CSE Ph.D. Breadth Requirements

Ph.D. students must complete three of the courses below—with average grade of at least 3.7—from three different areas:

Area 1: Biomedical Informatics and Computational Biology
- CSE5800 Bioinformatics
- CSE6800 Computational Genomics
- CSE5810 Introduction to Biomedical Informatics

Area 2: Algorithms, Complexity, and Theory
- CSE5500 Algorithms
- CSE5506 Theory of Computing

Area 3: Security, Cryptography, and Privacy
- CSE5402 Network Security
- CSE5850 Introduction to cybersecurity
- CSE5852 Modern Cryptography: Foundations

Area 4: Networks, Systems, and Performance
- CSE5300 Networking
- CSE5302 Computer Architecture

Area 5: Machine Learning and Data Science
- CSE5713 Data Mining
- CSE5819 Introduction to Machine Learning
- CSE5820 Machine Learning
- CSE5825 Bayesian Machine Learning

Any course from this list taken as part of undergrad studies in UConn, or an equivalent cross-listed undergrad course, may be counted toward satisfaction of the breadth requirements.

**Effective date.** These requirements apply to students commencing graduate studies in the Fall semester, 2023, or later. Students who commenced studies earlier may either fulfill these requirements, or the requirements in effect when they commenced studies. Earlier program requirements are available on the CSE website.