

Knowledge	
K1	Understand and identify mathematics and science principles of computing problem appropriate to its solution.
K2	Describe the fundamental principles in all core areas of computer science (algorithms, programming languages, computer systems, software development methodology).
K3	Gain significant application of software design systems to construct and demonstrate intermediate mastery of their applications.
Skills	
S1	Use abstraction, modeling, and mathematical concepts, methods, and techniques to analyze computing-based problems.
S2	Analyze a complex computing problem, apply principles of computing, and other relevant disciplines to identify solutions.
S3	Use computer science principles and the relevant concepts at basic and advanced levels.
S4	Apply systems and software development and management principles, methodologies, techniques, and tools to innovatively and creatively analyze, design, implement and evaluate systems and applications at various complexity levels.
S5	Investigate Artificial Intelligence (AI) theories, principles, and relevant mathematical models to automate processes, develop smart decision support systems, or simulate real-world situations at various complexity levels.
S6	Compare, contrast, and evaluate competing data science methods appropriate to the context of the problem.
Values	
V1	Communicate effectively with a range of audiences as a member or a leader of a team.
V2	Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.

Knowledge	
K1	Understand and identify mathematics and science principles of computing problem appropriate to its solution.
K2	Describe the fundamental principles in all core areas of information technology (programming languages, software development methodology, networks, cryptography, emerging technologies and cloud computing).
K3	Gain significant application of software design systems to construct and demonstrate intermediate mastery of their applications.
Skills	
S1	Use abstraction, modeling, and mathematical concepts, methods, and techniques to analyze computing-based problems.
S2	Analyze a complex computing problem, apply principles of computing, and other relevant disciplines to identify solutions.
S3	Use Information Technology (IT) principles, architecture models, user experience theories, and their applications at basic and advanced levels.
S4	Explain cybersecurity foundations, principles, concepts, theories, procedures, operations, policies, and technologies at basic and advanced levels.
S5	Design and implement cloud applications.
Values	
V1	Communicate effectively with a range of audiences as a member or a leader of a team.
V2	Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.