Minnesota
Articulated College Credit Agreement
www.CTEcreditMn.com

Articulated College Credit (ACC) 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 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 **Excel Spreadsheets**
Agreement Reviewed/Revised **2024 – 2025**

College	College Course	College Program	ACC
Anoka Technical College	ADSC 1171 Microsoft Excel	• Administrative Office Specialist (A.A.S. – 60 cr.) • Administrative Office Specialist (Diploma – 40 cr.) • Administrative Office Specialist (Certificate – 16 cr.) • Health Information Technology (A.A.S. – 64 cr.) • Office Software Specialist (Cert. – 22 cr.) • Medical Office Specialist (A.A.S. – 60 cr.) • Medical Receptionist (Diploma. – 48 cr.) • Medical Coding Specialist (Diploma – 41 cr.) • Legal Office Specialist (A.A.S. – 60 cr.) • Legal Office Specialist (Diploma.– 45 cr.)	2 of 2 credits (48 hrs.)
Anoka-Ramsey Community College	BUS 1143 Decision Making Using Excel	• Accounting Transfer Pathway (A.S.– 60 cr.) • Accounting Practitioner (A.A.S. – 60 cr.) • Business Computer Applications (Cert.–16 cr.) • Business, Workplace, & Technology Emphasis (A.A.S. – 60 cr.) • Small Business Accounting (Cert.-17 cr.)	3 of 3 credits (48 hrs.)
		• Business: Management/Marketing Emphasis (A.A.S. – 60 cr.)	3 of 3 elective credits (48 hrs.)
		• Business Transfer Pathway (A.S. – 60 cr.)	2 of 3 elective credits (32 hrs.)
		• Business, Industry, & Technology (A.S.– 60 cr.)	3 credits (Option 1)

Hennepin Technical College	ACCT 1125 Excel	• Accounting Transfer Pathway (A.S. – 60 cr.) • Accounting (A.A.S.– 60 cr.) • Accounting (Occ. Certificate – 17 cr.) • Accounting/Management Information Systems (A.A.S. – 60 cr.) • Accounting Technician (Diploma – 31 cr.) • Organizational Support (A.A.S.–60 cr.) • Organizational Specialist (A.A.S. – 60 cr.) • Organizational Specialist (Diploma – 45 cr.) • Microsoft Office Applications (Occ. Certificate–20 cr.)	3 of 3 credits (48 hrs.)
Normandale Community College	CIM 1121 Spread-sheets	• Computer/Information Management (Cert. – 15 cr.)	1 of 1 elective credit (16 hrs.)

Agreement Description

This course is an overview of Excel. It covers the creation and use of spreadsheet files to make business decisions. Topics include spreadsheet formulas and functions, formatting, ranges, charts, macros, database or list functions, spreadsheet decision tools, web queries, and the integration of information from other software packages into spreadsheet files. **These credits are valid for students in grades 9-12 for 5 years from the completion of this course.**

Curriculum Learning Outcomes

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

1. Create worksheets that include pie, column, and bar charts.
2. Use formulas & functions to perform mathematical calculations in the creation of the spreadsheet.
3. Filter, sort, and subtotal a spreadsheet to find or display specific information.
4. Format a spreadsheet using theme borders, images, and cell-formatting options.
5. Link Excel with other MS Office applications.
6. Perform data analysis using goal seek, what-if analysis, and pivot tables.
7. Display data in graphical form using pivot chart reports, trendlines, and slicers.
8. Create templates.
9. Demonstrate professionalism in all course e-mails, discussion boards, & classroom communications.

Course Assessments

Students must achieve an **80% or better average** on their coursework and production tests to receive Articulated College Credit.

- Students will demonstrate achievement of the course requirements through a combination of coursework and assessment.
- Coursework must include applying spreadsheet principles to real world situations.
- Production tests should be drawn from extra case problems or something similar in level of difficulty.

Recommended Industry-Recognized Certification
Or Comprehensive Assessment – College or High School

Certification/Assessment	Vendor	Other Information
Microsoft Office Excel Certification	Microsoft Office	www.microsoft.com

EXCEL SPREADSHEET

High School Course Name _____

Content Goals	Assessments
To work with cells in a spreadsheet	Students will obtain 80% or better on a combination of homework, theory tests and production tests that demonstrate their ability to: ▪ Enter data into cells and edit entries ▪ Enter formulas that utilize cell references ▪ Solve problems using relative and absolute cell references
To format spreadsheets	Students will obtain 80% or better on a combination of homework, theory tests and production tests that demonstrate their ability to: ▪ Adjust column width and row height ▪ Insert/delete columns and rows ▪ Change fonts and font sizes ▪ Change attributes ▪ Utilize drop shadow boxes, shading and borders ▪ Display headers and footers ▪ Identify information via long labels
To work within and among several spreadsheets	Students will obtain 80% or better on a combination of homework, theory tests and production tests that demonstrate their ability to: ▪ Copy and move information within a worksheet and into other worksheets ▪ Combine multiple worksheet files ▪ Link worksheet files
To work with ranges	Students will obtain 80% or better on a combination of homework, theory tests and production tests that demonstrate their ability to work with single and multi-dimensional ranges
To construct charts from spreadsheets	Students will obtain 80% or better on a combination of homework, theory tests and production tests that demonstrate their ability to: ▪ Determine what type of chart best depicts selected data in the worksheet ▪ Create various types of charts including two and three-dimensional bar, line and pie charts ▪ Display all related information including titles, legends, labels and drawn objects ▪ Perform “what-if” analysis with numeric data and charts
To utilize spreadsheet functions	Students will obtain 80% or better on a combination of homework, theory tests and production tests that demonstrate their ability to: ▪ Use basic, intermediate and advanced spreadsheet functions to answer questions ▪ Evaluate “what-if” alternatives through use of versions and scenarios ▪ Display data in an ethical manner and with understanding of how multiple scenarios can use similar numbers for different meanings

To develop and use macros	Students will obtain 80% or better on a combination of homework, theory tests and production tests that demonstrate their ability to: ▪ Plan, record, play back, name, document, and create buttons for macros ▪ Edit and debug macros ▪ Use macro commands that prompts for data entry, check data values and build loops ▪ Use sub-routines and create user-defined macro menus
To utilize list techniques	Students will obtain 80% or better on a combination of homework, theory tests and production tests that demonstrate their ability to: ▪ Use list techniques within a spreadsheet to plan, set-up, enter and sort data; query; find records ▪ Summarize data using cross-tabulation, sub-totals and pivot tables
To use spreadsheets for decision-making and goal-seeking	Students will obtain 80% or better on a combination of homework, theory tests and production tests that demonstrate their ability to: ▪ Build in decision-making into a spreadsheet through the use of @VLOOKUP functions and one- and two-way "what-if" tables ▪ Use goal-seeking techniques to explore business alternatives ▪ Utilize Solver to complete goal-seeking procedures
To audit formulas	Students will obtain 80% or better on a combination of homework, theory tests and production tests that demonstrate their ability to audit worksheet formulas
To integrate applications	Students will obtain 80% or better on a combination of homework, theory tests and production tests that demonstrate their ability to: ▪ Integrate Window applications ▪ Exchange objects between Windows-based applications
To import information from the web to Excel and to publish Excel to the web	Students will obtain 80% or better on a combination of homework, theory tests and production tests that demonstrate their ability to import and export Excel
Create customized Excel applications	Students will obtain 80% or better on a combination of homework, theory tests and production tests that demonstrate their ability to • Plan an application • Validate data entries • Protect worksheets and workbooks • Define range names