Required Course Mapping to Program SLOs

Course ID	Course Title (Units)	Course Type	Prerequisites	SLO-1	SLO-2	SLO-3	SLO-4	SLO-5	9-OTS	SLO-7	8-OTS	6-OTS	SLO-10	SL0-11
CS 310	Data Structures (3)	Required	CS 108, Math 245	D	D	D			D		D	D	D	D
CS 320	Programming Languages (3)	Required	CS 108	D	D	D					D	D		
CS 370	Computer Architecture (3)	Required	CS 237	D	D	D	D				D	D		D
CS 440	Social/Legal/Ethical Issues in Computing (3)	Required	CS 108					P	D	P	D			
CS 490	Senior Seminar (1)	Required	15 units upper division CS courses					P	P	P	P			
CS 530	Systems Programming (3)	Required	CS 237, 310	P	P	P	P	D	D			P	P	P
CS 560	Algorithms and Their Analysis (3)	Required	CS 310	P	P	P						P	P	P
CS 570	Operating Systems (3)	Required	CS 310, 370 and C language	P	P	P	D	D			D	P	P	P

Legend:

- I Introductory/Novice*
- D Developing competence*
- P Proficient*

Program Student Learning Objectives:

- SLO-1 Apply knowledge of computing and mathematics appropriate to the discipline
- SLO-2: Analyze a problem, and identify and define the computing requirements appropriate to its solution
- **SLO-3:** Design, implement, and evaluate a computerbased system, process, component, or program to meet desired needs
- **SLO-4:** Function effectively on teams to accomplish a common goal
- **SLO-5:** Honor professional, ethical, legal, security, and social issues ad responsibilities
- **SLO-6:** Communicate effectively with a range of audiences

- SLO-7: Analyze the local and global impact of computing on individuals, organizations, and societyse:
- **SLO-8:** Engage in continuing professional development
- **SLO-9:** Use current techniques, skills, and tools necessary for computing practice.
- **SLO-10:** Apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices.
- **SLO-11:** Apply design and development principles in the construction of software systems of varying complexity.

^{*} From Wikipedia/Dreyfus model of skill acquisition