

BS CS Alignment Matrix

| | CIS 115 | CIS 200 | CIS 300 | CIS 301 | CIS 308 | CIS 415 | CIS 450 | CIS 501 | CIS 560 | CIS 575 |
|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Student Outcomes | | | | | | | | | | |
| (a) An ability to apply knowledge of computing and mathematics appropriate to these outcomes and to the discipline | | | X | X | X | | X | A | XA | XA |
| (b) An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution | | X | X | | X | | | XA | | X |
| (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 | X | | | | | | X | | XA | |
| (e) An understanding of professional, ethical, legal, security and social issues and responsibilities | | | | | | XA | XA | | | |
| (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 | X | | | | | 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 | | XA | 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. | | | X | X | | | X | XA | X | X |
| (k) An ability to apply design and development principles in the construction of software systems of varying complexity. | | | | | | | | XA | X | |

An “X” denotes courses in which students have the opportunity to learn the outcome.

An “A” denotes courses in which student performance is used for program level assessment of the outcome.

Specialization Electives and Capstone Sequence

| | CIS 505 | CIS 640 | | CIS 520 | CIS 625 | | CIS 642/643 | CIS 598 |
|---|------------|------------|--|------------|------------|--|----------------|------------|
| Student Outcomes | | | | | | | | |
| (a) An ability to apply knowledge of computing and mathematics appropriate to these outcomes and to the discipline | X | X | | X | X | | XA | XA |
| (b) An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution | | | | X | X | | XA | 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 | XA |
| (d) An ability to function effectively on teams to accomplish a common goal | | | | XA | 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 | 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 | XA | | X | |
| (i) An ability to use current techniques, skills, and tools necessary for computing practice | X | X | | X | X | | XA | 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 | X | | XA | XA |
| (k) An ability to apply design and development principles in the construction of software systems of varying complexity. [CS] | | X | | X | X | | XA | XA |

An “X” denotes courses in which students have the opportunity to learn the outcome.

An “A” denotes courses in which student performance is used for program level assessment of the outcome.