DATA CURATION, GRADUATE CERTIFICATE

Graduate Certificate in Data Curation
The Graduate Certificate in Data Curation will provide an Information Science-centered focus on data issues, particularly in the representation, organization, storage, and retrieval of large amounts of data where expertise in these areas is needed. Data professionals are needed to fulfill a variety of functions, including data management, curation, and stewardship in academic and industry settings.

Data curators work alongside data engineers and data scientists to design, implement, and apply data management techniques to relevant data sets. Graduates of the program will gain the skills to identify reliable data sources, analyze data in various formats, and design and maintain big data and data analytics systems using the principles of data mining, data modeling, and data architecture.

Admission Requirements

Application Deadlines

Application deadlines vary by program, please review the application deadline chart (http://uwm.edu/graduateschool/program-deadlines/) for specific programs. Other important dates and deadlines can be found by using the One Stop calendars (https://uwm.edu/onestop/dates-and-deadlines/).

Application

- Students wishing to obtain this certificate must declare their intention by applying to the program office or director.
- All graduate certificate applicants—even those already enrolled in a UWM graduate program—must apply to the Graduate School through the Panthera Admission Application (https://graduateschool-apply.uwm.edu/).
- Graduate degree and previously admitted graduate non-degree students who decide to pursue a certificate program must submit the Panthera application before completing 6 credits in the certificate sequence.
- Applicants must possess a baccalaureate degree and have a minimum 2.75 cumulative undergraduate grade point average to be admitted in to a certificate program.

Admission

The minimum G.P.A. for admission is 2.75 (4 point scale) in a prior bachelor's or postbaccalaureate degree (or cumulative credits after admission to a dual bachelor-master's degree program.) Preference will be given to those students who have a baccalaureate degree in information sciences, computer information systems, computer science, engineering, statistics, or a related field. Students with sufficient background gained through work experience or professional training in information technologies, such as networks, web services, and database development, will also be considered for admission to the program. Those who have neither of the aforementioned qualifications will be encouraged to take the following prerequisites, or their equivalents, before taking related courses:

Code	Title	Credits
INFOST 240	Web Design I	3
INFOST 410	Database Information Retrieval Systems	3
INFOST 440	Web Application Development	3

If taken, these courses must have been completed within the last five years with a grade of B or better (B- not acceptable).

Credits and Courses

To complete the requirements for the data curation certificate, students must complete:

Code	Title	Credits
Required		
INFOST 582G	Introduction to Data Science	3
INFOST 771	Data Curation	3
Electives		
Select a minimum of 9 credits from the following:		9
INFOST 465G	Legal Aspects of Information Products and Services	
INFOST 655G	Information and Records Management:	
INFOST 656G	Electronic Documents and Records Management	
INFOST 660G	Information Policy	
INFOST 661G	Information Ethics	
INFOST 687G	Data Analysis for Data Science	
INFOST 691G	Special Topics in Information Science: (with relevant topic)	
INFOST 714	Metadata	
INFOST 716	Thesaurus Construction	
INFOST 717	Information Architecture	
INFOST 719	Advanced Topics in Information Organization (with relevant topic)	
INFOST 761	Information Privacy	
INFOST 780	XML for Libraries	
INFOST 783	Information Storage and Retrieval	
INFOST 785	Database Managment Systems for Information Professionals	
Total Credits		**15**

Relevant courses from other units on campus will also be considered, including:

Code	Title	Credits
BUS ADM 749	Data and Information Management	3
COMPSCI 411G	Machine Learning and Applications	3
COMPSCI 425G	Introduction to Data Mining	3
COMPSCI 557G	Introduction to Database Systems	3
COMPSCI 723	Natural Language Processing	3
COMPSCI 744	Text Retrieval and Its Applications in Biomedicine	3
COMPSCI 751	Switching and Automata Theory	3
HCA 745	Health Big Data Processing Platforms	3

HCA 760	Biomedical and Healthcare Terminology and Ontology	3

Additional Requirements

Transfer Credit

No more than 20% of the required credits may be taken at an institution other than UWM. These courses are subject to Graduate School transfer policy and must be approved by the director of the certificate program.

Grade Point Average Requirement

A minimum cumulative 3.00 grade point average in certificate courses taken at UWM is required.

Articulation with Degree Programs

1. Credits and courses required for a certificate may double count toward meeting UWM graduate degree requirements subject to the following restrictions:
   - Degree programs must approve the courses from certificates that can double count toward the degree.
   - All credits taken in completion of certificate requirements may count towards a UWM graduate degree as long as they do not contribute more than 90% of the total credits needed to obtain the degree. (Note: Students in PhD programs must still complete the minimum residency requirements)
   - Certificate courses used toward meeting degree requirements must be completed within the time limit for transfer credit.
2. Courses completed for a degree may be counted toward a subsequent certificate, subject to all certificate policy requirements.
3. A course may count toward no more than one certificate and one degree.
4. Students may not earn a certificate subsequent to a concentration in the same area.

Time Limit

Certificate program time limits shall be established as follows:

- 18 or fewer credits/Three years from initial enrollment in the certificate sequence.
- 19 or more credits/Four years from initial enrollment in the certificate sequence.

For certificates that are designed as add-ons to degree programs and are awarded concurrent with the degree, the time limit shall be the same as that of the degree program.