LINDSEY WILSON COLLEGE

ADDENDUM TO THE 2023-2024 ACADEMIC CATALOG

Related to New Programs and State Authorizations

Accreditation Statement (pages 1-2)

Accreditation

Lindsey Wilson College is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award associate, baccalaureate, master's, and doctoral degrees. Degree-granting institutions also may offer credentials such as certificates and diplomas at approved degree levels. Questions about the accreditation of Lindsey Wilson College may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, Georgia, 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website (www.sacscoc.org).

The college is also accredited by the University Senate of The United Methodist Church.

The Doctor of Philosophy in counselor education & supervision and the Master of Education in counseling are accredited through the Council for the Accreditation of Counseling & Related Educational Programs (CACREP).

The education program at Lindsey Wilson College is accredited by the Council for the Accreditation of Education Preparation (CAEP) and by the Kentucky Education Professional Standards Board (EPSB).

The Bachelor of Arts in business administration is accredited by the International Accreditation Council for Business Education (IACBE) at 11960 Quivira Road, Suite 300, Overland Park, KS, 66213, (931) 631-3009.

The baccalaureate degree program in nursing at Lindsey Wilson College is accredited by the Commission on Collegiate Nursing Education (CCNE) at 655 K Street, NW, Suite 750, Washington, DC, 20001, (202) 887-6791.

The Lindsey Wilson College Program of Nursing is a member of the American Association of Colleges of Nursing (AACN) at 655 K Street, NW, Suite 750, Washington, DC, 20001, (202) 463-6930.

The Kentucky Council on Postsecondary Education has authorized Lindsey Wilson College to offer programs at various locations in the state.

Lindsey Wilson College is authorized by the following states to offer programs:

- The Ohio Department of Higher Education has authorized Lindsey Wilson College to offer programs at Southern State Community College in Hillsboro.

- The State Council of Higher Education for Virginia (SCHEV) has certified Lindsey Wilson College to operate in Virginia at Southwest Virginia Community College.
- The West Virginia Higher Education Policy Commission has authorized Lindsey Wilson College to operate in West Virginia at the Southern West Virginia Community & Technical College-Logan Campus.
- Lindsey Wilson College is authorized for operation as a postsecondary educational institution by the Tennessee Higher Education Commission. This authorization must be renewed each year and is based on an evaluation by minimum standards concerning quality of education, ethical business practices, health and safety, and fiscal responsibility. In order to view detailed job placement and completion information on the programs offered by Lindsey Wilson College, please visit <https://www.tn.gov/thec/bureaus/student-aid-and-compliance/postsecondary-state-authorization/authorized-institutions-and-data.html>.
- Lindsey Wilson College has demonstrated that it meets the standards set forth in the rules of the Texas Higher Education Coordinating Board and qualifies for an exemption pursuant to Subchapter G, Chapter 61, Texas Education Code and, as defined in Chapter 7.3 of Board rules from certain, but not all, regulations. This exemption will continue as long as the institution maintains its accreditation status with the accrediting organization Southern Association of Colleges and Schools Commission on Colleges and standards acceptable to the Coordinating Board. Lindsey Wilson College is authorized to conduct courses, grant degrees, grant credit toward degrees, and to use certain protected academic terms in the State of Texas until expiration of its current grant of accreditation.

State Authorizations (page 8)

State Authorizations

Lindsey Wilson College is authorized for operation as a postsecondary educational institution by the following state agencies. These authorizations must be renewed each year and are based on an evaluation by minimum standards concerning quality of education, ethical business practices, health and safety, and fiscal responsibility.

- Kentucky: Kentucky Council on Postsecondary Education, 100 Airport Road, Frankfort, KY 40601; (502) 573-1555.
- Ohio: Ohio Department of Higher Education, 25 South Front Street, Columbus, OH 43215; (614) 466-6000.
- Tennessee: Tennessee Higher Education Commission, 312 Rosa Parks Avenue, 9th Floor, Nashville, TN 37243; (615) 741-3605.
- Virginia: Commonwealth of Virginia, P.O. Box 1475, Richmond, VA 23212; (804) 786-3586.
- West Virginia: West Virginia Higher Education Policy Commission, 1018 Kanawha Blvd, East-Ste. 700, Charleston, WV 25301; (304) 558-2101.
- Texas: Texas Higher Education Coordinating Board, 1801 Congress Ave. Suite 12.200, Austin, Texas 78701; (512) 427-2788

Community Campuses (pages 9-10)

Community Campuses

Lindsey Wilson College offers programs at campus sites in Kentucky, Ohio, Tennessee, Virginia, and West Virginia, including:

- **Ashland Community Campus** – Ashland Community & Technical College, 1400 College Drive, Ashland, KY 41101.
    - The Bachelor of Arts in human services & counseling and the Master of Education in counseling are offered.
- **Cumberland Community Campus** – Southeast Kentucky Community & Technical College, 700 College Road, Cumberland, KY 40823.
    - The Bachelor of Arts in human services & counseling and the Master of Education in counseling are offered.
- **Elizabethtown Community Campus –** Elizabethtown Community & Technical College, 600 College Street Road, Elizabethtown, KY 42701
    - The Bachelor of Arts in human services & counseling is offered.
- **Gallatin Community Campus** – Volunteer State Community College, 1480 Nashville Pike, Gallatin, TN 37066.
    - The Tennessee Higher Education Commission has authorized Lindsey Wilson College to offer the Bachelor of Arts in human services & counseling and the Master of Education in counseling.
- **Hazard Community Campus** – University Center of the Mountains, Hazard Community & Technical College, One Community College Drive, Hazard, KY 41701.
    - The Bachelor of Arts in human services & counseling and the Master of Education in counseling are offered.
- **Hillsboro Community Campus** – Southern State Community College, 100 Hobart Drive, Hillsboro, OH 45133.
    - The Bachelor of Arts in human services & counseling and the Master of Education in counseling are offered.
- **Irving Community Campus** – Irving Convention Center, 500 W. Las Colinas Blvd., Irving, TX 75039
    - The hybrid Master of Science in technology management, cybersecurity management, and data science, and the hybrid Master of Business Administration are offered.
- **Knicely Conference Center Campus** – Western Kentucky University, 2355 Nashville Rd., Bowling Green, KY 42101.
    - The hybrid Master of Science in technology management and the hybrid Master of Business Administration are offered.
- **Logan Community Campus** – Southern West Virginia Community & Technical College, 2900 Dempsey Branch Road, Mount Gay, WV 25637.
    - The Bachelor of Arts in human services & counseling and the Master of Education in counseling are offered.
- **London Community Campus** – Somerset Community College-Laurel Campus, 100 University Drive, London, KY 40741.
    - The Bachelor of Arts in human services & counseling and the Master of Education in counseling are offered.
- **Louisville Community Campus** – Jefferson Community & Technical College, 109 East Broadway, Louisville, KY 40202.
    - The Bachelor of Arts in human services & counseling and the Master of Education in counseling are offered.
- **Nashville Community Campus** – Nashville School of Law, 4013 Armory Oaks Dr., Nashville, TN 37204.
    - The Tennessee Higher Education Commission has authorized Lindsey Wilson College to offer Master of Science in technology management and the Master of Business Administration.
- **Prestonsburg Community Campus** – Big Sandy Community & Technical College, One Bert T. Combs Drive, Prestonsburg, KY 41653.

    - The Bachelor of Arts in human services & counseling and the Master of Education in counseling are offered.
- **Radcliff Regional Education Center** – 620 South Wilson Road, Radcliff, KY 40160.
    - The Master of Education in counseling is offered.
- **Richlands Community Campus** – Southwest Virginia Community College, 724 Community College Road, Cedar Bluff, VA 24609.
    - Programs offered are the Bachelor of Arts in human services & counseling, the Master of Education in counseling, and the certificate in substance abuse counseling.
- **Somerset Community Campus** – Somerset Community College, 808 Monticello Street, Somerset, KY 42501.
    - The Bachelor of Arts in human services & counseling and the Master of Education in counseling are offered.

Admissions Requirements (Page 17)

Admission Requirements – Graduate Students

The admission criteria for the college's Doctor of Philosophy in counselor education & supervision, Master of Education degree program in counseling, Master of Business Administration, and Master of Science in technology management are specific to each program. Individuals interested in these programs should consult the appropriate Program Application Procedure section of the catalog.

Transfer Students
All graduate programs offered by Lindsey Wilson College accept transfer students. Individuals interested in transferring to the college should consult the appropriate Transfer of Credit section of the catalog.

International Students
International students applying to the Master of Business Administration (M.B.A.) or the Master of Science degree programs in technology management (M.S.T.M.), cybersecurity management (M.S.C.M.), or data science (M.S.D.S.) must provide proof of English proficiency based on:

- TOEFL minimum score:
    - Internet-based (iBT): 79 composite,
    - Paper-based: 550; *or*
    - Revised Paper-delivered: 21 writing and 19 reading;
- IELTS minimum composite score of 6.5 (score of 6.0 may be considered);
- Duolingo 100;
- English is the student's native language; *or*
- Student completed an undergraduate or a graduate program at an accredited U.S. institution or equivalent English-speaking institution.

Students who fail to demonstrate English proficiency may still be considered for admission to the M.B.A. or M.S. programs but will be required to successfully complete a provisional ESL (English as a Second Language) course before being officially accepted into the program and enrolling in classes.

The English proficiency standards apply to domestic students applying to the M.B.A. or M.S. programs who have not received an undergraduate degree from an English-speaking institution.

International students applying to all other graduate program must provide proof of English proficiency based on:

- TOEFL minimum score:
    - Internet-based (iBT): 79* composite with 21 writing and 19 reading,
    - Paper-based: 550, *or*

    - Revised Paper-delivered: 21 writing and 19 reading;
- IELTS minimum composite score of 6.5;
- Duolingo 100;
- English is the student's native language; *or*
- Student completed an undergraduate or a graduate program at a U.S. institution with U.S. Department of Education recognized institutional accreditation.

Student Complaints (page 64)

Students attending campus locations in the following states may contact the corresponding state agency listed below if their complaint has not been resolved at the institutional level to their satisfaction. Students will not be subject to unfair actions as a result of initiating a complaint proceeding.

- **Kentucky:** CPE Complaint, Council on Postsecondary Education, 1024 Capital Center Drive, Ste. 320, Frankfort, KY 40601; (502) 573-1555. Students may also visit the Council for Postsecondary Education website for their online form.
- **Ohio:** Ohio Department of Higher Education, 25 South Front Street, Columbus, OH 43215; (614) 466-6000 or (614) 728-3095. Students may also visit the Ohio Department of Higher Education website for their online form.
- **Tennessee:** Any person claiming damage or loss as a result of any act or practice by this institution that may be a violation of the Title 49, Chapter 7, Part 20 or Rule Chapter 1540 01-02 may file a complaint with the Tennessee Higher Education Commission, Division of Postsecondary State Authorization after exhausting the grievance process at the institution. THEC's address, Tennessee Higher Education Commission, 312 Rosa L. Parks Ave., 9th Floor, Nashville, TN 37243 and its telephone number is (615) 741-1346.
- **Texas:** Texas Higher Education Coordinating Board, Office of General Counsel, P.O. Box 12788, Austin, TX 78711-2788; (512) 427-2788. Students may visit the Texas Higher Education Coordinating Board website for instructions and an online form.
- **Virginia:** State Council of Higher Education for Virginia, 101 N. 14th Street, 10th Floor, James Monroe Bldg., Richmond, VA 23219; (804) 225-2600. Students may visit the State Council of Higher Education for Virginia website for their online form or may contact council staff to file a complaint about the school as a last resort.
- **West Virginia:** Executive Vice Chancellor for Administration, West Virginia Council for Community & Technical College Education, West Virginia Higher Education Policy Commission, 1018 Kanawha Blvd East, Ste. 700, Charleston, WV 25301; (304) 558-5719. Students may also visit the West Virginia Council for Community & Technical College Education website for their online form.

Graduate Programs (page 77)

Graduate Programs

Master of Business Administration
Emphases offered in:
General Business
Project Management

Master of Education
Counseling
Specialization offered in:
Clinical Mental Health Counseling
Certificate offered in:
Substance Abuse Counseling

Master of Science
Cybersecurity Management
Data Science
Technology Management
Emphases offered in:
General Technology Management
Project Management

Doctor of Philosophy
Counselor Education & Supervision

M.S. Cybersecurity Management

Helen MacLennan, Ph.D., Dean School of Graduate Business & Technology
J.L. Turner Leadership Center, Room 216
(270) 384-7415 maclennanh@lindsey.edu

Mission Statement
The mission of the Master of Science in Cybersecurity Management (M.S.C.M.) program is to provide students with the knowledge and skills necessary to identify, manage, and communicate cybersecurity risks in a global environment through a project-based curriculum delivered by highly qualified faculty.

Cybersecurity, the practice of protecting systems, networks, and data from attacks, in becoming increasingly important as individuals and organizations rely more heavily on technology, cloud computing, and remote workers.

According to the Hechinger Report (March 2023), the U.S. Department of Education and the National Security Administration (NSA) is calling for educators to address a talent gap in cybersecurity – there were more than 300,000 job openings in the growing sector and no one qualified to fill them. A report by the Bureau of Labor and Statistics suggests that the job market for Information Security Analysts is expected to grow 35% by 2031. *Cybersecurity Magazine* reports the global shortage of cybersecurity professionals is at an estimated 3.5 million unfilled positions in 2023, up from 1 million in 2014.

The M.S.C.M. program adheres to the requirements for a National Center of Academic Excellence in Cybersecurity Endorsement (NCAE), which encourages consistency in cybersecurity education within the United States. It is an initiative to continue America's competitive edge in cybersecurity. It also gives colleges an opportunity to apply for grants that non-NCAE schools cannot.

The National Center of Academic Excellence in Cybersecurity (NCAE-C) program is managed by NSA's National Cryptologic School. Federal partners include the Cybersecurity and Infrastructure Security Agency (CISA), the Federal Bureau of Investigation (FBI), the National Institute of Standards and Technology (NIST)/National Initiative on Cybersecurity Education (NICE), the National Science Foundation (NSF), the Department of Defense Office of the Chief Information Officer (DoD-CIO), and the U.S. Cyber Command (USCYBERCOM).

Curriculum

The School of Graduate Business & Technology's Master of Science in Cybersecurity Management program requires 30 credit hours of core coursework in management and cybersecurity and a minimum of three hours of internship. The courses are offered through a combination of a flexible online or hybrid format.

A. Core Curriculum: 30 credit hours

- Strategic Management (MBA 6043) – 3 credit hours
- Organizational Leadership (MBA 6093) – 3 credit hours
- Foundations of Project Management (PM 5003) – 3 credit hours
- Process Management (PM 6013) – 3 credit hours
- Legal & Ethical Environment of Business (MBA 6033) – 3 credit hours
- Data Systems & Algorithms (MSDS 6203) – 3 credit hours
- Foundations of Cybersecurity Management (MSCM 5003) – 3 credit hours
- Cybersecurity Risk Management (MSCM 5013) – 3 credit hours

- Cybersecurity Threats, Attacks & Defense (MSCM 6003) – 3 credit hours
- Strategic Cybersecurity Management (MSCM 6013) – 3 credit hours

B. Internship: 3 credit hours

- Internship (MSTM 5900) – 0.5 credit hours*

**Students must earn a minimum of 3 credit hours and be continually enrolled in the course during the program.*

TOTAL HOURS: 33 credit hours

Admission

Program Application Procedure

Applicants to the M.S.C.M. program will need to:

1. Complete the Graduate School Application for Admission form, which must be submitted online with non-refundable fees of USD 35.00; *and*
2. Submit either:
    a. Official undergraduate transcripts documenting the completion of a U.S. undergraduate degree from an institution with U.S. Department of Education recognized institutional accreditation or its equivalent from a governmentally recognized or similar authority as a postsecondary, academic degree-granting institution of higher learning with the equivalent of a 2.5 GPA; *or*
    b. Official graduate transcripts documenting completion of a graduate degree from an institution with U.S. Department of Education recognized institutional accreditation. Official graduate transcripts from a nationally accredited institution or its equivalent from governmentally recognized or similar authority as a postsecondary, academic degree-granting institution of higher learning will be considered for admission on a case-by-case basis.

Students who have not taken undergraduate courses in technology and management may want to consider taking coursework prior to enrolling.

International Student Application Procedures

An international student's success will rest on the ability to understand, read, write, and speak English as all classes in the program are delivered in English. Thus, in addition to the application materials required of students from the United States, international students applying to a graduate program must provide proof of English proficiency based on:

- TOEFL minimum score:
    - Internet-based (iBT): 79 composite,
    - Paper-based: 550; *or*
    - Revised paper delivered: 21 writing and 19 reading.
- IELTS minimum composite score of 6.5 (score of 6.0 may be considered);
- Duolingo 100;
- English is the student's native language; *or*
- Student completed undergraduate or graduate program at an accredited U.S. institution or equivalent English-speaking institution.

Students who fail to demonstrate English proficiency may still be considered for admission but will be required to successfully complete a provisional ESL (English as a Second Language) course before being officially accepted into the program and enrolling in classes.

The English proficiency standards apply to domestic students who have not received an undergraduate degree from an English-speaking institution.

Transfer of Credit
The program will accept up to nine credit hours in transfer for equivalent courses from institutions of higher education with U.S. Department of Education recognized institutional accreditation.

Graduate Credit without the Bachelor's Degree
The following criteria apply to those students who wish to enroll in master's coursework but who have not earned a bachelor's degree:

- Undergraduates must have senior status;
- They must have a cumulative quality point average of at least 3.0; *and*
- They must have the permission of the director.

No coursework applied toward undergraduate graduation requirements may be counted toward requirements for a graduate degree. A maximum of nine graduate credit hours may be taken by an undergraduate.

M.S. Data Science

Helen MacLennan, Ph.D., Dean, School of Graduate Business & Technology
Center for Entrepreneurship
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Mission Statement
The mission of the Master of Science in data science (M.S.D.S.) program is to prepare students for employment in various data science and data management related areas and/or the pursuit of advanced degrees in data science fields by educating them in the knowledge and application of data science concepts and methods.

Curriculum

The School of Business & Communication's Master of Science in data science is an application-based program which requires 30 credit hours of core coursework in statistics, data science, and machine learning and a minimum of three hours of internship. The courses are all offered in a flexible online or blended format.

A. Core Curriculum: 30 credit hours

- Information in Infrastructure (MSTM 5033) – 3 credit hours
- Probability & Inference for Data Science (MSDS 5103) – 3 credit hours
- Introduction to Statistical Modeling (MSDS 5113) – 3 credit hours
- Fundamentals of Data Science (MSDS 5123) – 3 credit hours
- Data Systems & Algorithms (MSDS 6203) – 3 credit hours
- Programming for Data Science (MSDS 6213) – 3 credit hours
- Data & Database Management with SQL (MSDS 6403) – 3 credit hours
- Production & Visualization of Data (MSDS 6413) – 3 credit hours
- Machine Learning & Artificial Intelligence (MSDS 6503) – 3 credit hours
- Applied Capstone Project (MSDS 6903) – 3 credit hours

B. Internship: 3 credit hours

- Internship (MSTM 5900) – 0.5 credit hours*

**Students must earn a minimum of 3 credit hours and be continually enrolled in the course during the program.*

TOTAL HOURS: 33 credit hours

Admission

Program Application Procedure

Applicants to the M.S.D.S. program will need to:

3. Complete the Graduate School Application for Admission form, which must be submitted online with non-refundable fees of USD 35.00; *and*
4. Submit either:
    c. Official undergraduate transcripts documenting the completion of a U.S. undergraduate degree from an institution with U.S. Department of Education recognized institutional accreditation or its equivalent from a governmentally recognized or similar authority as a postsecondary, academic degree-granting institution of higher learning with the equivalent of a 2.5 GPA; *or*
    d. Official graduate transcripts documenting completion of a graduate degree from an institution with U.S. Department of Education recognized institutional accreditation. Official graduate transcripts from a nationally accredited institution or its equivalent from governmentally recognized or similar authority as a postsecondary, academic degree-granting institution of higher learning will be considered for admission on a case-by-case basis.

Students who have not taken undergraduate courses in data science may want to consider taking coursework prior to enrolling.

International Student Application Procedures

An international student's success will rest on the ability to understand, read, write, and speak English as all classes in the program are delivered in English. Thus, in addition to the application materials required of students from the United States, international students applying to a graduate program must provide proof of English proficiency based on:

- TOEFL minimum score:
    - Internet-based (iBT): 79 composite, *or*
    - Paper-based: 550; *or*
    - Revised paper delivered: 21 writing and 19 reading.
- IELTS minimum composite score of 6.5 (score of 6.0 may be considered);
- Duolingo 100;
- English is the student's native language; *or*
- Student completed undergraduate or graduate program at an accredited U.S. institution or equivalent English-speaking institution.

Students who fail to demonstrate English proficiency may still be considered for admission but will be required to successfully complete a provisional ESL (English as a Second Language) course before being officially accepted into the program and enrolling in classes.

The English proficiency standards apply to domestic students who have not received an undergraduate degree from an English-speaking institution.

Transfer of Credit
The program will accept up to nine credit hours in transfer for equivalent courses from institutions of higher education with U.S. Department of Education recognized institutional accreditation.

Graduate Credit without the Bachelor's Degree
The following criteria apply to those students who wish to enroll in master's coursework but who have not earned a bachelor's degree:

- Undergraduates must have senior status;
- They must have a cumulative quality point average of at least 3.0; *and*
- They must have the permission of the director.

No coursework applied toward undergraduate graduation requirements may be counted toward requirements for a graduate degree. A maximum of nine graduate credit hours may be taken by an undergraduate.

Course descriptions (after COUN courses on page 296)

Master of Science – Cybersecurity Management

M.S. Cybersecurity Management

MSCM 5003 – Foundations in Cybersecurity Management – 3 credit hours
This course provides an overview and foundational understanding of concepts essential to the management of cybersecurity including implementation security systems, data security, privacy, and compliance. Students will review topics including security planning, risk management, security technologies, basic cryptography, application security management, intrusion detection and prevention, physical security, and privacy issues.

MSCM 5013 – Cybersecurity Risk Management – 3 credit hours
In this course, students will learn the practical skills necessary to perform regular risk assessments of their organizations. Topics include management of inventory, risk remediation, risk management analysis, planning, and reporting. The course will provide real-world examples and scenarios of cybersecurity risk management concepts and techniques.

MSCM 6003 – Cybersecurity Threats, Attacks & Defense – 3 credit hours
This course focuses on the practical application of techniques for detecting and documenting network vulnerabilities. Students will explore penetration testing, language-specific software vulnerabilities, mitigation, and input validation.

MSCM 6013 – Strategic Cybersecurity Management – 3 credit hours
The focus of this course is the application of cybersecurity principles, frameworks, standards, and best practices to organization-level strategies, policies, programs, plans, procedures, and processes. Students will implement knowledge gained throughout the program to design a policies and procedures manual appropriate for a small business and develop the communication skills necessary to present their projects to senior-level constituencies

Master of Science – Data Science

M.S. Data Science

MSDS 5103 – Probability and Inference for Data Science – 3 credit hours

In this course, students will be introduced to inferential tools for applications in data science. Topics covered include hypothesis testing, confidence intervals, probability distributions, central limit theorem; and interval estimation.

MSDS 5113 – Introduction to Statistical Modeling – 3 credit hours
This course is an introduction to foundational concepts, theories, and techniques of statistical analysis for data science. Students will begin with descriptive statistics and probability and advance through multiple and logistic regression. Students will also conduct analyses in R. Additional topics covered include descriptive statistics, central tendency, exploratory data analysis, probability theory, discrete and continuous distributions, statistical inference, correlation, and multiple linear regression.

MSDS 5123 – Fundamentals of Data Science – 3 credit hours
This course provides an introduction to foundational concepts, technologies, and theories of data and data science. Students will gain a foundational understanding of the concepts and techniques used in data science and machine learning.

MSDS 6203 – Data Systems & Algorithms – 3 credit hours
In this course, students will work to develop their programming skills and learn the fundamentals of data structures and the practice use of algorithms. Students will review a variety of useful algorithms and analyze their complexity and gain insight into the principles and data structures used in algorithm design.

MSDS 6213 – Programming for Data Science – 3 credit hours
This course introduces students to programming language (Python, R, etc.) and its application in data science. Students will be introduced to platforms such as Jupytr Notebooks to learn the practical aspects of data manipulation, data cleaning, and exploratory data analysis.

MSDS 6403 – Data & Database Management with SQL – 3 credit hours
In this course, students will focus on understanding how data can be organized, cleaned, and managed within and between data sets. Students will be introduced to database design and to the use of databases in data science applications with an emphasis on SQL.

MSDS 6413 – Presentation & Visualization of Data – 3 credit hours
In this course, students are introduced to computational tools for building interactive graphics and dashboards as well as commercial visualization software. Student s will use visualizations technique to identify the patterns, trends, correlations, and outliers of data sets.

MSDS 6503 – Machine Learning & Artificial Intelligence – 3 credit hours
This course introduces students to relevant machine learning methods, communicating results, and the ethical considerations in machine learning. Students will build, train, and test machine learning models such as logistic regression and neural networks. Throughout the course, students experiment with th concepts of data science process and apply them to real-world datasets.

MSDS 6903 – Applied Capstone Project – 3 credit hours
In the capstone project, student teams will work to demonstrate their ability to apply and communicate data science concepts and processes to create a digital project of their choosing. Students may produce a website, platform, tool, or other digital project.