

Minnesota

Articulated College Credit Agreement

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Articulated College Credit Agreement

Through Articulated College Credit (ACC), specific college curriculum learning outcomes and assessments are embedded in participating high school career and technical education (CTE) programs as specified in this agreement. Relevant knowledge, skills, and standards are taught by qualified CTE high school instructor(s) in one or more high school courses. ACC is awarded if the student meets the college equivalency standards and later enrolls in the college(s) listed below requiring the course in a specific program.

Agreement Name **IT Exploration**
Agreement Reviewed/Revised **2024 -25**

These credits are valid for students in grades 9-12 for 5 years from the completion of this course.

Colleges	College Courses	College Programs	Articulated College Credit
Anoka-Ramsey Community College	CNET 1000 – IT Exploration	*Computer Networking (A.S. – 60 cr.) - Elective *Business, Industry, & Technology (A.S. – 60 cr.) – Elective *System Administration (A.A.S.- 60 cr.) – Elective *Network Support & Administration (Cert. – 30 cr.) – Elective	2 credits of 2 credits
Minnesota West Community & Technical College	CST 1101 – IT Exploration	*Computer & Networking Technology (A.A.S. – 60 cr.) *Computer Information Security & Assurance (A.A.S. – 60 cr.) *Computer Telecommunications (A.A.S. – 60 cr.)	2 credits of 2 credits

Course Description

This course introduces students to major IT career disciplines. It is intended for students exploring a career in IT and helps identify specific areas of interest. The four areas include systems infrastructure and networking, security, application development, and analytics. Students participate in hands-on activities that help them learn the concepts related to these career areas.

Course Learning Outcomes

100% of the course learning outcomes will be covered in the high school course(s) by qualified CTE high school instructor(s). The following outcomes will be addressed in the course:

- Explore software, hardware and network components that make up the IT infrastructure supporting businesses and organizations.
- Understand the importance of cyber security and how this applies to software, system settings and the protection of personal information.
- Recognize how software is a fundamental part of our digital world and learn about application development.
- Produce computer programs and learn about various types of software creation.
- Develop an understanding of the various careers related to data science, and analytics.
- Examine the types of data-intensive skills that provide competitive advantage to businesses and using a simulation they work on analytical skills and visualization using provided dataset and worksheets.

Course Topics

1. Basic Computer Hardware
2. Fundamentals of Computer Operating Systems
3. Basic Networking Technologies
4. Internet Computing Technologies
5. Programming Languages Defined
6. Command-Line Programming
7. Introduction to Graphics
8. Programming Techniques
9. Introduction to Information Security
10. Internet Privacy and Security
11. Hardening Networks & Systems
12. History and evolution of business intelligence, analytics, and informatics
13. Components of Business Analytics
14. Analytics and Competitive Advantage
15. The D.A.T.A. Framework
16. Data summarization using formulas and functions
17. Data mining, organization, and classification
18. Slicing and dicing - Data reduction and extraction
19. Data presentation and visualization

Assessments

Students must successfully achieve an overall score of **80%** or better (or grade) on the assessment in order to receive an Articulated College Credit Certificate. Students may complete the end-of-course assessment to demonstrate their grasp of course concepts and principles.

Recommended Comprehensive Assessments – College & High School

Certification or Assessment	Vendor	Other Information
Introduction to Information Technology (801)	Precision Exams	www.precisionexams.org
IT Exploration	NOCTI	www.nocti.org