



WENZHOU KEAN UNIVERSITY



FOUR YEAR ACADEMIC PLAN

Degree/Major: **B.A. IN MATHEMATICAL SCIENCES (Data Analytics Option)**

Effective Date: Fall 2024

Total Credits Required: 120 S.H.

Name: _____

Student ID# _____ Start Term: _____

Freshman Year

Fall Semester Year 1	
GE 1000 Transition to Kean	1
MATH 2415 Calc. I	4
ENG 1300 College Composition	6*
ESL 0303	3**
ESL 0305	3**
PE 3xxxxx	1**

Total Credits: 17

Spring Semester Year 1	
MATH 2416 Calculus II	4
MATH 2995 Matrix and Lin Alg.	3
ENG 1430 College Comp. II	6*
ESL 0403	3**
ESL 0405	3**
PE 3xxxxx	1**
Chinese Art	1**

Total Credits: 19

*3 Credits for ENG*1030, 3 Credits for MATH 1054 and 6 credits as lower-level free electives

** Credits do not count toward graduation

Winter and Summer Courses

Chinese 301003	2**
Chinese 301004	2**
Total Credits:	_____

Summer II	
_____	0
_____	0
Total Credits:	_____

Sophomore Year

Fall Semester Year 2	
MATH 3415 Calculus III	4
MATH 2526 Applied Statistics.	3
GE 2024 Research and Tech	3
GE Soc Sci I	3
CPS 1231 Fund of Comp Science	4
PE 3xxxxx	1
Chinese Art	1**

Total Credits: 17

Spring Semester Year 2	
MATH 3544 Prob. and Stats	3
MATH 3710 Found of Data Analytics	3
CPS 2231 Comp Org and Prog.	4
COMM 1402 Speech Comm.	3
PHY 2091/2095 or CHEM*1083	4
PE 3xxxxx	1**

Total Credits: 17

Summer and Winter Courses

Winter	
_____	_____
_____	_____
Total Credits	_____

Summer	
Chinese 301001	2**
Chinese 301002	2**
Total Credits	_____

Junior Year

Fall Semester Year 3	Spring Semester Year 3
MATH 3700 Big Data Computing 3	MATH 4720 Stat Data Mining 3
MATH Major Elective I 3	MATH Major Elective II 3
History 1062 3	GE Humanities I 3
FE 1000-2000 1 3	GE Science (add'l) 3
FE 1000-2000 2 3	Free Elective (3000-4000) 3 3
ENG 2403 World Literature 3	
Total Credits: <u>18</u>	Total Credits: <u>15</u>

Summer Courses

Summer I	Summer II
Optional Internship Course 2****	
0	0
Total Credits: ___	Total Credits: ___

Senior Year

Fall Semester Year 4	Spring Semester Year 4
MATH 4710 Data Visualization 3	MATH 4890** Senior Seminar 3
MATH Major Elective III 3	GE Humanities II 3
GE Soc Sci II 3	
Free Elective (3000-4000) 4 3	Free Elective (3000-4000) 6 3
Free Elective (3000-4000) 5 3	Free Elective (3000-4000) 7 3
Total Credits: <u>15</u>	Total Credits: <u>12</u>

TOTAL CREDITS REQUIRED FOR GRADUATION: 120

**** 2 or 3 credits can be covering as free elective Optional Internship Course/MATH 2800/MATH 3500/MATH 2110

Some Math Major Electives

- | | |
|---|--|
| 1. MATH 3225 Matrix & Linear Algebra II | 7. MATH 3560 Regression Analysis |
| 2. MATH 3790 Applied Machine Learning | 8. MATH 4805 Operation Research |
| 3. MATH 3940 Numerical Analysis | 9. MATH 3560 Applied Regression Analysis |
| 4. MATH 4451 Real Analysis | 10. MATH 3570 Multivariate Analysis |
| 5. MATH 3640 Financial Mathematics | 11. MATH 4465 Complex Variables |
| 6. MATH 3455 Differential Equations | |

Recommended Minor in CS: please refer to the catalog above. At WKU, students are required to earn a grade of C or better in CPS 1231, CPS 2231, CPS 2232, MATH 2110, and three other CPS courses (9 credits) level 3000 or above.