| CURRICULUM SUMMARY FOR THE <br> BACHELOR OF SCIENCE AND MASTER OF SCIENCE DEGREE IN MATHEMATICS TOTAL CREDITS REQUIRED: 144 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| CORE CURRICULUM (STANDARD)* | TCCNS | MAJOR (BS MATHEMATICS) | $\begin{gathered} \hline \hline \text { OTHER } \\ \text { REQUIREMENTS } \\ \hline \end{gathered}$ | Approved Free Electives |
| 43 credits | EQUIVALENT | 38 credits | 12 credits | 24 credits |
| Communication: |  | MATH 242(4) | CS 120 (3) | See academic advisor |
| ENG 131 (3) ** | ENGL 1301 | MATH 243(4) | CS 124 (3) |  |
| ENG 132 (3) | ENGL 1302 | MATH 250 (3) | PHYS 217 (1) |  |
| Mathematics: |  | MATH 251 (3) | PHYS 252 (3) |  |
| MATH 241 (4) | MATH 2413 | MATH 331 (3) | PHYS 251 (3) |  |
| Life and physical sciences: |  | MATH 336 (3) | FS 102 (1)\# |  |
| CHEM 131 or BIOL 143 (3) | CHEM 1311 or BIOL 1308 | MATH 439 (3) <br> MATH 440 (3) <br> MATH 431 (3) |  |  |
| PHYS 251 (3) | PHYS 2325 | MATH 473 (3) |  |  |
| Language, philosophy, and culture: |  | MATH 498 (3) |  |  |
| ENG 2xx (3) *** |  | MATH Electives ${ }^{\wedge}$ |  |  |
| Creative arts: |  | MATH 3xx or 4xx (3) |  |  |
| MUSI xxx, ART xxx or THEA xxx (3)**** |  | MATH 4xx (3)^^ |  |  |
| American history: |  |  |  |  |
| HIST 231 (3) | HIST 1301 |  |  |  |
| HIST 232 (3) | HIST 1302 | MS MATHEMATICS 24 credits |  |  |
| Government/political science: |  | MATH 631 |  |  |
| POLS 235 (3) | GOVT 2305 | MATH 633 |  |  |
| POLS 236 (3) | GOVT 2306 | MATH 634 |  |  |
| Social and behavioral sciences: |  | MATH 636 |  |  |
| $\begin{array}{\|l} \hline \text { PSY xxx, SOC xxx or ECON } \\ \text { xxx (3)***** } \\ \hline \end{array}$ |  | MATH 733 |  |  |
| Institutional Options: |  | MATH 500/600/700 Elective |  |  |
| SC 135 or 136 (3) | SPCH 1321 or SPCH 1315 | MATH 500/600/700 Elective |  |  |
| CS 116 (3) | COSC 1301 | MATH 500/600/700 Elective |  |  |

* Students should be advised by a major advisor prior to registering for any credit, particularly any core curriculum credit as listed.
** ( N ) represents the number of course credits.
*** MATH 241 will be used to satisfy the mathematics core requirement for mathematics majors.
**** ENG 230, ENG 231, ENG 235, or ENG 244 (TCCN: ENGL 2332, ENGL 2333, or ENGL 2326)
***** MUSI 136, MUSI 239, THEA 130, ART 135, ART 137 (TCCN: MUSI 1306, HUMA 1315, DRAM 1310, ARTS 1301, or HUMA 2323).
****** PSY 131, SOC 157, SOC 158, SOC 221, SOC 238, ECON 231 or ECON 232 (TCCN: PSYC 2301, SOC 1301, SOC 1306, SOC 2306, ANTH 2346, ECON 2301 or ECON 2302)
${ }^{\wedge}$ Math Electives may be selected from MATH 332, MATH 335, MATH 345, MATH 376, MATH 430, MATH 431, MATH 460, MATH 461 , MATH 462, MATH 463, MATH 464, MATH 465, MATH 471, MATH 474, MATH 475, MATH 476, MATH 490, or MATH 499. Some MATH XXX course may have been excluded. MATH 345 cannot be used.
\# Not required for first time transfer and an additional 1 credit will be needed in place of the course.
${ }^{\wedge}$ Counted toward both BS Degree and MS Degree in Mathematics
Note: Students interested in receiving a Bachelor of Science Degree in Math and in teaching mathematics grades 8-12 may substitute courses required by the College of Education for educator preparation and certification in place of "MINOR REQUIREMENTS." These courses include: EDCI 310, EDCI 328, EDCI 339, EDCI 350, EDCI 464, Reading 400 and Reading 402. Students interested in teaching may also take PHYS 213, 237, and PHYS 214, 238 in lieu of PHYS 217, 251 and PHYS 218, 252.


## Bachelor of Science and Master of Science Degree in Mathematics

Degree Plan - Total Credits: 144

|  | First Semester |  | Second Semester |  |
| :---: | :---: | :---: | :---: | :---: |
|  | ENG 131* Freshman English I | 3 | ENG 132 Freshman English II | 3 |
|  | MATH 241 Calculus \& Analytic Geometry I | 4 | MATH 242 Calculus \& Analytic Geometry II | 4 |
|  | CS 116 Computer Science I | 3 | Social and Behavioral Science*** | 3 |
|  | SC 135 or 136 Business \& Professional Communication or Public Address | 3 | CHEM 131 General Chemistry \& Lab I or BIOL 143 Survey of Life Science | 3 |
|  | FS 102 | 1 |  |  |
|  | HIST 231 Social \& Political History of the United States to 1877 | 3 | HIST 232 Social \& Political History of the United States since 1877 | 3 |
|  |  | 17 hrs |  | 16 hrs |


|  | Third Semester |  | Fourth Semester |  |
| :---: | :---: | :---: | :---: | :---: |
|  | ENG 2XX Any 200 Level ENG may be selected | 3 | MATH 251 Differential Equations | 3 |
|  | MATH 243 Calculus \& Analytic Geometry. II | 4 | MATH 331 Logic, Sets, \& Functions | 3 |
|  | PHYS 251 University Physics I | 3 | PHYS 252 University Physics II | 3 |
|  | PHYS 217 University Physics I Lab |  | PHYS 218 University Physics II Lab | 1 |
|  | POLS 235 American Political Systems I | 3 | POLS 236 American Political Systems II | 3 |
|  | MATH 250 Linear Algebra | 3 | CS 124 Fundamentals of Machine Comp | 3 |
|  |  | 17 hrs |  | 16 hrs |


| Fifth Semester |  | Sixth Semester |  |
| :---: | :---: | :---: | :---: |
| Creative Arts** | 3 | MATH 440 Intro to Analysis II | 3 |
| : MATH 439 Intro to Analysis I | 3 | MATH Elective^ (MATH 3XX or MATH 4XX) | 3 |
| MATH 431 Software for Machine ... | 3 | Free Elective | 3 |
| - CS 120 Intro to Computer... | 3 | Free Elective | 3 |
| [ MATH 336 Foundations of Algebra | 3 | Free Elective | 3 |
|  |  |  | 15 hrs |
|  | 15 hrs |  |  |


| $\underset{i}{\text { ej}}$ | Seventh Semester |  | Eighth Semester |  |
| :---: | :---: | :---: | :---: | :---: |
|  | MATH 473 Probability and Statistics I | 3 | MATH 498 Capstone Course | 3 |
|  | MATH Elective^ (MATH 3XX or MATH 4XX) | 3 | MATH Elective^^ (MATH 4XX) | 3 |
| 를 | MATH Elective^^ (MATH 4XX) | 3 | Free elective | 3 |
|  | Free Elective | 3 | MATH 633 Theory of Functions of Real Numbers | 3 |
|  | MATH 631 Introduction to the Foundations of Mathematics | 3 |  |  |
|  |  |  |  |  |
|  |  | 15 hrs |  | 12 hrs |


| E | Ninth Semester |  | Tenth Semester |  |
| :---: | :---: | :---: | :---: | :---: |
|  | MATH 733 Abstract Algebra | 3 | MATH 636 Topology | 3 |
|  | MATH 500/600/700 Elective | 3 | MATH 634 Theory of Functions of Complex Variables | 3 |
|  | MATH 500/600/700 Elective | 3 | MATH 500/600/700 Elective | 3 |
|  |  | 9 hrs |  | 9 hrs |

[^0]
[^0]:    * Pending acceptable scores on English and Math Placement Exams.
    ** MATH 241 will be used to satisfy the mathematics core requirement for mathematics majors only.
    *** PSY 131, SOC 157, SOC 158, SOC 221, SOC 238, ECON 231 or ECON 232
    **** MUSI 136, MUSI 239, THEA 130, ART 135, ART 137
    ${ }^{\wedge}$ Math Electives may be selected from MATH 332, MATH 335, MATH 345, MATH 376, MATH 430, MATH 431, MATH 460, MATH 461, MATH 462 , MATH 463, MATH 464, MATH 465, MATH 471, MATH 474, MATH 475, MATH 476, MATH 490, or MATH 499.
    ${ }^{\wedge}$ Counted toward both BS Degree and MS Degree in Mathematics
    Note: Students interested in receiving a Bachelor of Science Degree in Math and in teaching mathematics grades 8-12 may substitute courses required by the College of Education for educator preparation and certification in place of "MINOR REQUIREMENTS." These courses include: EDCI 310, EDCI 328, EDCI 339, EDCI 350, EDCI 464, Reading 400 and Reading 402. Students interested in teaching may also take PHYS 213, 237, and PHYS 214, 238 in lieu of PHYS 217, 251 and PHYS 218, 252.

