

**BS CS Alignment Matrix** – For each stated student learning outcome, where does the student have the opportunity to learn the outcome and where is student achievement of the outcome is assessed?

<b>SLO/Required Courses/experiences</b>	<b>CIS 200</b>	<b>CIS 300</b>	<b>CIS 301</b>	<b>CIS 308</b>	<b>CIS 415</b>	<b>CIS 450</b>	<b>CIS 501</b>
<b>Degree program Slo's</b>							
(a) An ability to apply knowledge of computing and mathematics appropriate to the discipline			X			X	
(b) An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution	X	XA		X			X
(c) An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs							X
(d) An ability to function effectively on teams to accomplish a common goal							X
(e) An understanding of professional, ethical, legal, security and social issues and responsibilities					XA	X	
(f) An ability to communicate effectively with a range of audiences					XA	X	
(g) An ability to analyze the local and global impact of computing on individuals, organizations, and society					XA		
(h) Recognition of the need for and an ability to engage in continuing professional development,					X		
(i) An ability to use current techniques, skills, and tools necessary for computing practice	X	X	X	X		XA	X
(j) An ability to 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. [CS]			X			X	XA
(k) An ability to apply design and development principles in the construction of software systems of varying complexity. [CS]							XA
<b>University Slo's</b>							
Knowledge	X	X	X	X	X	X	X
Critical thinking	X	X	X	X	X	X	X
Communication					X		
Diversity					X		
Academic and professional integrity					X	X	

Place an “X” for courses or experiences in which students have the opportunity to learn the outcome.

Place an “A” for courses or experiences in which student performance is used for program level assessment of the outcome.

**BS CS (Computer Science Option) Alignment Matrix** – For each stated student learning outcome, where does the student have the opportunity to learn the outcome and where is student achievement of the outcome is assessed?

<b>SLO/Required Courses/experiences</b>	<b>CIS 505</b>	<b>CIS 520</b>	<b>CIS 560</b>	<b>CIS 570</b>	<b>CIS 575</b>	<b>CIS 598</b>	
<b>Degree program Slo's</b>							
(a) An ability to apply knowledge of computing and mathematics appropriate to the discipline	XA	X	X	XA	XA	X	
(b) An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution		X			X	XA	
(c) An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs	X	X	X			XA	
(d) An ability to function effectively on teams to accomplish a common goal		XA				X	
(e) An understanding of professional, ethical, legal, security and social issues and responsibilities		X					
(f) An ability to communicate effectively with a range of audiences						XA	
(g) An ability to analyze the local and global impact of computing on individuals, organizations, and society							
(h) Recognition of the need for and an ability to engage in continuing professional development,		XA					
(i) An ability to use current techniques, skills, and tools necessary for computing practice	X	X	X			XA	
(j) An ability to 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. [CS]	X	X	XA	X	X		
(k) An ability to apply design and development principles in the construction of software systems of varying complexity. [CS]		X	XA			X	
<b>University Slo's</b>							
Knowledge	X	X	X	X	X	X	
Critical thinking	X	X	X	X	X	X	
Communication		X				X	
Diversity							
Academic and professional integrity		X					

Place an “X” for courses or experiences in which students have the opportunity to learn the outcome.

Place an “A” for courses or experiences in which student performance is used for program level assessment of the outcome.

**BS CS (Software Engineering Option) Alignment Matrix** – For each stated student learning outcome, where does the student have the opportunity to learn the outcome and where is student achievement of the outcome is assessed?

<b>SLO/Required Courses/experiences</b>	CIS 540	CIS 541	CIS 544	CIS 562	CIS 625		
<b>Degree program Slo's</b>							
(a) An ability to apply knowledge of computing and mathematics appropriate to the discipline	X	X	X	XA	XA		
(b) An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution	XA	X	X	X	X		
(c) An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs	X	XA	X		X		
(d) An ability to function effectively on teams to accomplish a common goal	XA	X		X			
(e) An understanding of professional, ethical, legal, security and social issues and responsibilities					X		
(f) An ability to communicate effectively with a range of audiences	X	XA					
(g) An ability to analyze the local and global impact of computing on individuals, organizations, and society							
(h) Recognition of the need for and an ability to engage in continuing professional development,	XA	X					
(i) An ability to use current techniques, skills, and tools necessary for computing practice	XA	X	X	X	X		
(j) An ability to 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. [CS]	X	XA			XA		
(k) An ability to apply design and development principles in the construction of software systems of varying complexity. [CS]	X	X	XA	X	X		
<b>University Slo's</b>							
Knowledge	X	X	X	X	X		
Critical thinking	X	X	X	X	X		
Communication	X	X					
Diversity							
Academic and professional integrity							

Place an “X” for courses or experiences in which students have the opportunity to learn the outcome.

Place an “A” for courses or experiences in which student performance is used for program level assessment of the outcome.