Academic and Student Affairs
Consent

AGENDA ITEM: 5 – J (1)
DATE: March 29-30, 2023

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SUBJECT
    Articulation Agreements – DSU

CONTROLLING STATUTE, RULE, OR POLICY
    BOR Policy 2:5 – Seamless Transfer of Credit
    BOR Policy 2:5:2 – External (Non-Regental System) Accredited University/College
        Transfer of Credit

BACKGROUND / DISCUSSION
    BOR Policy 2:5 – Seamless Transfer of Credit establishes requirements for institutions seeking to develop program level agreements for interested transfer students. The policy further establishes the distinction between AA, AS, and AAS degrees which are classified as transferable, terminal, or non-transferable degrees (respectively). However, the AAS is "transferable when a specific degree articulation agreement exists between a given A.A.S. degree and a specific Baccalaureate degree." Agreements established with regionally accredited institutions must be developed in conjunction with the faculty, following all institutional guidelines and are monitored as a function of the institutional program review process. Once approved, the agreements apply only at Regental institutions with equivalent programs.

IMPACT AND RECOMMENDATION
    To comply with BOR Policy 2:5, Dakota State University requests approval for the following articulation agreements:

- For National Security Agency (NSA) sponsored coursework and/or coursework through its National Cryptologic University (NCU), DSU may accept up to 90 semester hours of transfer credit from an approved four-year college or university and other non-traditional sources towards a Bachelor's degree. A maximum of 60 semester hours may be transferred from approved two-year community colleges. Of these 90/60 credit hours, up to 45 credits may come from military training as specified in the agreement. DSU may accept up to 12 semester hours of transfer

(Continued)
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DRAFT MOTION 20230329_5-J(1):
    I move to approve Dakota State University's articulation agreement with the National Security Agency, as presented.

credit from an approved institution toward a Master's degree if the credits are related to a student's program of study.

Board staff recommends approval.

ATTACHMENTS

Attachment I – DSU Articulation Agreement: National Security Agency

ARTICULATION AGREEMENT

Between the

NATIONAL SECURITY AGENCY

and

Dakota State University

THIS AGREEMENT made and entered into as of the 18th of January, 2023 by and between the National Security Agency ("NSA") on behalf of its National Cryptologic University (hereinafter "NCU") located at 9800 Savage Road, Fort George G. Meade, MD 20755 and Dakota State University (hereinafter "DSU") located at 820 Washington Ave N, Madison, SD 57042, jointly referred to as the "Parties" and each a "Party."

WHEREAS, NCU is seeking to expand the educational opportunities for its students; and

WHEREAS, the Parties seek to recognize the complementary nature of the NSA and DSU programs; and

WHEREAS, the Parties seek to provide students who have completed certain NSA-sponsored coursework an opportunity to more efficiently earn DSU degrees.

NOW, THEREFORE, on the terms and subject to condition herein contained, the Parties agree as follows:

I.   **Academic Program**

    A.   Requirements to be completed toward certain DSU degrees that are outlined in ***Appendices A-D.***

    B.   DSU may accept up to 90 semester hours of transfer credit from an approved four-year college or university and other non-traditional sources toward a Bachelor's degree. A maximum of 60 semester hours may be transferred from approved two-year community colleges. Of these (90/60), up to 45 credits may come from military training as specified in the appendices. DSU may accept up to 12 semester hours of transfer credit from an approved institution toward a Master's degree if the credits are related to a student's program of study.

    C.   Students must meet all DSU and South Dakota Board of Regents (SDBOR) policies, admissions requirements, and graduation requirements in order to receive a degree.

    D.   Additional Requirements:

        1.   Students will submit an admissions application to DSU. DSU will evaluate the application and offer or deny admission in accordance with DSU standard policies and procedures. NSA acknowledges that students admitted to DSU are subject to DSU and SDBOR policies and procedures applicable to all students.

        2.   DSU will waive the admissions requirements that a student is to provide their high school transcript or GED with scores based on military admissions requirements.

3. Students shall submit official transcripts from other accredited undergraduate institutions and official documentation of applicable coursework from the NCU, which will be reviewed in accordance with the parameters specified in **_Appendices A-D._** DSU policies and procedures regarding transfer credit and academic credit for prior learning and military experience apply to students seeking credit for NCU courses. No more than ten (10) years have passed since the completion of the course.

4. Students admitted to DSU will be charged tuition and applicable fees based on their state of residency for the duration of their enrollment. DSU established a reduced tuition rate for active duty service-members and DoD civilians of $250 per credit for undergraduate tuition, and all fees are waived. Graduate-level nonresident active military members and DoD civilians are charged the graduate tuition rate, and all fees are waived. Updated tuition and fees are published at https://www.sdbor.edu/student-information/Pages/Tuition-and-Fees.aspx.

5. DSU will maintain metrics on NCU students, including GPA, plan of study, and overall academic progress. NCU acknowledges and understands that disclosure of information about individual Program Participants is limited by the Federal Family Educational Rights and Privacy Act (FERPA), South Dakota state law, and DSU policies and procedures. If NCU requests information specific to individual students, any such release of information is conditioned upon the execution of written form of approval from the student. NCU shall arrange to have an authorization form submitted to DSU.

II. Promoting the Agreement

A. DSU and NSA agree to promote and publicize this Agreement. DSU shall obtain written approval from NSA Public Affairs prior to any marketing external to NSA. In addition, DSU shall obtain written approval from NSA Public Affairs prior to any use of NSA's name, initials, and/or seal or quotes from NSA's officials.

B. Neither party shall use i) the Marks of the other, ii) the name and or likeness of any student or iii) the name or likeness of an employee or officer of the other in connection with any product, service, promotion, news release or other publicity without the prior written permission of the other party and of the individual whose name and likeness may be under consideration.

III.   Annual Review
The Parties agree to confer with each other as needed or at least on a yearly basis regarding changes in curricula or any matter involved in this articulation agreement.

IV.   Modification
This agreement may be modified in writing at any time by Dakota State University, South Dakota Board of Regents, or NSA. Modification 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 modification may be required to comply with accreditation standards or to conform to professional licensure requirements.

V.   Term of Agreement

The effective date of this agreement is the start date of the DSU academic term and shall last for a term of one year. This Agreement shall automatically renew for one-year terms, unless terminated by Parties prior to the expiration of the first or successive one-year terms. This agreement may be terminated at any time without cause by either Party giving written notice at least ninety (90) days prior to the effective date of such termination. Termination shall not affect students enrolled at the time of termination.

VI.   No Agency Relationship Between the Parties

Nothing in this agreement is intended to or shall be construed to constitute or establish an agency; employer/employee, partnership, franchise, or fiduciary relationship between the Parties; and neither Party shall have the right or authority or shall hold itself out to have the right or authority to bind the other Party.

VII.   Assignment

This agreement may not be assigned by either Party without prior written consent of the other.

VIII.   Entire Agreement

This Agreement, together with the documents referred to herein as appendices, constitutes the entire agreement between the Parties with respect to its subject matter and constitutes and supersedes all prior agreements, representations and understandings of the Parties, written or oral.

IX.   Preservation and Immunities

Nothing herein shall constitute or be considered to be a limitation upon or waiver of the sovereign immunity of DSU.

X.   Notices

Any notices or communication permitted or required between the parties under this Agreement shall be in writing and given by hand delivery, delivery by United States mail, facsimile, or delivery by commercial overnight carrier. Notice shall be effective upon receipt to the person to whom it was addressed or ten (10) days after notice was sent, whichever is earlier. Notice shall be given to the following individuals:

If to NSA:	If to DSU:
Accelerated Degree Program	Dakota State University
National Security Agency	820 Washington Avenue N
9800 Savage Road, Suite 6808	Madison, SD 57042
Ft. George G. Meade	Phone: 605-256-5136
Maryland, 20755-6808	Fax: 605-256-5316

Phone: Email: Provost-VPAA@dsu.edu
Fax: 410-854-7835
Email:

Either party may change the notice address set forth in this Agreement by providing notice to the other party.

For DSU:

_____   Date: _____

Dr. Rebecca Hoey
Provost/Senior Vice President for Academic
and Student Affairs

For the National Security Agency:

_____   Date: _____

Dr. Mark Laurent Asselin
Commandant, National Cryptologic University

Appendix A

**Course Requirements for
Cyber Operations
Bachelor of Science (120 Credits)**

1. The DSU Bachelor of Science degree in Cyber Operations requires the completion of at least one hundred twenty (120) hours of coursework distributed among required core courses and specialization courses.
2. Upon successful completion of the JCAC, CYBR3420, or CYBR3422 program requirements, DSU will accept up to 45 credits from NSA prior to transferring to DSU. JCAC has undergone multiple iterations; for the purpose of this agreement, the following abbreviations will be used in relation to their ACE ID.
   a. JCACv01 = NV-1402-0296 (10/09 – 12/15)
   b. JCACv02 = NV-1402-0296 (01/16 – 12/20)
   c. JCACv03 = NV-1402-0296 (01/21 – present)
3. No more than ten (10) years have passed since the completion of the course to be recorded. Training that is older than 10 years may be approved by the DSU program coordinator if sufficient currency can be shown to have been maintained in the area by the applicant.
4. Students must take the Exit Exam prior to graduation.
5. DSU will waive the graduation requirements that 15 of the last 30 credits for the baccalaureate degree must be earned as institutional credits.
6. DSU will waive the admission requirement that a student to provide their high school transcript or GED with scores based on military admissions requirements.
7. 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; such certifications will be evaluated on a case-by-case basis.
8. 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 specific number of credits.

DSU COURSE NUMBER, TITLE and NUMBER of CREDITS			NCU COURSE NUMBER, TITLE and NUMBER of CREDITS		
Cyber Operations Major Content Courses		**45**			
CSC234	Software Security	3			
CSC250	Computer Science II	3			
CSC300	Data Structures	3			
CSC314	Assembly Language	3			
CSC334	Web Development	3			
CSC404	Foundation of Computation	3			
CSC420	Cellular and Mobile Communications	3			
CSC428	Reverse Engineering	3			
CSC432	Malware Analysis	3			
CSC436	Offensive Network Security	3			
CSC437	Survey of Enterprise Systems	3			
CSC438	Defensive Network Security	3			
CSC439	Threat Hunting and Incident Response	3			
CSC456	Operating Systems	3			
MATH201	Introduction of Discrete Mathematics	3			

Appendix A

Other Coursework with Transferrable Credits					
CSC105	Introduction of Computers	3	JCAC v01 or JCAC v02 or JCAC v03	Joint Cyber Analysis (10/09-12/15) Joint Cyber Analysis (01/16-12/20) Joint Cyber Analysis (01/21-Present)	3
CSC134	Introductions to Cyber Operations	3	JCAC v01 or JCAC v02 or JCAC v03	Joint Cyber Analysis (10/09-12/15) Joint Cyber Analysis (01/16-12/20) Joint Cyber Analysis (01/21-Present)	3
CSC150	Computer Science I	3	JCAC v01 or JCAC v02 or JCAC v03	Joint Cyber Analysis (10/09-12/15) Joint Cyber Analysis (01/16-12/20) Joint Cyber Analysis (01/21-Present)	
CSC163	HW, Virtualization, and Data Comm	3	JCAC v01 or JCAC v02 or JCAC v03	Joint Cyber Analysis (10/09-12/15) Joint Cyber Analysis (01/16-12/20) Joint Cyber Analysis (01/21-Present)	3
CSC285	Networking I	3	JCAC v01 or JCAC v02 or JCAC v03	Joint Cyber Analysis (10/09-12/15) Joint Cyber Analysis (01/16-12/20) Joint Cyber Analysis (01/21-Present)	3
CSC321	Information Security Management	3	CYBR3420 or CYBR3422	ROC Foundations Training Computer Network Qualification Course	3
CSC328	Operating Environments	3	JCAC v01 or CYBR3420 or CYBR3422	Joint Cyber Analysis (10/09-12/15) ROC Foundations Training Computer Network Qualification Course	3
CSC385	Networking II	3	CYBR3420 or CYBR3422	ROC Foundations Training Computer Network Qualification Course	3
CSC421	Web Software Security	3	CYBR3420 or CYBR3422	ROC Foundations Training Computer Network Qualification Course	3
CSC388	Computer Forensics Fundamentals	3	JCAC v02 or JCAC v03	Joint Cyber Analysis (01/16-12/20) Joint Cyber Analysis (01/21-Present)	3
CIS484	Database Management Systems	3	JCAC v01 or JCAC v02 or JCAC v03	Joint Cyber Analysis (10/09-12/15) Joint Cyber Analysis (01/16-12/20) Joint Cyber Analysis (01/21-Present)	3
CIS487	Database Programming	3	CYBR3420 or CYBR3422	ROC Foundations Training Computer Network Qualification Course	3
	Free Elective	3	CYBR3420 or CYBR3422	ROC Foundations Training Computer Network Qualification Course	3
	Free Elective	3	CYBR3420 or CYBR3422	ROC Foundations Training Computer Network Qualification Course	3
	Free Elective	3	CYBR3420 or CYBR3422	ROC Foundations Training Computer Network Qualification Course	3
General Education Requirements		**30**			
Written Communication		6			
Oral Communication		3			
Social Science		6			
Art & Humanities		6			
Mathematics		3			
Natural Science		6			
Major content credit required at DSU		45			
General Education Credits Required		30			
Articulated Credits from NSA (up to)		45			
Total for Program		**120**			

Appendix A

Evaluator		Date
1.		
2.		
3.		
Student's First Name		Initial
Student's Last Name		

Appendix B

Course Requirements for
Computer Science with No Specialization
Master of Science (30 Credits)

1. The DSU Master of Science degree in Computer Science with No Specialization requires the completion of at least thirty (30) hours of course work distributed among required core courses and elective courses.
2. Three (3) graduate credits will be awarded for each eighty (80) contact hours of NSA-sponsored coursework, not to exceed twelve (12) credit hours for any given course or combination of courses.
3. No more than ten (10) years have passed since completion of the course to be recorded. Training that is older than 10 years may be approved by the DSU program coordinator if sufficient currency can be shown to have been maintained in the area by the applicant.
4. Students will complete the remaining eighteen (18) credit hours toward completion of the degree through online course delivery.
5. Letters of recommendation will not be required in the application process.
6. Four (4) of the core courses must be taken through DSU, plus CSC 718 and one (1) Approved elective, totaling eighteen (18) credits
7. The remaining twelve (12) credits may be earned through the articulation agreement between DSU and NCU, offering students a flexible approach to allow them to apply specific work-related training, as defined in this document.
   a. Twelve (12) graduate credit hours will be granted to enrollees who have completed CYBR3420 or CYBR3422 and have not previously obtained credit as part of an undergraduate degree program. Three (3) credits for CSC 786 Cyber Problems in the core and nine (9) credits of courses of Approved electives.
   b. For other NCU-sponsored coursework, coursework will be granted on a per-course basis within the parameters of this agreement to 1) enrollees who have not completed CYBR3420 or CYBR3422 and 2) enrollees who have completed CYBR3420 and CYBR3422 programs but have already applied the credits towards an undergraduate degree. (*See Per-course Credit Table below*)
   c.

DSU COURSE NUMBER, TITLE and NUMBER of CREDITS			NCU COURSE NUMBER, TITLE and NUMBER of CREDITS		
Core Classes		**15**			
CSC 705	Design and Analysis of Algorithms	3			
CSC 712	Data Structures	3			
CSC 720	Theory of Computation	3			
CSC 722	Machine Learning Fundamentals	3			
CSC 786	Cyber Problems	3			
No Specialization Courses		**15**			
CSC 718	Operating Systems and Parallel Programming	3			
CSC/INFA /INFS	Approved Elective: 500 – 700 Level Courses	3			
CSC/INFA /INFS	Approved Elective: 500 – 700 Level Courses	3			
CSC/INFA /INFS	Approved Elective: 500 – 700 Level Courses	3			
CSC/INFA /INFS	Approved Elective: 500 – 700 Level Courses	3			
	Total Program Credits	**30**			

Appendix B

	Per-course Credit Table (NCU/DSU *Approved Electives*)		NCU COURSE NUMBER, TITLE and NUMBER of CREDITS		
			Course Code	Hours	Transfer Credits
CSC716	Secure Software Engineering	3	CYBR3300 CYBR3400 CYBR3500 CYBR3600 CYBR3700 MATH4330 COMP1022 COMP1023 CYBR2103 CYBR2106	24 Hours 16 Hours 16 Hours 24 Hours 16 Hours 48 Hours 1 Hour 4 Hours 32 Hours 36 Hours	80 Aggregate Contact Hours must be completed to receive 3 Credits
CSC748	Software Exploitation	3	ATNO3271 ATNO4271 ATNO4273 ATNO4275 CYBR2400 CYBR3000 CYBR3100 CYBR3810 CYBR4200 CYBR4210 CYBR4500 COMP3500 COMP3510	8 Hours 8 Hours 80 Hours 80 Hours 240 Hours 40 Hours 40 Hours 40 Hours 40 Hours 40 Hours 40 Hours 80 Hours 80 Hours	80 Aggregate Contact Hours must be completed to receive 3 Credits
INFA723	Cryptography	3	CRYP2650 CRYP2700 CRYP3131 CRYP3132 CRYP3133 CRYP3180 CRYP3190 ATNO4253 IAEC1120 IAEC2300 IAEC3285 IAEC4310 MATH3140 CYBR2102 NETW1100 NETW4001 NETW4211 NETW4220	80 Hours 60 Hours 80 Hours 80 Hours 40 Hours 160 Hours 120 Hours 40 Hours 8 Hours 2 Hours 40 Hours 40 Hours 200 Hours 32 Hours 424 Hours 40 Hours 40 Hours 40 Hours	80 Aggregate Contact Hours must be completed to receive 3 Credits
INFA773 Or INFS 751	Mobile Communication and Advanced Network Security Wireless Security	3	NPGS4745EC NPGS4770EC CYBR1030 CYBR1330 CYBR2102 CYBR2400 CYBR2450 CYBR3015 NETA2016 NETA3001 NETW1007 NETW1051 NETW1052 NETW2053 NETW3007 NETW3008 NETW3009	3 Credits 3 Credits 40 Hours 32 Hours 32 Hours 240 Hours 520 Hours 40 Hours 4 Hours 240 Hours 8 Hours 48 Hours 40 Hours 40 Hours 32 Hours 40 Hours 24 Hours	80 Aggregate Contact Hours must be completed to receive 3 Credits

Appendix B

			NETW3010 NETW3100 NETW3101 NETW3455 NETW4211 NETW4220 NETW4257 NETW4259 SIGC3803	40 Hours 40 Hours 72 Hours 32 Hours 40 Hours 40 Hours 32 Hours 40 Hours 160 Hours	
	Approved Elective	**3**			80 Aggregate Contact Hours must be completed to receive 3 Credits

Evaluator	Date	
1.		
2.		
3.		
Student's First Name	**Initials**	
Student's Last Name		

Appendix C

Course Requirements for
Cyber Defense – Technical Track
Master of Science (30 Credits)

1. The DSU Master of Science degree in Cyber Defense – Technical Track requires the completion of at least thirty (30) hours of course work distributed among required core courses and track courses.
2. Three (3) graduate credits will be awarded for each eighty (80) contact hours of NSA-sponsored coursework, not to exceed twelve (12) credit hours for any given course or combination of courses.
3. No more than ten (10) years have passed since completion of the course to be recorded. Training that is older than 10 years may be approved by the DSU program coordinator if sufficient currency can be shown to have been maintained in the area by the applicant.
4. Students will complete the remaining eighteen (18) credit hours toward completion of the degree through online course delivery.
5. Letters of recommendation will not be required in the application process.
6. The core courses must be taken through DSU totaling twelve (12) credits, plus two (2) of the Cyber Defense Technical track courses for six (6) credits.
7. The remaining twelve (12) credits may be earned through the articulation agreement between DSU and NCU, offering students a flexible approach to allow them to apply specific work-related training, as defined in this document.
   a. Twelve (12) graduate credit hours will be granted to enrollees who have completed CYBR3420 or CYBR3422 and have not previously obtained credit as part of an undergraduate degree program. Six (6) credits in the Track * and six (6) credits of electives **.
   b. For other NCU-sponsored coursework, coursework will be granted on a per-course basis within the parameters of this agreement to 1) enrollees who have not completed CYBR3420 or CYBR3422 and 2) enrollees who have completed CYBR3420 and CYBR3422 programs but have already applied the credits towards an undergraduate degree. (*See per-course table below*)

DSU COURSE NUMBER, TITLE and NUMBER of CREDITS			NCU COURSE NUMBER, TITLE and NUMBER of CREDITS		
Core Classes		**12**			
INFA 702	Data Privacy	3			
INFA 713	Managing Security Risks	3			
INFA 735	Offensive Security	3			
INFA 754	Network Security Monitoring and Intrusion Detection	3			
Technical Track Courses		**18**			
INFA 721	Computer Forensics	3			
INFA 732	Malware Analysis	3			
INFA 723	Cryptography *	3			
INFA 751	Wireless Security *	3			
	Approved Electives **	6			
	Total Program Credits	**30**			
			NCU COURSE NUMBER, TITLE and NUMBER of CREDITS		
	Per-course Credits Table		Course Code	Hours	Transfer Credits
CSC716	Secure Software Engineering**	3	CYBR3300 CYBR3400 CYBR3500 CYBR3600 CYBR3700 MATH4330	24 Hours 16 Hours 16 Hours 24 Hours 16 Hours 48 Hours	80 Aggregate Contact Hours must be completed to receive 3 Credits

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			COMP1022	1 Hour	
			COMP1023	4 Hours	
			CYBR2103	32 Hours	
			CYBR2106	36 Hours	
CSC748	Software Exploitation**	3	ATNO3271	8 Hours	80 Aggregate Contact Hours must be completed to receive 3 Credits
			ATNO4271	8 Hours	
			ATNO4273	80 Hours	
			ATNO4275	80 Hours	
			CYBR2400	240 Hours	
			CYBR3000	40 Hours	
			CYBR3100	40 Hours	
			CYBR3810	40 Hours	
			CYBR4200	40 Hours	
			CYBR4210	40 Hours	
			CYBR4500	40 Hours	
			COMP3500	80 Hours	
			COMP3510	80 Hours	
INFA723	Cryptography*	3	CRYP2650	80 Hours	80 Aggregate Contact Hours must be completed to receive 3 Credits
			CRYP2700	60 Hours	
			CRYP3131	80 Hours	
			CRYP3132	80 Hours	
			CRYP3133	40 Hours	
			CRYP3180	160 Hours	
			CRYP3190	120 Hours	
			ATNO4253	40 Hours	
			IAEC1120	8 Hours	
			IAEC2300	2 Hours	
			IAEC3285	40 Hours	
			IAEC4310	40 Hours	
			MATH3140	200 Hours	
			CYBR2102	32 Hours	
			NETW1100	424 Hours	
			NETW4001	40 Hours	
			NETW4211	40 Hours	
			NETW4220	40 Hours	
INFA751	Wireless Security*	3	NPGS4745EC	3 Credits	80 Aggregate Contact Hours must be completed to receive 3 Credits
			NPGS4770EC	3 Credits	
			CYBR1030	40 Hours	
			CYBR1330	32 Hours	
			CYBR2102	32 Hours	
			CYBR2400	240 Hours	
			CYBR2450	520 Hours	
			CYBR3015	40 Hours	
			NETA2016	4 Hours	
			NETA3001	240 Hours	
			NETW1007	8 Hours	
			NETW1051	48 Hours	
			NETW1052	40 Hours	
			NETW2053	40 Hours	
			NETW3007	32 Hours	
			NETW3008	40 Hours	
			NETW3009	24 Hours	
			NETW3010	40 Hours	
			NETW3100	40 Hours	
			NETW3101	72 Hours	
			NETW3455	32 Hours	
			NETW4211	40 Hours	
			NETW4220	40 Hours	
			NETW4257	32 Hours	
			NETW4259	40 Hours	
			SIGC3803	160 Hours	

Appendix C

	Elective**	3			80 Aggregate Contact Hours must be completed to receive 3 Credits

Evaluator	**Date**	
1.		
2.		
3.		
Student's First Name	**Initials**	
Student's Last Name		

Revised 10/27

Appendix D

Course Requirements for
Computer Science with a Specialization in Cyber Operations
Master of Science (30 Credits)

1. The DSU Master of Science degree in Computer Science with a specialization in Cyber Operations requires the completion of at least thirty (30) hours of course work distributed among required core courses and specialization courses.
2. Three (3) graduate credits will be awarded for each eighty (80) contact hours of NSA-sponsored coursework, not to exceed twelve (12) credit hours for any given course or combination of courses.
3. No more than ten (10) years have passed since completion of the course to be recorded. Training that is older than 10 years may be approved by the DSU program coordinator if sufficient currency can be shown to have been maintained in the area by the applicant.
4. Students will complete the remaining eighteen (18) credit hours toward completion of the degree through online course delivery.
5. Letters of recommendation will not be required in the application process.
6. Four (4) of the core courses must be taken through DSU, plus CSC 718 and CSC 723 in the Cyber Specialization courses, totaling eighteen (18) credits
7. The remaining twelve (12) credits may be earned through the articulation agreement between DSU and NCU, offering students a flexible approach to allow them to apply specific work-related training, as defined in this document.
   a. Twelve (12) graduate credit hours will be granted to enrollees who have completed CYBR3420 or CYBR3422 and have not previously obtained credit as part of an undergraduate degree program. Three credits (3) credits for CSC 786 Cyber Problems * in the Core and nine (9) credits of courses in the Cyber Operations Specialization. *.
   b. For other NCU-sponsored coursework, coursework will be granted on a per-course basis within the parameters of this agreement to 1) enrollees who have not completed CYBR3420 or CYBR3422 and 2) enrollees who have completed CYBR3420 and CYBR3422 programs but have already applied the credits towards an undergraduate degree. (*See Per-course Credit Table below*)

DSU COURSE NUMBER, TITLE and NUMBER of CREDITS			NCU COURSE NUMBER, TITLE and NUMBER of CREDITS		
Core Classes		**15**			
CSC 705	Design and Analysis of Algorithms	3			
CSC 712	Data Structures	3			
CSC 720	Theory of Computation	3			
CSC 722	Machine Learning Fundamentals	3			
CSC 786	Cyber Problems *	3			
Cyber Operations Specialization Courses		**15**			
CSC 718	Operating Systems and Parallel Programming	3			
CSC 723	Machine Learning for Cyber Security	3			
CSC 748	Software Exploitation *	3			
CSC 773	Mobile Communication and Advanced Network Security *	3			
INFA 723	Cryptography *	3			
	Total Program Credits	**30**			
			NCU COURSE NUMBER, TITLE and NUMBER of CREDITS		
	Per-course Credit Table		Course Code	Hours	Transfer Credits

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CSC748	Software Exploitation	3	ATNO3271 ATNO4271 ATNO4273 ATNO4275 CYBR2400 CYBR3000 CYBR3100 CYBR3810 CYBR4200 CYBR4210 CYBR4500 COMP3500 COMP3510	8 Hours 8 Hours 80 Hours 80 Hours 240 Hours 40 Hours 40 Hours 40 Hours 40 Hours 40 Hours 40 Hours 80 Hours 80 Hours	80 Aggregate Contact Hours must be completed to receive 3 Credits
INFA723	Cryptography	3	CRYP2650 CRYP2700 CRYP3131 CRYP3132 CRYP3133 CRYP3180 CRYP3190 ATNO4253 IAEC1120 IAEC2300 IAEC3285 IAEC4310 MATH3140 CYBR2102 NETW1100 NETW4001 NETW4211 NETW4220	80 Hours 60 Hours 80 Hours 80 Hours 40 Hours 160 Hours 120 Hours 40 Hours 8 Hours 2 Hours 40 Hours 40 Hours 200 Hours 32 Hours 424 Hours 40 Hours 40 Hours 40 Hours	80 Aggregate Contact Hours must be completed to receive 3 Credits
CSC733	Mobile Communication and Advanced Network Security	3	NPGS4745EC NPGS4770EC CYBR1030 CYBR1330 CYBR2102 CYBR2400 CYBR2450 CYBR3015 NETA2016 NETA3001 NETW1007 NETW1051 NETW1052 NETW2053 NETW3007 NETW3008 NETW3009 NETW3010 NETW3100 NETW3101 NETW3455 NETW4211 NETW4220 NETW4257 NETW4259 SIGC3803	3 Credits 3 Credits 40 Hours 32 Hours 32 Hours 240 Hours 520 Hours 40 Hours 4 Hours 240 Hours 8 Hours 48 Hours 40 Hours 40 Hours 32 Hours 40 Hours 24 Hours 40 Hours 40 Hours 72 Hours 32 Hours 40 Hours 40 Hours 32 Hours 40 Hours 160 Hours	80 Aggregate Contact Hours must be completed to receive 3 Credits
		3			80 Aggregate Contact Hours must be completed to receive 3 Credits
	Total Program Credits	**30**			
Evaluator		**Date**			

Appendix D

1.		
2.		
3.		
Student's First Name	**Initials**	
Student's Last Name		