

# Certificate Programs

---

Minot State University offers options for Certificate and Certificate of Completion programs. Certificate of Completion must be less than nine credits and a Certificate is nine or more credits. Students who receive only a certificate do not walk in commencement unless they have earned a bachelor's degree at the same time. Once a student completes the required courses, a student must submit the certificate application for the certificate to be posted on the transcript.

## Certificate in American Sign Language

SPED 113	American Sign Language I	3
SPED 115	American Sign Language II	3
SPED 213	American Sign Language III	3
SPED 312	Intermediate Sign Language	3
SPED 330	Survey of Deaf Culture	3
SPED 412	Advanced Sign Language	3
<b>Total Hours</b>		<b>18</b>

## Certificate in Applied Artificial Intelligence

The undergraduate certificate in Applied Artificial Intelligence provides students with the knowledge, tools and ethical awareness necessary to understand and responsibly apply AI in academic, professional, and personal context.

This certificate is designed to be accessible to students of any major, with no prior AI or programming experience required. It will explore the fundamentals of AI, its diverse applications, and its implications across disciplines. Students will gain hands on experience with online tools, investigate its role in career and academic pathways, and develop a project tailored to their interests and career aspirations.

### Required Course

AI 101	AI Everywhere & For Everyone	3
AI 201	AI for Personal and Professional Use	3
AI 301	Projects in AI	3
<b>Total Hours</b>		<b>9</b>

## Certificate in Communication Sciences and Disorders

CSD 320	Introduction to Phonetics	3
CSD 321	Language Development	3
CSD 322	Speech Sound Disorders	3
CSD 324	Techniques in Communication Disorders	3
CSD 331	Language Disorders in Children	3
CSD 341	Speech and Hearing Science	2
CSD 342	Introduction to Audiology	4
CSD 408	Social and Pragmatic Communication Disorders	3
CSD 412	Neurology for Communication Disorders	2
CSD 413	Anatomy and Physiology for Communication Disorders	3
CSD 420	Advanced Communication Disorders	3
CSD 427	Aural Rehabilitation	3
<b>Total Hours</b>		<b>35</b>

## Certificate in Communication Sciences and Disorders Support

Required Courses		6
CSD 310	Introduction to Communication Disorders	
CSD 321	Language Development	
Elective Course: Choose two of the following:		6
CSD 331	Language Disorders in Children	
CSD 413	Anatomy and Physiology for Communication Disorders	
CSD 420	Advanced Communication Disorders	

CSD 427	Aural Rehabilitation	
<b>Total Hours</b>		<b>12</b>

## Certificate in Computer Programming

This certificate will confirm students' mastery of knowledge and abilities at a level consistent with entry-level programming positions. The program will be of interest both to students who plan to pursue further work in a computing discipline and to students who wish to complement other interests with substantial knowledge of programming.

### Required Course

CSCI 112	Introduction to Visual Programming	4
CSCI 160	Computer Science I	4
CSCI 221	Web Application Development and Security	4
CSCI 260	UNIX and Linux Systems	4
CSCI 340	Networking	4

<b>Total Hours</b>		<b>20</b>
--------------------	--	-----------

## Certificate in Computer Science and Cybersecurity Education

The Computer Science and Cybersecurity Education certificate is designed to supply educators with knowledge of Technology Systems, Computational Thinking, Information Literacy, Computing in Society, and Digital Citizenship. These five topics are key to North Dakota's Computer Science and Cybersecurity Standards for K12 education.

CIS 185	Technology Management	3
CIS 244	IT Security and Information Assurance	3
CIS 258	IT Infrastructure	3
CSCI 111	Introductory Programming and Big Data	4
CSCI 331	Technology and Society	4

<b>Total Hours</b>		<b>17</b>
--------------------	--	-----------

## Certificate in Cyber Defense

CIS 185	Fundamentals of IT and Security	3
CIS 258	Networking Essentials	3
CIS 244	IT Security and Information Assurance	3
CIS 445	IT Audit Controls	3
CSCI 260	UNIX and Linux Systems	4

<b>Total Hours</b>		<b>16</b>
--------------------	--	-----------

## Certificate in Data Analytics

CSCI 111 or CSCI 160	Introductory Programming and Big Data Computer Science I	4
DATA 211 or MATH 210	Applied Statistics and Data Visualization Elementary Statistics	4
DATA 347	Data Analytics and Visualization	3

<b>Total Hours</b>		<b>11</b>
--------------------	--	-----------

The Data Analytics Program Certificate is an effort to equip our students with the necessary digital skills of gathering, analyzing, and utilizing data that can enhance not only traditional students' careers, but careers of professionals who want to update or move into this vital and growing area of knowledge.

## Certificate in Data Science

CSCI 111 or CSCI 160	Introductory Programming and Big Data Computer Science I	4
DATA 211 or MATH 210	Applied Statistics and Data Visualization Elementary Statistics	4

DATA 240	Programming for Data Science	4
CSCI 356 or CIS 454	Database Management Data and Information Management	4
<b>Total Hours</b>		<b>16</b>

The Data Science Program Certificate is an effort to equip our students with the necessary digital skills of gathering, analyzing, and utilizing data that can enhance not only traditional students' careers, but careers of professionals who want to update or move into this vital and growing area of knowledge.

## Certificate in Entrepreneurship

The Certificate of Entrepreneurship is a series of highly interactive classes designed to instill entrepreneurial thinking in students. The certificate will provide students with the knowledge of the entrepreneurial process and how to start, finance, plan, and launch a business. The certificate is focused on the entrepreneurial mindset and emphasizes an understanding of how to recognize business opportunities; attract, value, and manage resources; and transform business opportunities into value. The certificate program culminates with an experiential application of the skills acquired in the courses.

ENTR 302	Introduction to Entrepreneurship	3
ENTR 304	Entrepreneurship/Small Business Management	3
ENTR 470	Projects in Entrepreneurship	3
<b>Total Hours</b>		<b>9</b>

## Certificate in Geographic Information System

The Geographic Information System (GIS) certificate focuses on spatial analysis, spatial data management, and cartographic design. Students are also introduced to spatial statistics and programming using Python. This certificate prepares students for a career using GIS and typically can be completed within two to four semesters.

### Required Courses

GEOG 289	Introduction to GIS	3
GEOG 329	Applied GIS	3
Elective Courses (choose 2)		
DATA 211	Applied Statistics and Data Visualization	4
DATA 240	Programming for Data Science	4
GIS elective approved by Geography Coordinator		3-4

## Certificate in Interdisciplinary Game Design and Development

The *Interdisciplinary Game Design & Development* Certificate will provide students with the opportunity to explore varied elements of game/software development, including core computer science courses, digital art design, rhetorical structures in game systems, and games as tools for cognition and learning. This advanced certificate will provide students with expertise in software development, including the languages for two of the most popular game development engines: Unity and Unreal. At the end of the *Interdisciplinary Game Design & Development* certificate, students will complete a capstone project in which they design, develop, and publish (in some form) a digital game. This certificate program will include coursework from Computer Science, English, Art, and Psychology, and will tie together basic and advanced programming coursework, an in-development rhetoric course focused on game systems, coursework providing experience with creating digital art, a new course focused on cognitive processes in gaming, and a capstone project. Together, this set of courses will help students develop a foundational set of skills and knowledge surrounding digital games, including critical analysis of narrative and rhetorical structures, effective use of empirical research in the design of games, familiarity with mixed reality applications, advanced skills with common programming language and structures, exposure to digital art creation, and experience developing and publishing a digital game.

ART 112	Print, Web, and Social Media Graphics	3
CSCI 160	Computer Science I	4
CSCI 161	Computer Science II	4
CSCI 242	Algorithms and Data Structures I	4
CSCI 321	Windows Programming	4
ENGL 341	Theories and Rhetorics of Game Studies	3
PSY 314	Cognition and Games	3
GAME 461	Game Design Capstone	1
<b>Total Hours</b>		<b>26</b>

## Certificate in Introduction to Game Studies

The *Introduction to Game Studies* Certificate will provide students with the opportunity to explore varied elements of game/software development, including core computer science courses, rhetorical structures in game systems, and games as tools for cognition and learning. By the end of the *Introduction to Game Studies* certificate, students will be prepared to critically analyze existing game structures and design their own digital game. Together, the four certificate courses will help students develop a foundational set of skills and knowledge surrounding digital games, including critical analysis of narrative and rhetorical structures, effective use of empirical research in the design of games, familiarity with mixed reality applications, and skill with common programming language and structures.

CSCI 160	Computer Science I	4
CSCI 161	Computer Science II	4
ENGL 341	Theories and Rhetorics of Game Studies	3
PSY 314	Cognition and Games	3
<b>Total Hours</b>		<b>14</b>

## Certificate in Leadership

LEAD 101 or HON 250H	Introduction to Leadership Foundations of Leadership	3
LEAD 201	Collaborative Leadership	3
LEAD 301 or BUS 495	Experiences in Leadership Seminars in Leadership Development	3
<b>Total Hours</b>		<b>9</b>

## Certificate in Public History

The Certificate in Public History furnishes students with the skills and knowledge necessary to play an active role in researching and interpreting history in the public sphere. Most courses in the certificate program also may be applied to the History BA or BSE programs as core courses or electives.

The certificate includes HIST 251 Introduction to Public History as a required course, plus additional courses from the following list to reach a minimum of 12 credits.

HIST 251	Introduction to Public History	3
Select from the following:		9
HIST 280	Practice and Method	
HIST 220	North Dakota History	
HIST 354	Digital History	
HIST 497	Internship	
GEOG 289	Introduction to GIS	
ART 345	Introduction to Museum Studies	
<b>Total Hours</b>		<b>12</b>

## Certificate in Sign Language Interpreter Training

The Sign Language Interpreter Training certificate provides students who possess strong skills in American Sign Language with a foundation in methods of professional sign language interpretation. Completion of the certificate is intended to prepare students wishing to pursue a career as a professional sign language interpreter in both educational and community settings.

SPED 116	Intro to Sign Lang Interpreting	3
SPED 215	Interpreting I	3
SPED 216	Interpreting II	3
SPED 303	American Sign Language Fingerspelling, Numbers, and Specialized Vocabulary	3
SPED 318	Interpreting III	3
SPED 433	Field Experience	2
<b>Total Hours</b>		<b>17</b>

## Certificate in Substitute Teaching

Select 9 credits from the following courses: 9

ED 282	Managing the Learning Environment	
ED 260	Educational Psychology	
ED 284	Teaching Diverse Learners	
PSY 255	Child and Adolescent Psychology	
SPED 110	Introduction to Exceptional Children	
SS 283	Diversity in America	

**Total Hours** 9

## Certificate in Writing in the Disciplines

In addition to English 110,120, and 315, students must choose one writing intensive (WI) course from their discipline as listed below:

ENGL 110	College Composition I	3
ENGL 120	College Composition II	3
ENGL 315	Profes and Tech Writing	3

Select one of the following: 3

NURS 363	Nursing Theory and Research	
CSCI 331	Technology and Society	
ENGL 238	Children's Literature	
SPAN 320	Hispanic Cinema	
KIN 301	Psychomotor Development	

**Total Hours** 12

The Writing in the Discipline Certificate (WID) housed within the English department intends to strengthen writing throughout the University. The WID includes dialogue among instructors and students about writing and how writing operates among the University disciplines. The primary audience of the WID is non-majors and non-minors in English who desire a transcriptable certificate when applying for employment or further educational opportunities. The WID includes 9 hours of English courses (English 110, English 120, and English 315) and an additional course designated as writing-intensive (WI) from within each discipline participating in the Certificate.

## Certificate of Completion in French

FREN 101	Beginning French I	3
FREN 102	Beginning French II	3

## Certificate of Completion in German

GERM 101	Beginning German I	3
GERM 102	Beginning German II	3

## Certificate of Completion in Latin

LAT 101	Beginning Latin I	3
LAT 102	Beginning Latin II	3

## Certificate of Completion in Spanish

SPAN 101	Beginning Spanish I	3
SPAN 102	Beginning Spanish II	3

## Certificate of Completion in Intellectual/Developmental Disabilities

The certificate of completion can be transcribed as stand alone recognition of completing a package of coursework in the field of IDD prior to entering a degree program in this field. Students may also choose to add this certificate of completion onto another field of study.

SPED 101	Introduction to Intellectual and Developmental Disability Services	3
----------	--	---

Select three or four of the following: 12

SPED 111	Health Care in IDD I	
----------	----------------------	--

SPED 112	Health Care in Developmental Disabilities II
SPED 120	Intro to Positive Behavior Supports
SPED 140	Human Development
SPED 220	Promoting Inclusive Opportunities
SPED 223	Dual Diagnoses: ID and Mental Health Disorders
SPED 225	Assisting People with Traumatic Brain Injury
SPED 250	Developing Communicative Interactions
SPED 255	Aging and IDD
SPED 296	Field Experience in IDD
<hr/>	
<b>Total Hours</b>	<b>15</b>