## PROGRAM TO PROGRAM ARTICULATION AGREEMENT

Between the NATIONAL CRYPTOLOGIC SCHOOL of the NATIONAL SECURITY AGENCY

and

## DAKOTA STATE UNIVERSITY

## Agreement with Respect to Applying to the

## **Bachelor of Science in Cyber Operations**

## I. Parties

The parties to this agreement are the National Cryptologic School (NCS) of the National Security Agency (NSA) and Dakota State University (DSU).

## II. Purpose

The purpose of this document is to:

- 1. Have a signed articulation agreement that addresses the varying needs of students and complementary nature of the institutions' programs;
- 2. Provide increased educational opportunities for students at NSA who have completed NET03200, CYBR3420, CYBR3422;
- 3. Extend and clarify educational opportunities for students;
- 4. Provide NSA students who have completed or are currently enrolled in the Joint Cyber Analysis Course (JCAC), CYBER3420, or CYBR3422 an opportunity to earn a Bachelor of Science Degree in Cyber Operations.

## III. Academic Program

- A. Upon successful completion of the JCAC, CYBR4320, or CYBR4322 program requirements, Dakota State University will accept 45 credits from NSA prior to transferring to Dakota State University. Students must meet all Board of Regents policies and DSU admission and graduation requirements to receive a degree.
- B. Requirements to be completed at Dakota State University to earn a Bachelor of Science degree with a major in Cyber Operations are outlined in Appendix A.

#### Additional requirements:

- 1. Students must take the Exit Exam prior to graduation.
- 2. DSU will waive the graduation requirements that 15 of the last 30 credits for the baccalaureate degree must be earned as institutional credits.
- 3. 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.
- 4. 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-bycase basis.
- 5. 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.
- 6. 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.
- 7. DSU allows transfer of formal classwork credits from Department of Defense, NCS, as well as other ACE-accredited courses, for equivalency of coursework provided at DSU. The individual applying to the program should request an official NCS transcript to be mailed to DSU, following the "Request Official Transcript for College and University" process.
- 8. Students admitted to DSU will be charged standard off-campus tuition rates for the deration approved by DSU.

## IV. Obligations

Both parties agree to confer with each other on a yearly basis regarding changes in curricula involved in this articulation agreement. Faculty and staff at both institutions will share information on this agreement with interested and qualified students. Both institutions will provide counseling and advising to students and prospective students.

#### V. Modification

This agreement may be modified from time to time by the South Dakota Board of Regents and the NCS. 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: Initial start date was Fall 2015 term at the NCS and DSU. Updated January 2020.

#### VII. Acceptance of Agreement:

#### For Dakota State University

Jim I	Moran	Date <sup>.</sup>	April 7, 2020	

Dr. Jim Moran Provost/Vice President for Academic Affairs

Richard Hanson

\_\_\_\_\_Date: \_\_\_\_\_\_Date: \_\_\_\_\_\_

Dr. Richard Hanson Dean of The Beacom College of Computer and Cyber Sciences

## **For National Security Agency:**

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\_Date: \_\_\_\_April 7, 2020

Ms. Diane Janosek Commandant, National Cryptologic School

BS CYBER OPERATIONS ARTICULATION WITH NSA UPDATED JANUARY 2020

# Appendix A

## JCAC $\rightarrow$ : DSU (21 credits)

JCAC	DSU
Computer Technology	CSC 105 Introduction to Computers (3)
Intro to information System Security	CSC 134 Introduction to Cyber Operations (3)
Computer Programming Scripting Dev	CIS 275 Web Application Programming I (3)
Computer Programming Scripting Dev	CSC 328 Operating Environments (3)
Data Communications	CSC 163 HW, Virtualization, and Data Comm (3)
Routing and Switching Protocols	CSC 285 Networking I (3)
Information Assurance	CIS 484 Database Management Systems (3)

Note: The undergraduate cyber training of those United States Air Force (USAF) members who have not

taken JCAC, but rather a comparable USAF training solution, will be evaluated on a case-by-case basis.

## CYBR3420/CYBR3422 → DSU (24 credits)

CYBR3420/CYBR3422	DSU
Windows module	CSC 321 Information Security Management (3)
Unix module	CIS 375 Web Application Programming II (3) & Free Electives (3)
Networks module	CSC 385 Networking II (3) & Free Electives (3)
Security module	CIS 487 Database Programming (3) & Free Electives (3)

## **Cyber Operations Major Content Courses**

DSU Course	45 Credits
CSC 150 Computer Science I	3 credits
CSC 234 Software Security	3 credits
CSC 250 Computer Science II	3 credits
CSC 300 Data Structures	3 credits
CSC 314 Assembly Language	3 credits
CSC 404 Foundation of Computation	3 credits
CSC 420 Cellular and Mobile Communications	3 credits
CSC 428 Reverse Engineering	3 credits
CSC 432 Malware Analysis	3 credits
CSC 436 Offensive Network Security	3 credits
CSC 437 Survey of Enterprise Systems	3 credits
CSC 438 Defensive Network Security	3 credits
CSC 456 Operating Systems	3 credits
MATH 201 Introduction to Discrete Mathematics	3 credits
CIS/CSC 300/400 or MATH123 and above	3 credits

These 45 credits capture the technical essence of our Cyber Operations program at DSU that achieved CAE-

CO designation, thus must be taken from DSU.

## Certifications $\rightarrow$ DSU

A+	CSC 163 HW, Virtualization, and Data Comm (3)
Security+	CSC 134 Introduction to Cyber Operations (3)
CISSP	CSC 134 Introduction to Cyber Operations (3)
Network+	CSC 285 Networking I (3)
Cisco ICND 1	CSC 285 Networking I (3)
Cisco ICND 2/CCNA	CSC 285 Networking I (3) and CSC 385 Networking II (3)
Juniper JNCIA	CSC 285 Networking I (3) and CSC 385 Networking II (3)

## **General Education Graduation Requirement: 30 credits**

The General Education requirement at DSU is 30 credits and includes courses in the six goal categories including 1) Written Communication (6 credits); 2) Oral Communication (3 credits); 3) Social Science (6 credits); 4) Arts & Humanities (6 credits); 5) Mathematics (3 credits); and 6) Natural Science (6 credits).

## **Degree Program Credit Hour Totals**

Major content credits required at DSU	45
General Education credits required	30
Articulated credits from NSA	45
Total credits required	120