MSIN Degree Specific Core Course List

Note: Students should always register under the INI course number (14-XXX) if a course is cross-listed with other departments. The numbers for cross-listed courses are provided to the right of the course titles below. These courses are 12 units unless otherwise noted.

Please note: Course numbers and titles may change. If you notice such a change, please email ini-academic@andrew.cmu.edu prior to enrolling in a course.

10-601  Introduction to Machine Learning
10-605  Machine Learning with Large Datasets
10-701  Introduction to Machine Learning (PhD)
11-642  Search Engines
11-663  Applied Machine Learning (cross-listed 05-834)
11-685  Introduction to Deep Learning
14-735  Secure Coding
14-741  Introduction to Information Security
14-74   Security in Networked Systems
14-744  Mobile and Embedded Software Design
14-757  Introduction to Adversarial Machine Learning
14-760  Advanced Real-World Data Networks
14-795  AI Application in Information Security
14-819  Introduction to Software Reverse-Engineering
14-829  Mobile & IoT Security
14-848  Cloud Infrastructure and Services
15-605  Operating System Design and Implementation
15-611  Compiler Design
15-618  Parallel Computer Architecture and Programming
15-619  Cloud Computing
15-641  Networking and the Internet
15-645  Database Systems
15-712  Advanced Operating Systems and Distributed Systems
15-719  Advanced Cloud Computing (cross-listed 18-709)
15-740  Computer Architecture
15-744  Computer Networks
15-745  Optimizing Compilers for Modern Architectures
18-645  How to Write Fast Code
18-648  Real-Time Embedded Systems
18-649  Distributed Embedded Systems
18-730  Introduction to Computer Security
18-731  Network Security
18-732  Secure Software Systems
18-740  Modern Computer Architecture and Design
18-746  Storage Systems (cross-listed 15-746)
18-750  Wireless Networks and Applications
18-756  Packet Switching and Computer Networks
18-758  Wireless Communications
18-845  Internet Services

**VERSION TABLE**

*Notates dates courses were added or removed from the list.*

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