PROGRAM TO PROGRAM ARTICULATION AGREEMENT

Agreement with Respect to Applying the
COMPUTER NETWORK SPECIALIST
Associate of Applied Sciences Degree Program
Towards the
COMPUTER SCIENCE MAJOR
Bachelor of Science Degree Program

Between
WESTERN DAKOTA TECHNICAL INSTITUTE
and
DAKOTA STATE UNIVERSITY

I. Parties

The parties to this agreement are Western Dakota Technical Institute (WDTI) 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 from South Dakota and the region;
C. extend and clarify educational opportunities for students;
D. provide WDTI students who have completed the A.A.S. degree in Computer Network Specialist an opportunity to earn a Bachelor of Science degree with a major in Computer Science.

III. Academic Program

A. Upon successful completion of the major requirements specified in III.B below, Dakota State University will accept 12 technical course credits from the A.A.S. degree in Computer Network Specialist for students majoring in Computer Science. Students must successfully complete the A.A.S. degree in Computer Network Specialist from WDTI prior to transferring to Dakota State University for the technical course credits to be accepted. General Education coursework is in addition to the 12 technical course credits. Furthermore, students may validate credit for any required course in the major using any of the validation methods accepted by Dakota State
University. Students may not earn more than 32 semester hours of credit using these validation methods.

B. Students must meet all Board of Regents policies and university graduation requirements in order to receive a degree.

C. Requirements to be completed at Dakota State University to earn a Bachelor of Science degree with a major in Computer Science are outlined below.

**Major requirements: 48 credits**

- CIS 332 Structured Systems Analysis and Design (3 credits)
- CIS 385 Networking II (3 credits)
- CIS 447 Artificial Intelligence (3 credits)
- CIS 484 Database Management Systems (3 credits)
- CSC 250 Computer Science II (3 credits)
- CSC 260 Object-Oriented Design (3 credits)
- CSC 300 Data Structures (3 credits)
- CSC 314 Assembly Language (3 credits)
- CSC 317 Computer Organization & Archit (3 credits)
- CSC 466 Language Processing (3 credits)
- CSC 456 Operating Systems (3 credits)
- CSC 461 Programming Languages (3 credits)
- CSC 470 Software Engineering (3 credits)
- CSC 482 Algorithms and Optimization (3 credits)

*Select 6 credits from the following:* (6 credits)

- BADM 456 Cyberlaw
- CIS 275 Web Application Programming I
- CIS 340 Adv. Java Programming
- CIS 375 Web Application Programming II
- CIS 383 Networking I
- CIS 414 Computer Security Fundamentals
- CIS 416 Network Security
- CIS 418 Computer Security Intrusion Control and Detection
- CIS 422 Computer Security Cryptography & Info Assurance
- CIS 424 Internet and E-Commerce
- CIS 487 Database Programming
- CIS 488 Adv. Database Issues
- CIS 492 Topics
- CSC 403 Programming for GUI
- CSC 410 Parallel Computing
- CSC 433 Computer Graphics
- CSC 460 Scientific Visualizations
- CSC 492 Topics
- CSC 494 Internship
- CSC 498 Undergraduate Research/Scholarship
CSC 483 Machine Learning Fundamentals
CSC 486 Data Mining Methods

**Required Support Courses: 22 credits**
- ENGL 208 Documentation & Presentation (3 credits)
- MATH 123 Calculus I (4 credits)
- MATH 281 Intro to Statistics
  - or
- MATH 381 Intro to Probability & Statistics (3 credits)
- MATH 316 Discrete Mathematics (3 credits)
- MATH electives (9 credits)
  \[ \{ MATH \ 125, \ MATH \ 201, \ MATH \ 315, \ MATH/CSC \ 318, \ MATH \ 321, \ MATH \ 381, \ MATH \ 413, \ MATH \ 418, \ MATH \ 471, \ MATH \ 475, \ MATH \ 492 \} \]

**General Education/Institutional Graduation Requirement Courses: 41 credits**

1. Must include CSC 150 Computer Science I
2. The remaining 38 credits must meet system general education requirements, in addition to institutional graduation requirements, globalization requirements and writing intensive requirements, and must be selected from the approved list of courses specified in BOR Policy 2:7.
3. To fulfill the system general education requirements, all students must pass the System Information Literacy Examination. Technical institute graduates must take the examination during the first semester of attendance at DSU.

**Electives: 5 credits**

**Total number of credits at Dakota State University: 116**
Transfer credits from WDTI: 12*
Total credits required: 128

*Transferable general education course credits can be completed at WDTI.

**Additional requirements:**
1. In accordance with BOR policy 2:28, students must demonstrate satisfactory performance in writing, mathematics, reading and science reasoning as evidenced by receiving a passing score on all sections of the Collegiate Assessment of Academic Proficiency (CAAP) exam. In accordance with the Regental policy, students must sit for the exam during the semester in which they have completed 48 passed credit hours and must have completed a specified 18 credit hours of general education courses during the first two semesters of attendance at DSU.
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 Western Dakota Tech with approval by the South Dakota Board of Education. 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. Incorporation of terms in master agreement.

The parties have entered into the present agreement pursuant to the agreement of January 25, 2005 between the Rapid City Board of Education on behalf of Western Dakota Tech and the South Dakota Board of Regents on behalf of Black Hills State University, Dakota State University, Northern State University, the South Dakota School of Mines and Technology, South Dakota State University and the University of South Dakota. This agreement shall be subject to all terms and conditions stated in the January 25, 2005 agreement.

VII. Effective Date of Agreement: Start Date of the Fall 2006 Term at WDTI and DSU. The agreement applies to students who graduated from WDTI in 2000 and subsequent years.

VIII. Acceptance of Agreement:

For Dakota State University:

[Signature]
Dr. Tom Halverson
Dean, College of Business and Information Systems

Date: 6/23/2006

[Signature]
Dr. Cecelia Wittmayer
Vice President for Academic Affairs

Date: 6/23/06
For Western Dakota Technical Institute:

Mr. Travis Lundquist
Academic Unit Chair

Dr. Rich Gross
President, Western Dakota Technical Institute

Dr. Rick Melmer
Secretary, South Dakota Department of Education

Dr. Kelly Duncan-Clark
President, South Dakota Board of Education