

Course ILOs for Approved Common Core Courses (Subject Code: COMP)

Course Code, Title and Course ILOs	Weighting	Area(s)
COMP 1001 Exploring Multimedia and Internet Computing		S&T
CILO 1 Identify the organization, basic working mechanism, and latest trend of modern computer systems	NA	
CILO 2 Recall the design principles and procedure of software application development	NA	
CILO 3 Recognize the social and philosophical impacts of computers and internet to human society	NA	
CILO 4 Use integrated knowledge on state-of-the-art software to solve problems and present solutions via websites, surveys, documents, spreadsheets, presentations, etc.	NA	
CILO 5 Search information efficiently from internet and share with others	NA	
CILO 6 Identify security issues in internet and protect personal information	NA	
COMP 1021 Introduction to Computer Science		QR
CILO 1 Take a "real-life" problem and abstract out the pertinent aspects necessary to solve it	20%	
CILO 2 Formulate formal solutions to well-posed problems using the logic of a programming language	20%	
CILO 3 Implement formal solutions in Python	40%	
CILO 4 Have an understanding of many important areas of computation from the Computer Science perspective	20%	
COMP 1022P Introduction to Computing with Java		QR
CILO 1 Take a "real-life" problem and abstract out the pertinent aspects necessary to solve it	20%	
CILO 2 Formulate formal solutions to well-posed problems using the logic of a programming language	20%	
CILO 3 Implement formal solutions in Java using an integrated development environment	40%	
CILO 4 Have an understanding of basics of data abstraction using the object-oriented framework	20%	
COMP 1942 Exploring and Visualizing Data		QR
CILO 1 An ability to explain a variety of mathematical models or quantitative methods	NA	
CILO 2 An ability to use appropriate mathematical models or quantitative methods to formulate, analyze and solve problems	NA	
CILO 3 An ability to visualize the input data and the solution of the problem	NA	

Course ILOs for Approved Common Core Courses (Subject Code: COMP)

Course Code, Title and Course ILOs	Weighting	Area(s)
COMP 1943 Creative Sound Design		A, S&T, QR
CILO 1 Collage source sounds to create soundtracks with a desired mood	10%	
CILO 2 Use sound effects to create soundtracks with a desired mood	15%	
CILO 3 Use sound effects to modify soundtracks so that their original mood is changed to a desired mood	15%	
CILO 4 Create music with a desired mood	20%	
CILO 5 Modify music so that its original mood is changed to a desired mood	20%	
CILO 6 Create and modify music and soundtracks with mixed and time-varying moods	20%	
COMP 1944 Artificial Intelligence Ethics		SA, S&T
CILO 1 Compare different frameworks for AI ethics, including IEEE Ethically Aligned Design, and be familiar with the many types of misuse of AI technology	20%	
CILO 2 In new scenarios where AI impacts society, evaluate the limits of deontological rule-based AI ethics; analyze intended and unintended consequences in line with consequentialist AI ethics, social well-being metrics, and AI for social good; and analyze the societal role of virtue AI ethics	10%	
CILO 3 Propose designs for embedding values into autonomous systems and artificial moral cognition, particularly with regard to the ethics of emotional AI, empathetic AI, and affective computing	10%	
CILO 4 In new scenarios where AI impacts society, analyze the AI and machine learning's fairness, responsibility and accountability, and evaluate what degree of transparency and explainability is possible	10%	
CILO 5 Recognize weaponization of information and exploitation of unconscious biases, and propose training dataset design policies to avoid algorithmic bias and discriminatory outcomes	20%	
CILO 6 Analyze the social consequences of alternative approaches of personal data rights and individual access control, and recognize the risks of surveillance capitalism	10%	
CILO 7 Explain the risks of autonomous weapons, analyze the tradeoffs, and contrast policy proposals	10%	
CILO 8 Analyze AI safety options in coming eras of strong AI and artificial superintelligence	10%	
COMP 2711 Discrete Mathematical Tools for Computer Science		QR
CILO 1 Understand and use the specific mathematical concepts taught	NA	
CILO 2 Understand and use basic mathematical proof techniques. In particular they will be able to prove new statements not previously taught in class	NA	
CILO 3 Model simple combinatorial and computational problems mathematically	NA	

NA : The course offering unit has not assigned any weighting for the course ILOs.

Updated as at 30 April 2021