SPS Graduate Program Curricula 2012-13

The following program requirements apply to SPS graduate students that begin their program in the 2012-13 academic year. Please note that you are bound to the curriculum requirements in effect in the quarter you start taking courses, not the quarter you are admitted. While we will make every reasonable effort to accommodate students whose programs change, this is not always possible. Northwestern University reserves the right to modify or discontinue any program without notice.

Click on the links below to review the curriculum for your program. Information Systems – On Campus or Distance Learning (Blended)

Creative Writing (MA) Creative Writing (MFA) Liberal Studies Literature Medical Informatics- Distance Learning Predictive Analytics- Distance Learning Public Policy and Administration – On Campus and Distance Learning Regulatory Compliance Sports Administration

Information Systems – On Campus or Distance Learning (Blended) Master of Science Degree Requirements

Courses	Units
Core Courses (3 courses)	3
CIS 313-0 or CIS 313-DL Telecommunications & Computer Networks ¹	
CIS 314-0 or CIS 314-DL Object-Oriented Programming ²	
CIS 317-0 or CIS 317-DL Database Design and Implementation ³	
Area of Specialization (Choose 1 specialization of 6 elective courses)	6
Database & Internet Technologies	
CIS 394-0 or CIS 394-DL Software Project Management & Development ⁴	
CIS 419-0 or CIS 419-DL Web Application Development	
CIS 431-0 or CIS 431-DL Database Administration	
CIS 435-0 or CIS 435-DL Data Warehousing and Data Mining ⁵	
Plus	
Any two other electives from the MSIS curriculum	
Information Systems Security	
CIS 394-0 or CIS 394-DL Software Project Management & Development ⁴	
CIS 452-0 or CIS 452-DL Fundamentals of Network Security	
CIS 455-0 or CIS 455-DL Business Continuity and Disaster Recovery	
CIS 457-0 or CIS 457-DL Management of Information Security	
Plus	
Any two other electives from the MSIS curriculum	
Software Development & Project Management	
CIS 394-0 or CIS 394-DL Software Project Management & Development ⁴	
CIS 419-0 or CIS 419-DL Web Application Development	
CIS 483-0 or CIS 483-DL Software Testing and Quality Assurance	
Plus	
Any three other electives from the MSIS curriculum	
Information Systems Management	
CIS 394-0 or CIS 394-DL Software Project Management & Development ⁶	

¹ Now CIS 413 Telecommunications and Computer Networks

- ³ Now CIS 417 Database Systems Design and Implementation
- ⁴ Now CIS 494 Project Management I
- ⁵ Now CIS 435 Practical Data Science Using Machine Learning
- ⁶ Now CIS 494 Project Management I.

² Now CIS 414 Introduction to Object-Oriented Programming

CIS 457-0 or CIS 457-DL Management of Information Security	
CIS 460-0 or CIS 460-DL Information Technology Security ¹	
CIS 465-0 or CIS 465-DL Information Technology Strategy	
Plus	
Any two other electives from the MSIS curriculum	
Medical Informatics (online only)	
MED_INF 402 or MHI 402 Introduction to Clinical Thinking	
MED INF 403 or MHI 403 Introduction to Medical/Health Informatics	
MED_INF 405 or MHI 405 HIT Integration, Interoperability and Standards	
MED_INF 406 or MHI 406 Decision Support Systems and Health Care	
Plus	
Any two elective courses from the MSIS curriculum	
Information Systems	
CIS 394-0 or CIS 394-DL Software Project Management & Development ¹	
Plus	
Any five elective courses from the MSIS curriculum	
Other Required Courses	
LEADERS 481-0 or LEADERS 481-DL Foundations of Leadership	1
One of the following	1
CIS 498-0 or CIS 498-DL Computer Information Systems Project - or -	
CIS 590-0 or CIS 590-DL Capstone Research (see the SPS Graduate Handbook for	
guidelines)	
Total required units:	11

¹ Now CIS 460 Information Technology Management.

Creative Writing (MA) Master of Arts Degree Requirements

Courses	Units
 Three workshops in one genre: Fiction: MCW 413 Fiction Workshop Creative Nonfiction: MCW 461 Creative Nonfiction Workshop Poetry: MCW 411 Poetry Workshop 	3
 One cross-genre course: Fiction: MCW 479 Poetry for Prose Writers Creative Nonfiction: MCW 479 Poetry for Prose Writers Poetry: MCW 480 Prose Genres for Poets 	1
Two graduate-level literature courses. These literature courses may be taken from LIT, ENGLISH, COMP_LIT, or other departments of literary study. ¹	2
Three graduate-level course electives. May not include more than 2 MCW 499 Independent Study courses. ¹	3
MCW 590 Capstone ² (see the SPS Graduate Handbook for guidelines)	1
Total required units:	10

¹ Prior approval from the <u>academic coordinator</u> is required for registration in any courses offered by The Graduate School. No approval is necessary for enrollment in MCW electives, LIT, or IPLS courses.

² Now MCW 590 Capstone Writing and Revision.

Creative Writing (MFA) Master of Fine Arts Degree Requirements

Courses	Units
Seven workshops in one genre:	
Fiction: MCW 413 Fiction Workshop	7
Creative Nonfiction: MCW 461 Creative Nonfiction Workshop	/
Poetry: MCW 411 Poetry Workshop	
One cross-genre course:	
Fiction: Poetry for Prose Writers	1
Nonfiction: MCW 479 Poetry for Prose Writers	1
• Poetry: MCW 480 Prose Genres for Poets	
MCW 570 Seminar on Teaching Creative Writing	1
One of the following teaching or publishing courses:	
MCW 579 Practicum in Teaching Creative Writing	1
 MCW 575 Journal Publishing: TriQuarterly Online 	L
MCW 576 The Publishing Industry	
Three graduate-level literature courses. These literature courses may be taken from LIT,	3
ENGLISH, COMP_LIT, or other departments of literary study. ¹	
Three graduate-level course electives. May not include more than 2 independent study courses. ²	3
MCW 589 Capstone Research ³	
(see the SPS Graduate Handbook for guidelines)	1
MCW 590 Capstone ⁴	1
(see the SPS Graduate Handbook for guidelines)	1
Total required units:	18

¹ Prior approval from the <u>academic coordinator</u> is required for registration in any courses offered by The Graduate School. No approval is necessary for enrollment in MCW electives, LIT, or IPLS courses. Students are limited to 3 300-level course registrations.

² Prior approval from the <u>academic coordinator</u> is required for registration in any courses offered by The Graduate School. No approval is necessary for enrollment in MCW electives, LIT, or IPLS courses. Students are limited to three 300-level course registrations.

³ Now MCW 589 Capstone Preparation and Writing

⁴ Now MCW 590 Capstone Writing and Revision.

Liberal Studies Master of Arts Degree Requirements

Courses	Units
IPLS 410 Introduction to Cultural Analysis	1
Two of the following seminars:	2
IPLS 401 Seminar in Liberal Studies I	
IPLS 402 Seminar in Liberal Studies II	
IPLS 403 Seminar in Liberal Studies III	
Five graduate-level courses in liberal studies, humanities and related social sciences; may be applied toward a specialization (4 courses) in any of the following areas: American Studies, History, Religious and Ethical Studies, or an individualized specialization. No more than three of these courses may be at the 300-level. ¹	5
IPLS 590 Thesis Research (see the SPS Graduate Handbook for guidelines)	1
Total required units:	9

¹ Prior approval from the <u>academic coordinator</u> is required for registration in any courses offered by The Graduate School. No approval is necessary for enrollment in LIT or IPLS courses. Students are limited to 3 300-level course registrations.

Literature Master of Arts Degree Requirements

Courses	Units
LIT 410 Introduction to Graduate Study	1
Seven graduate-level literature Courses (400–levels). No more than three of these courses may be at the graduate 300-level. ¹	7
LIT 590 Thesis Research (see the SPS Graduate Handbook for guidelines)	1
Total required units:	9

¹ Prior approval from the <u>academic coordinator</u> is required for registration in any courses offered by The Graduate School. No approval is necessary for enrollment in LIT courses. Students are limited to 3 300-level course registrations.

Medical Informatics- Distance Learning Master of Science Degree Requirements

Courses	Units
Track Courses (determined upon admission)	0-4
Clinical Track	
CIS 313-DL Telecommunications & Computer Networks ¹	
CIS 317-DL Database Systems Design and Implementation ²	
Technologist Track	
MED INF or MHI 401-DL American Health Care System	
MED INF or MHI 402-DL Introduction to Clinical Thinking	
Core courses (7)	
MED INF or MHI 403-DL Introduction to Medical Informatics	1
MED INF 404 Health Care Enterprise Operations or MHI 404 Health Care	1
Organization Operations	
MED INF or MHI 405-DL Health Care Information Tech Integration & Standards	1
MED INF or MHI 406-DL Decision Support Systems & Health Care	1
MED INF or MHI 407-DL Legal, Ethical & Social Issues in Informatics	1
MED INF or MHI 408-DL Medical Technology Acquisition & Assessment	1
MED INF or MHI 409-DL Introduction to Biostatistics	1
Other Required Courses (2)	
LEADERS 481-DL Foundations of Leadership	1
One of the following:	1
MED INF or MHI 498-DL Capstone Project – or -	
MED INF or MHI 590-DL Thesis Research (see the SPS Graduate Handbook for guidelines)	
Total required units:	11 ³ -13

¹ Now CIS 413 Telecommunications and Computer Networks

² Now CIS 417 Database Systems Design and Implementation. Prior to fall 2011, this course was known as CIS 317-DL 'Introduction to Databases.' All versions of these courses are considered equivalent.

³ The minimum number of units required for the degree is 11. Students who have completed all other curriculum requirements and have fewer than eleven units should complete sufficient additional electives to meet this requirement.

Predictive Analytics- Distance Learning Master of Science Degree Requirements

Courses	Units
Core courses (7)	
PREDICT 401-DL: Introduction to Statistical Analysis	1
PREDICT 402-DL: Introduction to Predictive Analytics & Data Collection ¹	1
CIS 317-DL: Database Systems Design and Implementation ²	1
CIS 435-DL: Data Warehousing & Data Mining ³	1
PREDICT 410-DL: Predictive Modeling I ⁴	1
PREDICT 411-DL: Predictive Modeling II ⁵	1
PREDICT 475-DL: Project Management	1
Elective courses (choose any two PREDICT electives, including 490 special topics and select CIS courses)	2
Other Required Courses (2)	
LEADERS 481-DL: Foundations of Leadership ⁶ – and -	1
One of the following:	1
PREDICT 590-DL: Thesis (see the SPS Graduate Handbook for guidelines) - or -	
PREDICT 498-DL: Capstone Project	
Total required units:	11

¹ Now titled PREDICT 402 Introduction to Predictive Analytics. Both versions of these courses are considered equivalent.

² As of fall 2014, students take CIS 417 Database Systems Design and Implementation or PREDICT 420 Database Systems and Data Preparation.

³ As of fall 2014, students take CIS 435 Practical Data Science Using Machine Learning or PREDICT 422 Practical Machine Learning.

⁴ Now titled PREDICT 410 Regression and Multivariate Analysis. Both versions of these courses are considered equivalent.

⁵ Now titled PREDICT 411 Generalized Linear Models. Both versions of these courses are considered equivalent.

⁶ As of fall 2014, students take LEADERS 481 Foundations of Leadership or PREDICT 480 Business Leadership and Communications.

Public Policy and Administration – On Campus and Distance Learning Master of Arts Degree Requirements

Courses	Units
Core and required courses	11
MPPA 401 Research Methods	1
MPPA 402 Elements of Public Finance & Budgeting	1
MPPA 403 Fundamentals of Public Administration	1
MPPA 404 Microeconomics for Public Policy and Administration	1
MPPA 405 Elementary Statistics for Research	1
MPPA 406 Analytic Methods for Public Policy Analysis	1
MPPA 407 Scope and Theory of Public Policy	1
MPPA 408 Organizational Theory ¹	1
MPPA 409 Strategies for Effective Writing and Communication	1
LEADERS 481 Foundations of Leadership	1
One of the following:	
MPPA 498 Capstone Project – or -	
MPPA 590 Thesis Research (see the SPS Graduate Handbook for guidelines)	1
Specialization courses (choose two electives in one of these specialization areas, or the "generalist" category to take electives not in the same track)	2
Public Policy	
Public Administration	
Global Policy	
Health Services Policy (available to on-campus students only)	
Total Required Units	13

¹ Students who take the newly titled 408 Public Organization Theory & Management class (fall 2015 or later) do not have to take LEADERS 481. A specialization class may be substituted.

Regulatory Compliance Master of Science Degree Requirements

Courses	Units
Core and required courses	6
MSRC 401 Quality Systems for Regulatory Compliance	1
MSRC 405 Applied Research and Writing	1
MSRC 409 or MED_INF 409-DL Biostatistics (now MHI 409-DL)	1
MSRC 435 Risk and Decision Management	1
LEADERS 481 Foundations of Leadership	1
MSRC 590 Thesis Research	1
Concentration area courses (choose one specialization of 4 courses)	4
Healthcare Compliance Track	
HC_COM 410 Healthcare Regulatory Environment	1
HC_COM 411 Healthcare Compliance Programs	1
HC_COM 412 Healthcare Regulatory Enforcement	1
HC_COM 413 Healthcare Billing Models and Systems	1
Clinical Research Track	
CLIN RES 400 Essentials of Initiating Clinical Research	1
CLIN RES 401 Responsible Conduct of Research	1
CLIN RES 402 Drug and Device Development or QARS 450 Medical Device Regulations or QARS 460 Drug and Biologics Regulations	1
CLIN RES 403 Clinical Research Design and Methodology	1
Quality Systems Track	
QARS 420 Practical Quality Management	
QARS 421 Applied Quality and Regulatory Practices	
QARS 425 Quality Assurance Project Management	
QARS 450 Medical Device Regulations or QARS 460 Drug and Biologics Regulations	
Cross-track course	1
(Any course in a track outside the student's home track)	1
Total Required Units	11

Sports Administration Master of Arts Degree Requirements

Courses	Units
Core Courses (7)	
MSA 400 Sports in the Social Context	1
MSA 401 Sports Research Methods & Quantitative Analysis	1
MSA 402 Fundamentals of Sports Marketing	1
MSA 403 Management and Organization of Sports	1
MSA 404 Principles of Sports Finance & Accounting ¹	1
MSA 405 Legal & Ethical Issues in Sports Management	1
MSA 406 Sports Risk and Crisis Management ²	1
Concentration area courses (choose two electives in one of these areas of concentration) ³	2
Sports Management	
Sports Marketing & Public Relations	
Other Required Courses (2)	
LEADERS 481 Foundations of Leadership	1
One of the following:	1
MSA 590 Thesis Research (see the SPS Graduate Handbook for guidelines) -or-	
MSA 498 Capstone Class	
Total required units:	11

¹ As of Fall 2014, MSA 404 is titled 'Sports Business: Finance, Accounting and Economics'

² As of Fall 2014, MSA 406 is titled 'Sports Public Relations and Crisis Management'

³ Students admitted prior to Fall 2014 should petition to take any available electives to meet their specific program track requirements