

IST 714 - Cloud Architecture

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Course Description

Advanced, lab-based exploration of enterprise cloud migration/adoption costs, planning and economics; cloud application/service design, network and data center resource orchestration. Topics also include cloud elastic sizing, risk management, governance, compliance and monitoring.

Additional Description:

IST 714 Cloud Architecture is an advanced, architecture design thinking course. What is needed for enterprise cloud migration and adoption plans, economics and cost analyses, cloud and edge application and service design, virtual network and software defined data center resource orchestration, cloud and edge cybersecurity, cloud governance, and cloud management and monitoring are addressed. Infrastructure, Platform, and Application as a Service course components and class projects, lectures, industry guest lectures, class discussions, and case studies facilitate student learning.

Credit(s)

3.0

Professor of Record

Lee McKnight

Audience

iSchool students enrolled in School of Information Studies MS degree and Certificate programs in Applied Data Science, Information Management, and Library and Information Science, are welcome. Students in other graduate degree programs may enroll with permission of instructor.

Learning Objectives

1. Students will learn through experiential practice to develop intermediate to advanced skills with private, public, hybrid, federated and multi-cloud platforms.
2. Students will understand the Cloud Computing Stack including SaaS, PaaS and IaaS components.
3. Students will learn secure cloud architecture, service development and operations (Dev/ops) and how to incorporate security into the Devops environment for cloud – native DevSecOps processes.
4. Students will learn cloud operating model business organizational impacts.
5. Students will learn cloud economics and service innovation.
6. Students will learn cloud service technical and business risk assessment.
7. Students will learn cloud migration strategies to shift from legacy systems.

Course Syllabus

[Spring 2022 Syllabus- Lee McKnight](#)

Other iSchool Courses

- [IDS660 - Spring Break in Silicon Valley/Entretch - NYC](#)
- [IST 511 - Intro to Library & Info Prof](#)
- [IST556 - Mobile Network Services](#)
- [IST564 - Accessible Lib & Info Services](#)
- [IST 600 - Digital Humanities](#)
- [IST 600 - Information Justice and Community Engagement](#)
- [IST 602 - Digital Forensics](#)

- [IST 603 - Global Financial Systems Architecture](#)
- [IST 605 - Reference & Info Literacy Svces](#)
- [IST 608 - Blockchain Management](#)
- [IST611 - Info. Tech. in Educ. Orgs.](#)
- [IST612 - Youth Svce inLibrary Info Ctrs](#)
- [IST 613 - Library Plan., Mrktng. Assess](#)
- [IST 614 - Management Principles for Information Professionals](#)
- [IST 615 - Cloud Management](#)
- [IST 617 - Motivational Aspects of Information Use](#)
- [IST 618 - Information Policy](#)
- [IST 619 - Economics of Digital Transformation](#)
- [IST 621 - Information Management and Technology](#)
- [IST 622 - Preserv. of Cultural Heritage](#)
- [IST 623 - Intro to Information Security](#)
- [IST 624 - Preserv Lib/Archival Collectns](#)
- [IST 625 - Enterprise Risk Management](#)
- [IST 627 - What's the Big Idea: Technology Innovation](#)
- [IST 628 - Organization/Management of Archival Collections](#)
- [IST632 - Management and Organization of Special Collections](#)
- [IST634 - Security in Networked Environ](#)
- [IST 635 - Collection Dev & Access](#)
- [IST 636 - Leading Issues/Info Security](#)
- [IST639 - Enterprise Technologies](#)
- [IST643 - Enterprise Services and Virtualized Systems](#)
- [IST 645 - Managing Info Systems Projects](#)
- [IST646 - Storytelling Info Professional](#)
- [IST647 - Network Virtualization](#)
- [IST648 - Enterprise Wireless Network Technologies](#)
- [IST 649 - Human Interaction W/Computers](#)
- [IST 651 - Scripting for Enterprise Data Systems](#)
- [IST 652 - Scripting for Data Analysis](#)
- [IST 654 - Information Systems Analysis](#)
- [IST655 - Enterprise IT Consultation](#)
- [IST 658 - Advanced Enterprise Network Management](#)
- [IST 659 - Database Administration Concepts & Database Management](#)
- [IST661 - Managing a School Library](#)
- [IST662 - Instr Strgt & Tech/Info Profs](#)
- [IST663 - Motivating 21st Cent. Learning](#)
- [IST 664 - Natural Language Processing](#)
- [IST668 - Literacy Through School Libraries](#)
- [IST671 - Research Methods in Info. St.](#)
- [IST672 - The Public Library as Institution](#)
- [IST 673 - Technology & The Future of Work](#)
- [IST 674 - Academic Librarianship](#)
- [IST676 - Digital Data and Services in Libraries](#)
- [IST 678 - Communications for Information Professionals](#)
- [IST 681 - Metadata](#)
- [IST 682 - Cultural Competence for Information Professionals](#)
- [IST 687 - Introduction to Data Science](#)
- [IST 700 - Visual Analytics Dashboards](#)
- [IST 700 - Applied Deep Learning](#)
- [IST 700 - Deep Learning, NLP, and Computational Social Science](#)
- [IST 700 - Agile Project Management](#)
- [IST 704 - Applied Info Security](#)
- [IST 707 - Applied Machine Learning](#)
- [IST711 - e-Government](#)
- [IST 714 - Cloud Architecture](#)
- [IST 715 - LAMS: Libraries, Archives, and Museums](#)
- [IST717 - Advanced Library Management](#)
- [IST 718 - Big Data Analytics](#)
- [IST 719 - Information Visualization](#)
- [IST720 - Topics in Library Leadership](#)
- [IST 722 - Data Warehouse](#)
- [IST724 - Database Security](#)
- [IST725 - Information Technology Security Architecture](#)
- [IST726 - Enterprise Architecture: Concepts and Practice](#)
- [IST 728 - Information Security Policy](#)
- [IST735 - Copyright for Information Prof](#)
- [IST 736 - Text Mining](#)
- [IST745 - Proj Portfolio and Prgm Mgmt](#)
- [IST 747 - Comple Issues in IT Project Management](#)
- [IST 754 - Capstone Project in Enterprise Data Systems](#)
- [IST 755 - Strategic Management of Information Resources](#)
- [IST769 - Advanced Big Data Management](#)
- [IST 772 - Quantitative Reasoning for Data Science](#)
- [IST 790 - Theories of Information](#)
- [IST 971 - Internship in Info Studies](#)
- [IST972 - School Media Practicum](#)
- [IST 973 - Internship in Information Studies](#)

- [IST 974 - Internship in Applied Data Science](#)