2+2 Degree Plan

Mathematics: Data Science & Statistics

Western Illinois University

How 2+2 Works

- The 2+2 is a four-year plan that leads to a Bachelor of Science (B.S.) degree in Mathematics - Data Science and Statistics option at WIU. Students will fill out applications for both schools, consult the advisors and catalogs from both schools for specifics. This completion guide is designed to ensure graduation in four years by taking courses at both BHC and WIU. This guide assumes students have met all course prerequisites required by BHC and admission requirements for WIU.
- Upon completion of the first two years' requirements at BHC, students will receive an Associate of Science (A.S.) degree. Students will be required to complete the major's core requirements at WIU, and upon completion of the final two years' curriculum requirements, students will receive the B.S. degree with a Major in Mathematics. In general, a minimum of 60 semester hours (s.h.) will be taken at BHC at BHC rates and 60 s.h. from WIU at WIU rates for a minimum of 120 semester hours (s.h.).
- A minimum cumulative grade point average of 2.00 should be achieved by the junior year and maintained for graduation as a Mathematics major.
- Grades of C or higher are required in the two required English Composition Courses to transfer to WIU.

Black Hawk College Course & Credit Hours

Western Illinois University Equivalents

Semester 1

Course	Credit	Equivalent
MATH 124 - Calculus I	4	MATH 133 - Calculus with Analytic Geometry I
ENG 101 – Composition I	3	ENG 180 - College Writing I
IAI Physical or Life Science *part of a 2-course sequence*	4	WIU Natural Science
IAI Social & Behavioral Science – *ECON 221 - Principles of Macro Economics or ECON 222 - Principles of Micro Economics recommended*	3	ECON 231 - Principles of Macroeconomics or ECON 232 – Principles of Microeconomics
Total	14	

Semester 2

Course	Credit	Equivalent
MATH 225 - Calculus II	4	MATH 134 - Calculus with Analytic Geometry II
MATH 108 – Statistics for General Education or MATH 228 – Probability and Statistics	3	STAT 171 General Elementary Statistics
ENG 102 – Composition II	3	ENG 280 College Writing I
IAI Physical or Life Science *part of a 2-course sequence*	4	WIU Natural Science
IAI Social & Behavioral Science	3	WIU Social Science
Total	17	

Semester 3

Course	Credit	Equivalent
MATH 226 - Calculus III	5	MATH 231 - Calculus with Analytic Geometry III
CS 121 - Intro to Computer Science	4	CS 214 - Principles of Computer Science
IAI Physical or Life Science	3 min.	IAI Physical or Life Science elective
IAI Humanities	3	WIU Humanities
Total	15	

Semester 4

Course	Credit	Equivalent
MATH 230 - Linear Algebra	3	MATH 311 - Linear Algebra
MATH 161 - Discrete Mathematics	3	MATH 255 - Discrete Mathematical Structures for Computer Science (3.s.h)
CS 225 - Advanced Programming	4	CS 250 - Data Structures I
SPEC 101 – Principles of Speech Comm.	3	COMM 241 - Intro to Public Speaking
IAI Fine Arts	3	WIU Fine Arts
Total	16	
Total Credits Semesters 1 – 4	62	

Notes:

Once you transfer to WIU, here are the remaining requirements to finish your degree:

Semester 1 (Fall)	Semester 2 (Spring)	Semester 3 (Fall)	Semester 4 (Spring)
Math 383 - Mathematical Modeling (3.s.h.)*	Math 341 - Sets and Logic (3 s.h.)*	DS 435 - Applied Data Mining for Business Decision- Making (3 s.h.)	Math 481 - Numerical Analysis I (3 s.h.)*
STAT 276 - Introduction to Probability & Statistics (3 s.h.)	CS 351 - Data Structures II (3 s.h.)	DS 480 - Predictive Analytics (3 s.h.)	STAT 478 - Analysis of Variance (3 s.h.)*
DS 303 *or* STAT 474 - Applied Business Forecasting and Regression Analysis *or* Regression & Correlation Analysis (3.s.h.)	Minor/Open elective (3 s.h.)	Minor/Open elective (3 s.h.)	CS 470 - Database Systems (3 s.h.)
Minor elective (3 s.h.)	Minor/Open elective (3 s.h.)	Social Science (3 s.h.)	Humanities/Fine Arts (3 s.h.)
Human Well Being (3 s.h. total) *2 courses from 2 different categories	Social Science (3 s.h.)	Humanities/Fine Arts (3 s.h.) MATH 391 Writing in the Mathematical Sciences *or* MATH 444 Undergraduate Research Project	Multicultural Studies (3 s.h.)

∗ MATH 391 must be completed in conjunction with one of these courses to fulfill the Writing Instruction in the Discipline (WID) graduation requirement (1 s.h.).

Multicultural studies may be met at Black Hawk by selecting a BHC non-western studies course and replace it in the WIU schedule by a minor course, if necessary.

Notes:

Get Started

You can apply at WIU in two ways:

1. Be a part of our Transfer Admission Guarantee program (TAG) by filling out our admissions application at **wiu.edu/apply** and selecting TAG. You can be a part of TAG at any point *prior* to earning 30 credits at your community college. Go to **wiu.edu/tag** to find out more about this program.
2. Fill out the admissions application at any time and select the date you would like to transfer into WIU.

The 2+2 degree map is a four year plan that leads to a Bachelor of Science degree in Mathematics at Western Illinois University and the Associate in Science at Black Hawk College. Students intending to complete the degree from WIU should follow the list of courses outlined in this brochure.

This 2+2 degree map has been reviewed and accepted by both schools as an illustration, which is subject to change.

Western Illinois University
Office of the Provost
College of Arts & Sciences, Mathematics and Philosophy Department
2+2 Agreement

Black Hawk College and Western Illinois University agree that if a student completes the Associate of ***Science Degree*** and is admitted to Western Illinois University, that student shall be eligible for this Articulation Agreement.

1. This Articulation Agreement is only appropriate for students who transfer from ***Black Hawk College*** with an Associate of ***Science Degree*** that includes the general education courses, that are attached to this document, and who pursue a Bachelor of ***Science in Mathematics*** from Western Illinois University. The series of courses that must be taken to complete the baccalaureate degree at WIU are attached to this document.

2. The student must satisfactorily complete the course requirements at Western Illinois University to earn a Bachelor of ***Science in Mathematics***.

3. Students admitted under this 2+2 Agreement must meet all other graduation requirements as listed in the student undergraduate catalog at Western Illinois University.

4. If either ***Black Hawk College*** or Western Illinois University changes major program requirements, general education requirements, graduation requirements, this agreement is subject to renegotiation.

5. ***COMPLETE PROGRAM OUTLINE IS ATTACHED***

_____
WIU Dean   Date

_____
WIU Department Chair   Date
11/15/2021

_____
Amy Maxeiner, Vice President for
Instruction, Black Hawk College / Date
8/6/2021

_____
Jennifer Miller, Dean of Liberal Arts
& Sciences, Black Hawk College / Date
8/5/21

_____
Connie McLean, Chair of Mathematics,
Black Hawk College / Date
07/27/21