BACHELOR of ARTS in MATHEMATICS (\#528) B1: Fundamentals of Analysis and Discrete Math

Department of Mathematics
Ogden College of Science and Engineering
Western Kentucky University
The suggested program of study shown below should be used in consultation with your advisor(s). Every student will finish with a unique plan of his/her own depending on the electives selected.
Success Markers

| FIRST YEAR |
| :--- |
| Visit The Learning |
| Center for free |
| tutoring |


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| :---: | :---: | :---: | :---: |
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| SAMPLE - 4 year plan |  |  |  |
| Fall Semester |  | Spring Semester |  |
| MATH 136 - Calculus I (FQuantitative Reasoning) | 4 | MATH 137 - Calculus II | 4 |
| CS 180 - Computer Science I | 4 | CS 181 - Computer Science II OR MATH 371 - Computational Problem Solving | 3-4 |
| PHIL 215 - Elementary Logic (prerequisite for CS 181 if taking that course) OR EE 180 - Digital Circuits | 3 | ENG 100 - Introduction to College Writing (F-College Composition) | 3 |
| Colonnade (E-Natural \& Physical Science, with lab) | 3-5 | HIST 101 - World History I OR HIST 102 - World History II (F-World History) | 3 |
|  |  | Colonnade (E-Social \& Behavioral Science) | 3 |
| TOTAL CREDIT HOURS | 14-16 | TOTAL CREDIT HOURS | 16-17 |


| SECOND YEAR | Fall Semester | Spring Semester |  |  |
| :---: | :--- | :---: | :--- | :---: |
|  | MATH 307 - Linear Algebra | 3 | MATH 237 - Multivariable <br> Calculus | 4 |
|  | MATH 310 - Discrete Math | 3 | MATH 317 - Introduction to <br> Algebraic Systems | 3 |
|  | COMM 145 - Fundamentals of Public <br> Speaking and Communication (F- <br> Human Communication) | 3 | MATH Elective (300/400 level)* | 3 |
|  | ENG 200 - Introduction to Literature <br> (F-Literary Studies) | 3 | Colonnade (E-Arts \& Humanities) | 3 |
|  | Foreign Language | 3 | Colonnade (E-Natural \& Physical <br> Sciences) | 3 |
|  | TOTAL CREDIT HOURS | $\mathbf{1 5}$ | TOTAL CREDIT HOURS | $\mathbf{1 6}$ |


| WINTER TERM | Winter Term |  |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |
|  | TOTAL CREDIT HOURS |  |

THIRD YEAR
Fall Semester

| Visit Career Services | MATH 337 - Elements of Real <br> Analysis | 3 | MATH 417 - Algebraic Systems | 3 |
| :--- | :---: | :---: | :--- | :---: |
|  | MATH 439 - Topology I | 3 | MATH 450 - Complex Variables | 3 |
|  | Math Elective (300/400 level)* | 3 | Colonnade (C-Local to Global) | 3 |
|  | 3 | Colonnade (C-Systems) | 3 |  |
| Colonnade (C-Social to Cultural) | 3 | General Elective | 3 |  |
|  | TOTAL CREDIT HOURS | $\mathbf{1 5}$ | TOTAL CREDIT HOURS | $\mathbf{1 5}$ |


| SUMMER TERM | Summer Term |
| :--- | :--- |
|  | It is STRONGLY recommended to purse an <br> internship in your prospective career field after <br> the third year. |


| FOURTH YEAR | Fall Semester | Spring Semester |  |  |
| :---: | :--- | :---: | :--- | :---: |
|  | MATH 431 - Intermediate Analysis | 3 | MATH 498 - Senior Seminar | 3 |
|  | Math Elective (300/400 level)* | 3 | Math Elective (300/400 level)* | 3 |
|  | General Electives | 8 | General Electives | $6-9$ |
| Celebrate | TOTAL CREDIT HOURS | $\mathbf{1 4}$ | TOTAL CREDIT HOURS | $\mathbf{1 2 - 1 5}$ |

Total Credit Hours: 120

* Two courses from MATH 315, 323, 415, 423, 473. Six more hours from MATH 275 (up to 3 hours), STAT 301, MATH 305, 315, 323, $331,370,371$ (if not taken instead of CS 181), 382, 398 (up to 3 hours), 405, 406, 409, 415, 423, 435, 470, 473, 475 (up to 6 hours), 482.

PLEASE NOTE: Prerequisites, Course Numbers, and Course Titles are subject to change.
Consult your advisor each semester.
Course Descriptions may be viewed at http://www.wku.edu/catalog
For more Information:
Department: Mathematics
Website: www.wku.edu/math
Phone: (270)745-3651
Email: math@wku.edu
Course Descriptions: http://www.wku.edu/undergraduatecatalog/

