

## **Master of Science: Enterprise Data Systems 2020- 2021 Advising Check Sheet**

The 36-credit MS-EDS curriculum includes a 21-credit primary core requirement, a 12-credit secondary focus area requirement, a non-credit graduate seminar, and a 3-credit capstone project exit requirement. The curriculum, typically completed within 2 years, combines core classes with electives to give you a strong foundation in data systems, along with the freedom to pursue courses that interest you.

### **Primary Core: 21 credits**

This set of seven courses gives students an understanding and solid background of key concepts and procedures required to understand the technical, security, policy and management principles of current and future information systems. Students should complete 6 of the required courses in their first year.

Class #	Course Title	Completed
IST 614	Management Principles for Information Professionals*	
IST 615	Cloud Management*	
IST 618	Information Policy*	
IST 623	Introduction to Information Security*	
IST 651	Scripting Foundations for Enterprise Data Systems	
IST 658	Advanced Enterprise Network Management	
IST 687	Introduction to Data Science*	

### **Secondary Focus Areas: 12 credits**

The five secondary focus areas and the courses mentioned for each area are key to educating individuals who can achieve a detailed understanding of the requirements and issues related to the design and management of current and future information system infrastructures and services in digital enterprise environments. Students can take 12 credits out of any of the courses listed below in the different focus areas, but are strongly encouraged to take all 12 credits within one focus area. Focus Area credits can also be used toward a Certificate of Advanced Study (CAS) in Data Science or Information Security Management.

#### ***Cloud and Virtualized Information Environments***

The courses in this focus area concentrate on planning, designing and managing modern and future networked and information environments that rely on virtualized and software-defined concepts.

Class #	Course Title	Completed
IST 639	Enterprise Technologies	
IST 643	Enterprise Services and Virtualized Systems	
IST 647	Network Virtualization	
IST 714	Cloud Architecture	
IST 726	Enterprise Architecture: Concepts and Practice	

#### ***Data Science Infrastructure & Applications***

The courses in this focus area concentrate on topics related to the processing, management, and analysis of data and the information infrastructure and services that support modern enterprise data environments.

Class #	Course Title	Completed
IST 659	Data Administration Concepts & Database Management*	
IST 718	Big Data Analytics*	
IST 719	Information Visualization*	
IST 722	Data Warehouse*	
IST 769	Advanced Big Data Management*	
IST 777	Statistical Methods in Information Science and Technology	

### **Enterprise IT Infrastructure Management**

The courses in this focus area provide students with the capabilities to plan, analyze and manage current and future enterprise IT information environments along with an understanding of the economic, policy, risk and technical implications of their deployment and management.

Class #	Course Title	Completed
IST 619	Applied Economics for Information Managers	
IST 625	Enterprise Risk Management*	
IST 643	Enterprise Services and Virtualized Systems	
IST 645	Managing Information Systems Projects*	
IST 648	Enterprise Wireless Networks	
IST 654	Information Systems Analysis*	
IST 683	Managing Information Technology-Enabled Change	

### **Information Security Management**

The courses in this focus area concentrate on topics related to the planning, analysis, and management the information security policies, applications and infrastructure for modern and future enterprise information environments.

Class #	Course Title	Completed
IST 602	Digital Forensics	
IST 634	Security in Networked Environments	
IST 724	Database Security	
IST 728	Information Security Policy	

### **Mobile Services and Applications**

The courses in this focus area concentrate on topics related to the planning, analysis, and management of enterprise mobile services and applications.

Class #	Course Title	Completed
IST 556	Mobile Network Services	
IST 643	Enterprise Services and Virtualized Systems	
IST 648	Enterprise Wireless Networks	
CIS 651	Mobile Application Programming	
CSE 691	Android Programming	

### **Graduate Seminar: Non- Credit, Required**

The Graduate Seminar is a residential workshop that presents emerging topics in the information studies field, designed to bring together students from all graduate programs in the school. Three seminars are delivered each year. Students in the MSEDs program must complete one seminar during the duration of their program of studies. For information on dates and topics, visit [ischool.syr.edu/seminar](http://ischool.syr.edu/seminar).

### **Exit Requirement: 3 credits**

IST 754, the MS-EDS Capstone project-based course, must be taken after the completion of 18 core course credits and the immersion seminar.

Class #	Course Title	Completed
IST 754	Capstone Project in Enterprise Data Systems	

*\*classes are also available as online classes in the quarter terms calendar, offered in partnership with 2SU. There are restrictions on these courses for specific groups of students so please reach out to your advisor for more information.*