DATA AND INFORMATION SCIENCES (GRAD)

The School of Data and Information Sciences (SDIS) was founded in 2026 by joining the School of Information and Library Science (1931) and the School of Data Science and Society (2022). SDIS brings together longstanding excellence in information and library science with leadership in data science, including computational and statistical methods, and societal applications.

Home to a top-ranked library and information science program, SDIS is recognized for strong teaching, research and service and is the home to the Carolina Health Informatics Program (CHIP) and the Center for Information, Technology and Public Life (CITAP). The School teaches and trains undergraduate and graduate students in data science, health informatics, information science and library science, as well as offers certificates for adult learners.

SDIS conducts research and scholarship across the data and information life cycle, with an emphasis on human-centric, ethical and applied approaches. Committed to data, information and AI literacy for all Tar Heels, SDIS faculty are tackling our communities' most pressing needs and our world's most intractable challenges.

Courses

Numbered 400-999:

- Data Science and Society (DATA) (https://catalog.unc.edu/courses/data/)
- Information and Library Science (INLS) (https://catalog.unc.edu/courses/inls/)
- Carolina Health Informatics Program (CHIP) (https://catalog.unc.edu/courses/chip/)

NOTE: The prefix, or subject code, for all School of Information and Library Science courses is INLS. When a prerequisite is listed for a course, it may be assumed that an equivalent course taken elsewhere or permission of the instructor also fulfills the prerequisite or corequisite. The course instructor must approve the equivalency of the substitute course. Although graduate students may take courses numbered below 400, they will not receive credit toward a graduate degree for those courses

Master of Applied Data Science

The Master of Applied Data Science (https://go.unc.edu/MADS/) (MADS) is delivered through interactive, live online classes, asynchronous lessons, in-person immersions, and a real-world, team-based capstone project. The program provides recent graduates and working professionals with a comprehensive understanding of the data life cycle; technical expertise in areas such as programming and machine learning; and opportunities to connect with industry professionals in North Carolina and beyond. Students will graduate prepared to identify and tell a story through data; work collaboratively to apply data-driven insights; and directly impact lives in their workplaces and communities. The degree (https://go.unc.edu/UNCMADS/) culminates in a team-based capstone with students working on real-world data challenges. The curriculum (https://go.unc.edu/MADScourses/) and the capstone focus on the practical development and application of data science skills, equipping students to advance in professional settings. View more information and course requirements. (https://info.online.unc.edu/requestinfo/datascience/?x=OFB&lsrc=search_brand_google&https://info.online.unc.edu/requestinfo/datascience/&gclsrc=aw.ds&gad_source=1&gad_campaignid=20305298107&gbraid=0AAAAADk

Master of Science in Data Science

The Master of Science in Data Science (https://go.unc.edu/MSinDataScience/) will prepare students to enter industry across a spectrum of disciplines. By the end of study, graduates will be ready to occupy leadership roles in organizations, directing research or developing new analytic and computational tools and technologies. This is a three-semester, 30-credit-hour degree with key curricular components such as foundational coursework, professional development, and specialization tracks. Students will choose to complete either a capstone project or a research thesis as a summative assessment in the program. Students may also extend their studies, if necessary, particularly if they complete a research thesis in preparation for admission to a Ph.D. program.

Master of Science in Library Science

The goal of the M.S.L.S. program (https://go.unc.edu/MSLS/) is to help students become leaders in the dynamic world of libraries and information organizations as they change to address 1) the needs of communities that are becoming more diverse, 2) an increasing multiplicity of information formats and technologies, and 3) a global perspective toward knowledge barriers and access. Students should be proficient in the theories and practices used in libraries, archives, and other cultural institutions, including effective communication across differing ethical, cultural, political, social, and emotional perspectives.

Typical job titles for graduates include library director, archives manager, records manager, digital librarian, documents librarian, cataloger, public and reference services librarian, school librarian, acquisitions and collection manager, children's librarian, database administrator, special collections librarian, academic library subject specialist, and systems librarian.

The 48 credit hours of coursework is selected, in consultation with the student's faculty advisor, from the information and library science curriculum or, as appropriate, from related subject fields in other schools and departments of the University or at neighboring universities. A master's paper or project (INLS 992) is also required of each master's student. A theme within the curriculum for both master's degrees (https://go.unc.edu/ILSMasters/) is evidence-based practice, which requires students to interpret and apply existing research to their professional situations, as well as to design and conduct their own research where necessary data is not otherwise available.

Course Requirements

Code	Title	Hours
Core Courses		**12**
INLS 776	Ethics, Values, and Society	3
INLS 777	Perspectives on Information, Technology, and People	3
Course Bins		**18**
Two courses from the information bin		6
Two courses from the services and organizations bin		6
One course from the technology bin		3
One course from the people and communities bin		3
Electives		**18**

6 elective courses of the student's choice. These courses can be all INLS courses or a combination of SILS courses and up to 12 hours of non-SILS courses that are numbered 400 and up.		
Thesis/Substitute or Dissertation		
INLS 778	Research Methods and Proposal Development	3
or INLS 779	Practicum Project Development	
INLS 992	Master's (Non-Thesis)	3
Minimum Hours		**48**

Information bin

Code	Title	Hours
INLS 509	Information Retrieval	
INLS 513	Resource Selection and Evaluation	
INLS 515	Consumer Health Information	
INLS 520	Organization of Information	
INLS 530	Young Adult Literature and Related Materials	
INLS 550	History of the Book and Other Information Formats	
INLS 584	Information Ethics	
INLS 609	Experimental Information Retrieval	
INLS 620	Distributed Knowledge Graphs I: Core Concepts and Standards	
INLS 625	Information Analytics	
INLS 707	Government Information	
INLS 708	Law Libraries and Legal Information	
INLS 709	Business Information	
INLS 714	Introduction to Information Analytics	
INLS 720	Data Practices and Standards	
INLS 732	Children's Literature and Related Materials	
INLS 749	Art and Visual Information Management	
INLS 755	Archival Appraisal	
INLS 757	Principles and Practices in Archival Description	
INLS 842	Seminar in Popular Materials and Reader's Advisory	
INLS 857	Seminar in Rare Book Collections	

Services and Organizations bin

Code	Title	Hours
INLS 501	Information Resources and Services	
INLS 525	Electronic Records Management	
INLS 551	History of Libraries and Other Information-Related Cultural Institutions	
INLS 556	Introduction to Archives and Records Management	
INLS 558	Principles and Techniques of Storytelling	
INLS 582	Systems Analysis	
INLS 585	Management for Information Professionals	
INLS 685	Project Management: Strategy and Applications	
INLS 700	Scholarly Communication	
INLS 710	Evidence-Based Clinical Practice	
INLS 711	Crisis Management for Libraries	
INLS 719	Usability Testing and Evaluation	
INLS 721	Cataloging Theory and Practice	
INLS 733	Public Library Work with Youth	
INLS 782	Library Assessment	
INLS 783	Library Instruction & Pedagogy	
INLS 787	Legal Issues for Librarians	
INLS 841	Seminar in Academic Libraries	
INLS 843	Seminar in Public Libraries	

Technology bin

Code	Title	Hours
INLS 465	Understanding Information Technology for Managing Digital Collections	
INLS 512	Applications of Natural Language Processing	
INLS 523	Introduction to Database Concepts and Applications	
INLS 534	Youth and Technology in Libraries	
INLS 541	Information Visualization	
INLS 560	Introduction to Programming	
INLS 561	Digital Forensics for Curation of Digital Collections	
INLS 570	Fundamentals of Programming Information Applications	
INLS 572	Web Development	
INLS 613	Text Mining	
INLS 623	Database Systems II: Intermediate Databases	
INLS 641	Visual Analytics	
INLS 642	Data Mining	
INLS 661	Social Informatics	
INLS 718	User Interface Design	
INLS 750	Introduction to Digital Curation	
INLS 751	Data Governance and Curation	
INLS 752	Digital Preservation and Access	
INLS 753	Preservation of Library and Archive Materials	
INLS 760	Web Databases	
INLS 818	Seminar in Human-Computer Interaction	

People and Communities bin

Code	Title	Hours
INLS 500	Human Information Interactions	
INLS 660	Social Media and Society: A Theoretical and Empirical Overview	
INLS 737	Inclusive Information Services for Diverse Populations	
INLS 739	Programming and Outreach for Library User Populations	
INLS 754	Access and Outreach for Archives	
INLS 759	Community Archiving	

Milestones

The following list of milestones (non-course degree requirements) must be completed; view this list of standard milestone definitions (https://catalog.unc.edu/graduate/degree-programs/#milestonestext) for more information.

- Master's Committee
- Master's Written Exam/Approved Exam Substitute
- Thesis Substitute
- Residence Credit
- Master's Exit Survey

Master of Science in Information Science

The goal of the M.S.I.S. program (https://go.unc.edu/MSIS/) is to enable students to contribute to the design, development, and maintenance of information systems and networks; lead the development of new technologies and new applications relating to the delivery of information; and demonstrate a theoretical knowledge of information science, including the theory of information storage and retrieval, systems science, and social, political, and ethical implications of information systems.

With an M.S.I.S. degree, students find jobs in areas that include (among others) information system analysis design, development, and support; database design and administration; user experience design (including interface design and usability testing); Web site design and management; social media; information resource and knowledge management; information security; and competitive intelligence.

Course Requirements

Code	Title	Hours
Core Courses		**6**
INLS 776	Ethics, Values, and Society	3
INLS 777	Perspectives on Information, Technology, and People	3
Course Bins		**18**
Two courses from the Information Bin		6
INLS 509	Information Retrieval	
INLS 513	Resource Selection and Evaluation	
INLS 515	Consumer Health Information	
INLS 520	Organization of Information	
INLS 530	Young Adult Literature and Related Materials	
INLS 550	History of the Book and Other Information Formats	
INLS 584	Information Ethics	
INLS 709	Business Information	
INLS 609	Experimental Information Retrieval	
INLS 620	Distributed Knowledge Graphs I: Core Concepts and Standards	
INLS 625	Information Analytics	
INLS 707	Government Information	
INLS 708	Law Libraries and Legal Information	
INLS 714	Introduction to Information Analytics	
INLS 720	Data Practices and Standards	
INLS 732	Children's Literature and Related Materials	
INLS 749	Art and Visual Information Management	
INLS 755	Archival Appraisal	
INLS 757	Principles and Practices in Archival Description	
INLS 842	Seminar in Popular Materials and Reader's Advisory	
INLS 857	Seminar in Rare Book Collections	
One course from the Services and Organizations Bin		3
INLS 501	Information Resources and Services	
INLS 525	Electronic Records Management	
INLS 551	History of Libraries and Other Information-Related Cultural Institutions	
INLS 556	Introduction to Archives and Records Management	
INLS 558	Principles and Techniques of Storytelling	
INLS 582	Systems Analysis	
INLS 585	Management for Information Professionals	
INLS 685	Project Management: Strategy and Applications	
INLS 700	Scholarly Communication	
INLS 710	Evidence-Based Clinical Practice	
INLS 711	Crisis Management for Libraries	
INLS 719	Usability Testing and Evaluation	
INLS 721	Cataloging Theory and Practice	
INLS 733	Public Library Work with Youth	
INLS 782	Library Assessment	
INLS 783	Library Instruction & Pedagogy	
INLS 787	Legal Issues for Librarians	
INLS 841	Seminar in Academic Libraries	
INLS 843	Seminar in Public Libraries	
Two courses from the Technology Bin		6
INLS 465	Understanding Information Technology for Managing Digital Collections	
INLS 512	Applications of Natural Language Processing	
INLS 523	Introduction to Database Concepts and Applications	
INLS 534	Youth and Technology in Libraries	
INLS 541	Information Visualization	
INLS 560	Introduction to Programming	
INLS 561	Digital Forensics for Curation of Digital Collections	
INLS 570	Fundamentals of Programming Information Applications	
INLS 572	Web Development	
INLS 613	Text Mining	
INLS 623	Database Systems II: Intermediate Databases	
INLS 641	Visual Analytics	
INLS 642	Data Mining	
INLS 661	Social Informatics	
INLS 760	Web Databases	
INLS 818	Seminar in Human-Computer Interaction	
INLS 718	User Interface Design	
INLS 750	Introduction to Digital Curation	
INLS 751	Data Governance and Curation	
INLS 752	Digital Preservation and Access	
INLS 753	Preservation of Library and Archive Materials	
One course from the People and Communities Bin		3
INLS 500	Human Information Interactions	
INLS 660	Social Media and Society: A Theoretical and Empirical Overview	
INLS 737	Inclusive Information Services for Diverse Populations	
INLS 739	Programming and Outreach for Library User Populations	
INLS 754	Access and Outreach for Archives	
INLS 759	Community Archiving	
Electives		**18**
6 elective courses of the student's choice. These courses can be all INLS courses or a combination of SILS courses and up to 12 hours of non-SILS courses that are numbered 400 and up.		18

Thesis/Substitute or Dissertation		**6**
INLS 778	Research Methods and Proposal Development	3
or INLS 779	Practicum Project Development	
INLS 992	Master's (Non-Thesis)	3
Minimum Hours		**48**

Milestones

The following list of milestones (non-course degree requirements) must be completed; view this list of standard milestone definitions (https://catalog.unc.edu/graduate/degree-programs/#milestonestext) for more information.

- Master's Committee
- Master's Written Exam/Approved Exam Substitute
- Thesis Substitute
- Residence Credit
- Master's Exit Survey

Digital Curation and Management, M.P.S.

The master of professional science (M.P.S) in digital curation and management is a 30-credit-hour, online or hybrid degree that focuses on digital curation. This comprehensive degree includes flexible electives and a set of core courses that prepare students to understand the complexities of data management and digital assert stewardship in relation to longevity, discoverability, and usability. All students will also get hands-on training with a remote or in-person digital curation internship.

Course Requirements

Code	Title	Hours
Core Courses		
INLS 722	Introduction to Metadata Architectures and Applications	1.5
INLS 750	Introduction to Digital Curation	3
INLS 751	Data Governance and Curation	3
INLS 765	Information Technology Foundations for Managing Digital Collections	1.5
INLS 766	Audit and Certification of Trustworthy Digital Repositories	1.5
INLS 767	Information Assurance	3
INLS 800	Seminar Series in Digital Curation	1.5
GRAD 712	Leadership in the Workplace	1.5
GRAD 713	Applied Project Management: Frameworks, Principles and Techniques	1.5
GRAD 714	Introduction to Financial Accounting	1.5
GRAD 715	Business Communication	1.5
Electives		
Students must take 6 credits as electives from the pre-approved list below, or seek Director approval upon request.		6
Thesis/Substitute or Dissertation		
INLS 992	Master's (Non-Thesis)	3
Minimum Hours		**30**

Code	Title	Hours
Electives		
INLS 556	Introduction to Archives and Records Management	3
INLS 560	Programming for Information Science	3
INLS 561	Digital Forensics for Curation of Digital Collections	3
INLS 572	Web Development I	3
INLS 712	Introduction to Text Mining	1.5
INLS 714	Introduction to Information Analytics	1.5
INLS 724	Introduction to Electronic Records Management	1.5
INLS 726	Big Data and NoSQL for Data Science	1.5
INLS 761	Data Analysis	1.5
INLS 772	Applied Statistics, Machine Learning, & Data Communication	3
INLS 773	Database for Data Science	1.5
INLS 774	Applied Data Ethics	1.5

Milestones

The following list of milestones (non-course degree requirements) must be completed; view this list of standard milestone definitions (https://catalog.unc.edu/graduate/degree-programs/#milestonestext) for more information.

- Master's Committee
- Master's Written Exam/Approved Exam Substitute
- Thesis Substitute
- Residence Credit
- Master's Exit Survey

Biomedical and Health Informatics, M.P.S.

The M.P.S. in Biomedical and Health Informatics (https://go.unc.edu/MPSBMHI/) is an interdisciplinary, 35-credit, non-thesis degree program. The degree is available as an online program or residential (on-campus) program.

Graduates of the program will gain knowledge and skills in:

- Management of large scale projects related to clinical and public health information systems
- Development and evaluation of health information systems that impact clinical decision making and health care quality
- Analysis and management of health data for improvement in clinical practice, biomedical research and public health services

The program partners with several top-ranked academic units on UNC campus. Its interdisciplinary nature draws faculty and scholars from information and computer science, public health, biostatistics, medicine, nursing, dentistry, data science, and pharmacy.

Course Requirements

Code	Title	Hours
Core Requirements		**18**
Human-Centered Systems		
Complete a minimum of 6 credit hours in human-centered systems courses. CHIP 710 is required. Choose from the list below.		
CHIP 710	Systems Analysis in Healthcare (Required) [1]	
CHIP 711	Human Factors in Healthcare and AI	
INLS 509	Information Retrieval	
INLS 718	User Interface Design	

INLS 719	Usability Testing and Evaluation	
INLS 777	Perspectives on Information, Technology, and People	
Data and Technology		
Complete 6 credit hours of data and technology courses.		
CHIP 705	Introduction to Programming for Healthcare Application [2]	
or INLS 560	Introduction to Programming	
CHIP 732	Database Systems in Healthcare [3]	
or INLS 523	Introduction to Database Concepts and Applications	
Health Context		
Complete 6 credit hours of health context courses. CHIP 721 and CHIP 725 required.		
CHIP 721	Healthcare Systems in the US [4]	
CHIP 725	Electronic Health Records	
Professional Foundations		**6**
Complete a minimum of 6 credit hours of professional foundations courses. Choose from the course list below.		
Track Courses		**8**
Complete a minimum of 8 credit hours in track courses. Select a track and courses from the course list below.		
Internship (Thesis Substitute)		**3**
Minimum of 300 total hours. Internship can be completed in 1 semester or over multiple semesters.		
CHIP 793	Health Informatics Internship	
Minimum Hours		**35**

[1] Students previously took CHIP 490.296 (hybrid), CHIP 490.311 (online), CHIP 490.320 (on campus), CHIP 690.311 (online), or CHIP 690.320 (on campus).
[2] Students previously took CHIP 490.335 or CHIP 690.335.
[3] Students previously took CHIP 490.297 or CHIP 690.297.
[4] Students previously took CHIP 490.261.

Code	Title	Hours
Professional Foundations Courses		
CHIP 400	Digital Health Innovation	
CHIP 715	Quality Improvement and Lean Six Sigma	
GRAD 712	Leadership in the Workplace	
GRAD 713	Project Management: Frameworks, Principles and Techniques	
GRAD 715	Professional Communication	
GRAD 725	Build Your Professional Brand	
GRAD 726	Executive Perspective: Business Fundamentals	
GRAD 727	Team Collaboration	
HPM 730	Leadership and Workforce Management Strategies	
INLS 585	Management for Information Professionals	
INLS 685	Project Management: Strategy and Applications	
MBA 893B	Healthcare Analytics	
NURS 746	Health Care Policy and Leadership	
NURS 790I	Population Health: Interprofessional Management in a Changing Healthcare System	
PUBH 747	Project Management Principles and Practices	
PUBH 748	Leadership in Health Policy for Social Justice	
PUBH 784	Project Management Strategy and Application	
Track Electives		
Clinical Track		
CHIP 708	Foundations of Clinical Data Science	
CHIP 707	Data Analytics in Healthcare	
CHIP 770	Health Informatics Seminar	
INLS 613	Text Mining	
INLS 625	Information Analytics	
INLS 718	User Interface Design	
NURS 870	Applied Health Informatics in Complex Health Care Systems	
Data Science & Artificial Intelligence Track		
CHIP 708	Foundations of Clinical Data Science	
CHIP 718	Data Visualization in Healthcare	
CHIP 741	Health App Development with JavaScript and FHIR	
CHIP 752	Introduction to Statistical Analysis in Healthcare	
CHIP 753	Advanced Statistical Analysis and Quantitative Methods in Healthcare	
CHIP 770	Health Informatics Seminar	
INLS 613	Text Mining	
INLS 641	Visual Analytics	
INLS 642	Data Mining	
INLS 772	Applied Statistics, Machine Learning, & Data Communication	
INLS 774	Applied Data Ethics	
Patient Safety Track		
CHIP 715	Quality Improvement and Lean Six Sigma	
CHIP 718	Data Visualization in Healthcare	
CHIP 770	Health Informatics Seminar	
PUBH 730	Leading Continuous Quality Improvement (CQI) in Public Health Locally And Globally	
Public Health Track		
CHIP 770	Health Informatics Seminar	
HPM 620	Implementing Health Informatics Initiatives for Emerging Leaders	
HPM 671	Statistical Methods for Health Policy and Management	
PUBH 714	Introduction to Monitoring and Evaluation	
Build Your Own Track		
Select a minimum of 8 credit hours from any track course options to customize your own track. Additional course options may be considered with Program Director Approval.		

Milestones

The following list of milestones (non-course degree requirements) must be completed; view this list of standard milestone definitions (https://catalog.unc.edu/graduate/degree-programs/#milestonestext) for more information.

- Master's Committee
- Master's Oral Exam/Approved Exam Substitute
- Thesis Substitute
- Residence Credit
- Master's Exit Survey

Data Science, Ph.D.

The Doctor of Philosophy in Data Science (https://go.unc.edu/PhDinDataScience/) will prepare students to enter academia or industry across a spectrum of disciplines. By the end of study, graduates will be ready to occupy leadership roles in organizations, directing research teams, developing new analytic and computational tools and technologies, and delivering the most up-to-date instruction to the next generation of learners. The program is a five-year, 56-credit hour degree with key curricular components such as foundational coursework, research rotations, and specialization tracks.

Information and Library Science, Ph.D.

The Doctor of Philosophy in Information and Library Science (https://go.unc.edu/PhDILS/) (PhD-ILS) is a residential research degree designed to educate scholars and future leaders in the field of information and library science. Each student will develop a program of studies tailored to their individual interests and career goals. Required classes include a seminar on current research issues in LIS, and coursework on research methods, statistics, and theory. Students will take additional courses related to their specific research area. The PhD-ILS program (https://go.unc.edu/ILSDoctoral/) also offers opportunities for students to develop teaching skills through both coursework and teaching experience.

Course Requirements

Code	Title	Hours
Core Courses		
INLS 881	Research Issues and Questions I	3
INLS 882	Research Issues and Questions II	3
A Statistics Course [1]		
BIOS 660	Probability and Statistical Inference I	
BIOS 661	Probability and Statistical Inference II	
EDUC 710	Introductory Statistical Methods	
EDUC 784	Intermediate Statistical Methods	
POLI 783	Probability and Statistics	
POLI 784	Regression Models	
PSYC 830	Statistical Methods in Psychology I	
PSYC 831	Statistical Methods in Psychology II	
SOCI 708	Statistics for Sociologists	
SOCI 709	Linear Regression Models	
STOR 654	Statistical Theory I	
STOR 655	Statistical Theory II	
STOR 664	Applied Statistics I	
STOR 665	Applied Statistics II	
A Theory Development Course [1]		
An Advanced Research Methods Course [1]		
INLS 884	Seminar in Research Methodology	
Electives		
No explicit electives are required. Students supplement remaining degree-credit hours with various courses across campus (not GRAD, nothing below 500 or 994).		
Thesis/Substitute or Dissertation		
INLS 994	Doctoral Research and Dissertation [2]	3
Minimum Hours [3]		**42**

[1] Various departments' courses can satisfy these required topics, see the Doctoral Program Handbook (DPH). Coordinators can also approve other classes not already listed in the DPH.
[2] Students must take INLS 994 twice for a minimum of 6 credit hours.
[3] 42 credit hours are required with 6 credit hours of INLS 994 Doctoral Research and Dissertation

Milestones

The following list of milestones (non-course degree requirements) must be completed; view this list of standard milestone definitions (https://catalog.unc.edu/graduate/degree-programs/#milestonestext) for more information.

- Doctoral Committee
- Doctoral Oral Comprehensive Exam
- Doctoral Written Exam
- Prospectus Oral Exam
- Advanced to Candidacy
- Dissertation Defense
- Doctoral Dissertation Approved/Format Accepted
- Residence Credit
- Doctoral Exit Survey
- Doctoral Manuscript Submission
- Doctoral Intradepartmental Review

Health Informatics, Ph.D.

The Ph.D. in Health Informatics program (https://go.unc.edu/PHDHI/) at UNC Chapel Hill (UNC-CH) prepares graduate students to contribute to the field of biomedical and health informatics studies through research, teaching and exposure to practical biomedical and health informatics challenges. The Carolina Health Informatics Program (CHIP) PhD trains scholars for careers in research and instruction as well as leadership roles in the industry. The program provides students with research experience, familiarity with biomedical and health informatics concepts, theories and methods.

Course Requirements:

Code	Title	Hours
Core Requirements		**18**
Human-Centered Systems		
Must take a minimum of 6 credit hours. CHIP 710: Systems Analysis in healthcare is required. Select from options below.		
CHIP 710	Systems Analysis in Healthcare (Required)	
CHIP 711	Human Factors in Healthcare and AI	
INLS 509	Information Retrieval	
INLS 718	User Interface Design	
INLS 777	Perspectives on Information, Technology, and People	
Data and Technology		
Must take a minimum of 6 credit hours.		
CHIP 705	Introduction to Programming for Healthcare Application	
or INLS 560	Introduction to Programming	
CHIP 732	Database Systems in Healthcare	
or INLS 523	Introduction to Database Concepts and Applications	

Health Context		
Must take a minimum of 6 credit hours. CHIP 721 and CHIP 725 required.		
CHIP 721	Healthcare Systems in the US	
CHIP 725	Electronic Health Records	
Professional Foundations		**3**
Must take a minimum of 3 credit hours. See a list of elective options below.		
Research Methods		**3**
Must take a minimum of 3 credit hours. See a list of elective options below.		
Electives		**9**
Any graduate level course that advances a student's knowledge of health informatics, and/or relevant skills needed to successfully conduct their dissertation research, will count toward the required coursework for the health informatics PhD program. A list of course subject areas is available on Canvas. See a list of elective course options below. [1]		
Thesis/Substitute or Dissertation		
CHIP 994	Doctoral Research and Dissertation [2]	6
Minimum Hours		**55**

[1] These lists are not exclusive. With advisor or DGS approval, additional courses may fulfill these requirements.
[2] Students must take CHIP 994 twice for a minimum of 6 credit hours.

Code	Title	Hours
Professional Foundations		
CHIP 400	Digital Health Innovation	
CHIP 715	Quality Improvement and Lean Six Sigma	
CHIP 793	Health Informatics Internship	
EDUC 850	Change Leadership and Systems Improvement	
GRAD 712	Leadership in the Workplace	
GRAD 713	Project Management: Frameworks, Principles and Techniques	
GRAD 715	Professional Communication	
GRAD 725	Build Your Professional Brand	
GRAD 726	Executive Perspective: Business Fundamentals	
GRAD 727	Team Collaboration	
HPM 730	Leadership and Workforce Management Strategies	
INLS 585	Management for Information Professionals	
INLS 685	Project Management: Strategy and Applications	
MBA 893B	Healthcare Analytics	
NURS 746	Health Care Policy and Leadership	
NURS 790I	Population Health: Interprofessional Management in a Changing Healthcare System	
PUBH 747	Project Management Principles and Practices	
PUBH 748	Leadership in Health Policy for Social Justice	
PUBH 784	Project Management Strategy and Application	

Code	Title	Hours
Research Methods		
CHIP 752	Introduction to Statistical Analysis in Healthcare	
CHIP 753	Advanced Statistical Analysis and Quantitative Methods in Healthcare	
DPET 831	Quantitative Methods in Clinical Research	
HPM 671	Statistical Methods for Health Policy and Management	
HPM 880	Principles of Health Policy Research Methods	
INLS 691H	Research Methods in Information Science	
INLS 778	Research Methods and Proposal Development	
PUBH 714	Introduction to Monitoring and Evaluation	

Code	Title	Hours
Electives		
CHIP 400	Digital Health Innovation	
CHIP 707	Data Analytics in Healthcare	
CHIP 708	Foundations of Clinical Data Science	
CHIP 711	Human Factors in Healthcare and AI	
CHIP 715	Quality Improvement and Lean Six Sigma	
CHIP 718	Data Visualization in Healthcare	
CHIP 741	Health App Development with JavaScript and FHIR	
CHIP 752	Introduction to Statistical Analysis in Healthcare	
CHIP 753	Advanced Statistical Analysis and Quantitative Methods in Healthcare	
CHIP 770	Health Informatics Seminar	
CHIP 793	Health Informatics Internship	
DPET 831	Quantitative Methods in Clinical Research	
HPM 620	Implementing Health Informatics Initiatives for Emerging Leaders	
HPM 671	Statistical Methods for Health Policy and Management	
HPM 725	Health Care Strategy and Marketing	
HPM 742	Health Care Finance	
HPM 743	Health Care Reimbursement	
HPM 760	Healthcare Quality and Information Management	
HPM 794	Patient-Reported Outcomes Measurement and Application in Healthcare Research and Practice	
HPM 880	Principles of Health Policy Research Methods	
INLS 509	Information Retrieval	
INLS 515	Consumer Health Information	
INLS 613	Text Mining	
INLS 625	Information Analytics	
INLS 641	Visual Analytics	
INLS 642	Data Mining	
INLS 691H	Research Methods in Information Science	
INLS 718	User Interface Design	
INLS 719	Usability Testing and Evaluation	
INLS 772	Applied Statistics, Machine Learning, & Data Communication	
INLS 773	Database for Data Science	
INLS 774	Applied Data Ethics	
INLS 777	Perspectives on Information, Technology, and People	
INLS 778	Research Methods and Proposal Development	
NURS 870	Applied Health Informatics in Complex Health Care Systems	
PUBH 711	Critical Issues in Global Health	

PUBH 714	Introduction to Monitoring and Evaluation
PUBH 730	Leading Continuous Quality Improvement (CQI) in Public Health Locally And Globally

Milestones:

The following list of milestones (non-course degree requirements) must be completed; view this list of standard milestone definitions (https://catalog.unc.edu/graduate/degree-programs/#milestonestext) for more information.

- Doctoral Committee
- Doctoral Oral Comprehensive Exam
- Doctoral Written Exam
- Prospectus Oral Exam
- Advanced to Candidacy
- Dissertation Defense
- Doctoral Dissertation Approved/Format Accepted
- Residence Credit
- Doctoral Exit Survey
- Doctoral Intradepartmental Review (PhD Checkpoint)

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