#### PROGRAM TO PROGRAM ARTICULATION AGREEMENT

#### Between the

#### **DAKOTA STATE UNIVERSITY**

and

# **Lake Superior College**

Agreement with Respect to Applying to the

# Bachelor of Science in Network and Security Administration

### I. Parties

The parties to this agreement are Lake Superior College and Dakota State University (DSU).

# II. Purpose

The purpose of this agreement is to:

- A. Have a signed articulation agreement that addresses the varying needs of students and complementary nature of the institutions' programs;
- B. Provide increased educational opportunities for students at LSC who have completed Networking and Cybersecurity, AAS
- C. Extend and clarify educational opportunities for students;
- D. Provide LSC students who have completed, or who are currently enrolled in, the Networking and Cybersecurity, AAS an opportunity to earn a Bachelor of Science Degree in Network and Security Administration at DSU.

# III. Academic Program

- A. Upon successful completion of the Networking and Cybersecurity, AAS Dakota State University will accept 63 credits from LSC prior to transferring to Dakota State University. Students must meet all other Board of Regents policies and DSU admission and graduation requirements to receive a degree.
  - a. LSC students take 15 credits at the General Education level and these courses will be equated on a course by course basis but are already included in the 63 credits transferred.
- B. Requirements to be completed at Dakota State University to earn a Bachelor of Science degree with a major in Network and Security Administration are outlined in Appendix A.

## **Additional requirements:**

1. Students must take the Exit Exam prior to graduation, as required of all students graduating with the BS.

- 2. DSU will waive the admissions requirement that a student is to provide their high school transcript or GED with scores based on military admissions requirements.
- 3. DSU allows degree-seeking students who are currently enrolled to earn academic credit for non-traditional learning experience when those experiences are equivalent to coursework provided at DSU. DSU awards credit for external certifications through non-traditional learning. Appendix A contains a non-exhaustive list. Others will be mapped on a case-by-case basis.
- 4. Credits earned through nationally normed exams (AP, CLEP, DSST, etc.) are accepted. The permanent record will show the equivalent course name and a grade of EX for the specified number of credits.
- 5. DSU allows transfer of formal classwork from accredited institutions in partial or complete fulfillment of the General Education requirements. DSU requires official transcripts from any accredited college or university, or military service-affiliated college office paperwork, for coursework to be transcripted.
- 6. The DSU Admission Policy can be found here: https://catalog.dsu.edu/content.php?catoid=29&navoid=1378

# IV. Obligations

Both parties agree to confer with each other on a yearly basis regarding changes in curricula involved in this articulation agreement.

## V. Modification

This agreement may be modified from time to time by the South Dakota Board of Regents and LSC. Modifications may not diminish the entitlements enjoyed by students who have already attended classes delivered under the terms of earlier versions of the agreement, except in rare instances in which retroactive implementation of modifications may be required to comply with accreditation standards or to conform to professional licensure requirements.

VI. Effective Date of Agreement: Start date of the Spring 2020 Terms at LSC and DSU.

VII. Acceptance of Agreement:	
For Dakota State University:	
Jul Ma	Date:
Dr. James Moyan	/ /
Interim Provost and VP of Academic Affairs	
For Lake Superior College:	
ite ste	Date:
Dr. Hanna Erpestad	
Academic VP	
Day	Date: 25 SOFT 2019
Dr. Patricia Rogers	
President	

Appendix A

Lake Superior College - Associate of Applied Science Networking and Cybersecurity Crosswalk to Dakota State University Bachelor of Science in Network and **Security Administration** DSU **Dakota State Course Title LSC Course** Credits **LSC Course Title** Credits Course Number Number CIS 275 Web App Programming I 3 CIS 375 Web App Programming II 3 CIS 484 Database Mgmt. Systems 3 CIS 2972 Network Administration: SQL Server CSC 105 Introduction to Computers 3 CIS 1402 Foundations of CIS 3 CSC 150 Computer Science 1 3 CSC Intro to Cyber Operations/ 3 CIS 1810 Network Administration: Security 134/CSC Information Security Fundamentals 145 CSC 163 Hardware, Virtualization & Data 3 CIS 1521, CIS A+ Software, A+ Hardware, Network 9 Comm 1522 & CIS Administration: Server Virtualization 2973 CSC 234 Web Software Security 3 CSC 250 Computer Science 2 3 CSC 285 Networking I 3 CIS 1946 & Cisco I, Cisco 2 6 CIS 1947 CSC 321 Information Security Management 3 CIS 2812 **Network Security Fundamentals** 3 CSC 328 Operating Environments 3 CIS 1950, CIS Network Administration: Windows Client, 9 1952 & CIS Network Administration: Windows Server & Network Administration: Linux 1745 CSC 385 Networking II 3 CSC 387 Routing and Switching 5 CSC 388 **Computer Forensics** 3 CIS 2813 Network Forensics and Incident Response 3 CSC 407 Advanced Routing and Switching 3 CSC 430 Windows Administration 3 CSC 431 Linux/Unix Admin 3 CSC 436 Offensive Network Security 3 CSC 437 Survey of Network Administration 3 CSC 438 **Defensive Network Security** 3 CSC 443 Scripting for Network 3 Administration CSC Internship or UG Research CIS 2987CIS 3 CIS Capstone/Internship 5 494/498 2980 Elective Elective 3 CIS 2560 Web Server Administration 3 Elective Elective 3 CIS 2814 Ethical Hacking and System Defense 3 Elective Elective 3 CIS 2973 Network Administration: Server 3 Virtualization MATH College Algebra 3 114 MATH 3 Introduction to Statistics 281

Elective	Elective	3	CIS 2811	Intrusion Detection and Prevention Fundamentals	3
Elective	Elective	1	CIS 1500	Computer User Support	3
Elective	Elective	3		meet by CIS 1522 & CIS 2973	
			CIS 2976	Emerging Technologies In Information Systems	1
ENGL	Composition I	3			
101					
ENGL	Composition II	3			
201					
SPCM	Fundamentals of Speech	3			
101					
				General Education Credits	15
	Social Science	3			
	Social Science	3			
	Natural Science	3			
	Natural Science	3			
	Arts and Humanities	3			
	Arts and Humanities	3			
		120	*Should student choose a different elective, course may not transfer in the same		

DSU Courses after AAS Transfer		
DSU Course Number	Course Title	Credits
CIS 275	Web App Programming I	3
CIS 375	Web App Programming II	3
CSC 150	Computer Science I	3
CSC 234	Web Software Security	3
CSC 250	Computer Science II	3
CSC 385	Networking II	3
CSC 387	Routing and Switching	5
CSC 407	Advanced Routing and Switching	3
CSC 430	Windows Administration	3
CSC 431	Linux/Unix Admin	3
CSC 436	Offensive Network Security	3
CSC 437	Survey of Network Administration	3
CSC 438	Defensive Network Security	3
CSC 443	Scripting for Network Administration	3
MATH 114	College Algebra	3
MATH 281	Introduction to Statistics	3
ENGL 101	English Composition I	3
ENGL 201	English Composition II	
SPCM 101	Fundamentals of Speech	3
	Social Science *	3
	Social Science *	3
	Natural Science *	3
	Natural Science *	3
	Arts and Humanities	3
	Arts and Humanities *	3
	gen ed transfer *	-15
LSC AAS Degre	ee Transfer Credits:	63
	fter AAS Degree:	62
Total Credits:		125- 131*
		121.

<sup>\*</sup>Students will exceed the number of credits for graduation

<sup>\*</sup>Students must have 6 credits of arts and humanities

CIP code (6-digit)

Describe program

requirements (if any)

admission

#### PROGRAM TRANSFER TABLE Check if the sending program \_\_\_\_ or receiving program \_\_\_\_ College (sending) University (receiving) Lake Superior College Institution **Dakota State University** NETWORKS ADMINISTRATION and NETWORK AND SECURITY Program name **CYBERSECURITY ADMINISTRATION** Award Type (e.g., AS) BS AAS Credit Length 72 credits 120

#### Instructions

List all required courses in both academic programs.

11.1001

- MnTC goal areas transfer to the receiving institution according to the goal areas designated by the sending institution.
- Do not indicate a goal area for general education courses that are not part of the MnTC.
- For restricted or unrestricted electives, list number of credits.
- Credits applied: the receiving institution course credit amount may be more or less than the sending institution credit amount. Enter the number of credits that the receiving institution will apply toward degree completion.
- Show equivalent university-college courses on the same row to ensure accurate DARS encoding.
- Equiv/Sub/Wav column: If a course is to be encoded as equivalent, enter Equiv. If a course is to be accepted by the
  university as a "substitution" only for the purposes of this agreement, enter Sub. If a course requirement is waived by
  the receiving institution, enter Wav. If a course is to be accepted by the university as a MnTC goal area, restricted
  elective or unrestricted elective, leave the cell blank.

(To add rows, place cursor outside of the end of a row and press enter.)

# **SECTION A - Minnesota Transfer Curriculum-General Education**

College (sending)			University (rec	eiving)		
course prefix, number and name	Goal(s) <sup>1</sup>	Credits	course prefix, number and name	Goal(s)1	Credits Applied	Equiv Sub Wav
Minnesota Transfer Cu	rriculum-General Education					Nations
General Education Credits*	Select from at least 3 different goal areas of the Minnesota Transfer Curriculum	15	Recommended Courses up to 15 Credits:			
			English Composition I*		3	
			Speech*		3	
			English Composition II*		3	
			Social Science *		3	
			Social Science *		3	
			Natural Science*		3	
	,		Natural Science*		3	

<sup>&</sup>lt;sup>1</sup> MnTC goal areas transfer to the receiving MnSCU college/university according to the goal areas designated by the sending college/university

		Arts and Humanities*	3	
MnTC/General Education Total	15			

Special Notes, if any: \*Should student choose a different elective, course may not transfer in the same

# SECTION B - Major, Emphasis, Restricted and Unrestricted Electives or Other

(pre-requisite courses, required core courses, required courses in an emphasis, or electives (restricted or general) within the major). Restricted electives (in Major) fulfill a specific requirement within a major. Example A: "Chose two of the following three courses;" Example B: A Biology degree may require 40 science credits (20 credits of required courses + 20 credits of listed related courses, such as botany, genetics, sociobiology, etc. which students can select).

Major, Emphasis, Restricted, Unrestricted Electives or Other	Courses			
CIS 1402 Foundations of CIS	3	CSC 105 Introduction to Computers	3	
CIS 1810 Network Administration: Security	3	CSC 145 Information Security Fundamentals	3	
CIS 1521 A+ Software CIS 1522 A+ Hardware CIS 2973 Network Administration: Server Virtualization	9	CSC 363 Hardware, virtualization & Data Comm	3	
CIS 1946 Cisco 1 CIS 1957 Cisco 2	6	CSC 383 Networking I	3	
CIS 2812 Network Security Fundamentals	3	CSC 321 Information Security Management	3	
CIS 1950 Network Administration: Windows Client CIS 1952 Network Administration: Windows Server CIS 1745 Network Administration: Linux	9	CSC 328 Operating Environments	3	
CIS 2814 Ethical Hacking and Systems Defense	3	CSC 436 Offensive Network Security	3	
CIS 2972 Network Administration: SQL Server	3	CSC 484 Database Mgmt. Systems	3	
CIS 2560 Web Server Administration	3	Elective	3	
CIS 2976 Emerging Technologies in Information Systems	1	Elective	3	
meet by CIS 1522 & CIS 2973		Elective	3	
CIS 2813 Network Forensics and Incident Response	3	CSC 388 Computer Forensics	3	
CIS 2811 Intrusion Detection and Prevention Fundamentals	3	Elective	3	
CIS 1500 Computer User Support	3 -	Elective	1	
CIS 2987 CIS Capstone CIS 2980 CIS Internship	5	CSC 494 Internship OR CSC 498 UG Research	3	
Restricted elective credits - list courses (if none enter 0)				
Unrestricted elective credits (if none enter 0)		College's unrestricted elective credits accepted in transfer (if none enter 0)		
Major, Emphasis, Unrestricted Electives Total	57	Total College Credits Applied (sum of sections A and B)	48	

SECTION C - Remaining University (receiving) Requirements				
	course prefix, number and name	Credits		
	CSC 150 Computer Science 1	3		
	CSC 250 Computer Science 2	3		
	CSC 275 Web App Programming I	3		
	CSC 375 Web App Programming II	3		
	CSC 385 Networking II	3		
	CSC 387 Routing and Switching	5		
	CSC 407 Advanced Routing and Switching	3		
	CSC 234 Web Software Security	3		
	CSC 431 Linux/Unix Admin	3		
	CSC 443 Scripting for Network Administration	3		
	CSC 437 Survey of Network Administration	3		
	English Composition I	3		
	Speech	3		
	College Algebra	3		
	Introduction to Statistics	3		
	English Composition II	3		
	Social Science*	. 3		

Social Science *	3
Natural Science*	3
Natural Science*	3
Arts and Humanities*	3
University unrestricted elective credits not counted elsewhere (if none enter 0)	
Total Remaining University Credits <sup>2</sup>	65

College (sending) Credits		University (receiving) Requirements	
MnTC/General Education	15		
Major, Emphasis, Unrestricted Electives or Other	57		
Total College Credits	72	Total College Credits Applied	63
		Remaining credit to be taken at the university (receiving institution)	65
		Total Program Credits	128

<sup>&</sup>lt;sup>2</sup> At least 40 of the required credits for the baccalaureate degree shall be at the upper-division level. If a lower division course is shown as equivalent to an upper division course, check with the university to determine if it will count toward the 40 required credits of upper division.

College	Name	S	ignature	Date
Chief Academic Officer	Hanna Erpestad	Hon	5 71	9/20/
Title				
University	Name	Si	ignature	Date
Chief Academic Officer	Jim Moran	Ja,	Men	10/8/19
Provost   UPAA				
DARS Encoder				
	when equivalencies were verified/enco	oded in DARS by th	ne receiving Minnes	ota State instit