## B.A. IN MUSIC PLUS A SECONDARY MAJOR IN ACTUARIAL SCIENCE

- The B.A. degree in Music requires 124 credits.
--66 hours must be non-music credits.
--40 hours must be 300 or 400-level courses.
--All music majors have Arts Event Attendance Requirements; for details, check https://www.butler.edu/jca/for-current-students.
- The double major of Music and Actuarial Science will fulfill the following Areas of Inquiry in the University Core Curriculum: Perspectives of the Creative Arts and Analytic Reasoning. In addition, the B.A. Music curriculum fulfills the Social Justice and Diversity requirement of the Butler University Core Curriculum; music majors are exempted from the Butler Cultural Requirement because of the arts event attendance requirements for all arts majors. The Indianapolis Community Requirement is NOT satisfied.
- The student will be assigned an Actuarial Science advisor in addition to their Music advisor.


## Semester 1

| AM 021* | Keyboard Skills 1 | 1 | AM 022* | Keyboard Skills 2 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| *If the major instrument is piano, the student should take AM 031, Piano Major: Keyboard Skills 1 and AM 032, Piano Major: Keyboard Skills 2 instead of AM 021, AM 022, AM 023, and AM 024. |  |  |  |  |  |
|  |  |  |  |  |  |
| AM | Major Instrument or Voice | 2 | AM | Major Instrument or Voice | 2 |
| ES | Major Ensemble | 1 | ES | Major Ensemble | 1 |
| MT 101 | Music Theory 1 | 3 | MT 102 | Music Theory 2 | 3 |
| MT 111 | Aural Skills 1 | 1 | MT 112 | Aural Skills 2 | 1 |
| FYS 101 | First Year Seminar | 3 | FYS 102 | First Year Seminar | 3 |
| PWB | Physical Well-Being | 1 |  |  |  |
| MA 106* | Calculus \& Anal. Geo. 1 | 4 | MA 107 | Calculus \& Anal. Geo. 2 | 4 |
| Language Elective |  | 3 | MS 100 | Business Appl with Excel | 2 |
|  |  | Language Elective |  |  | 3 |

Explanation: 6 hours of the same language at the 200-level or higher are required.
TOTAL Credit Hours: 19
20
*Math placement test required; the student may need to take MA 101 (Algebra, 3 cr.) and/or MA 102 (Precalculus, 3 cr.) prior to MA 106. Students get credit for MA 106 if they receive a 4 or 5 on the Calculus AB AP exam; they receive credit for both MA 106 and MA 107 if they receive a 4 or 5 on the Calculus BC AP exam with a 4 or 5 on the $A B$ subscore.

## Semester 3

| AM 023 | Keyboard Skills 3 | 1 |
| :--- | :--- | :--- |
| AM |  | Major Instrument or Voice |
| ES - | 2 |  |
| ME 330 |  | Major Ensemble |
| MT 201 | Self-Represent for Musicians | 1 |
| Music Theory 3 | 1 |  |

## Semester 4

| AM 024 | Keyboard Skills 4 | 1 |
| :--- | :--- | :--- |
| AM | Major Instrument or Voice | 2 |
| ES | Major Ensemble | 1 |
| MT 202 | Music Theory 4 | 3 |
| MT 212 | Aural Skills 4 | 1 |

1

GHS $\qquad$ Global and Historical Studies 3 TI $\qquad$ Texts and Ideas 3

MA 361
MA 363

Calculus \& Anal. Geo. 3
Probability Theory 1
3
Introduction to Accounting 13

MA 360

Statistical Theory
Probability Theory 2

20

## Semester 5

$\qquad$ Major Instrument or Voice

NW $\qquad$
MA 310
MA 398
MS 265
Semester 6

Major Ensemble
Music in Global Contexts
1
3
The Social World (if needed)
3
ES
MH 308-SJD
SW $\qquad$
CS 142
MA 395
MA 397

TOTAL Credit Hours:
19

Major Instrument or Voice 2
Major Ensemble 1
Music History 12
The Natural World 5
Linear Algebra 3
Actuarial Mathematics 23
Information Technology 3

19

Semester 7
$\qquad$
ES ___
MH 306

GHS $\qquad$
EC 231
FN 340
MA 362

Major Instrument or Voice 2
Major Ensemble
Music History 2

Global and Historical Studies 3
$\begin{array}{ll}\text { Principles of Microeconomics } & 3 \\ \text { Corporate Finance } & 3 \\ \text { Linear Regression \& Time Ser } & 3\end{array}$

Semester 8

| AM | Major Instrument or Voice | 2 |  |
| :--- | :--- | :--- | :--- |
| ES - |  | Major Ensemble | 1 |
| ME 430 |  | E-Portfolio Capstone | 0 |
| MH 307 |  | Music History 3 | 3 |
|  |  |  |  |
|  |  | 3 |  |
| EC 232 |  | Principles of Macroeconomics | 3 |
| MA 372 | Loss Models | 3 |  |
| MA 399 | Financial Derivatives | 3 |  |
| MA 495 | Math for Invest \& Fin Markets | 3 |  |

MA 495

Major Instrument or Voice2
Major Ensemble0 3

## REQUIRED MUSIC COURSES:

Note: The 8-semester sequence shown above includes AM 021 and AM 022, as well as 4 additional semesters of Applied Music (8 credits) and 2 additional semesters of Major Ensemble (2 credits), in addition to the courses listed below. While not required in the B.A. degree, most music majors will take these additional classes for placement or scholarship reasons.

AM 023,024* Keyboard Skills 3,4 2
*AM 031 \& AM 032 if major instrument is piano
AM Major Instrument or Voice 8
ES
Major Ensemble 6
ME 330 Self-Representation for Musicians 1
ME 430 E-Portfolio Capstone 0
MH $305 \quad$ Music History and Literature 12
MH 306 Music History and Literature 2
MH 307 Music History and Literature 3
MH 308-SJD Music in Global Contexts 3
MT 101 Music Theory 13
MT 111 Aural Skills 1 1
MT 102 Music Theory 2
MT 112 Aural Skills 2 1
MT 201 Music Theory 3
MT 211 Aural Skills 3 1
MT 202 Music Theory 4
MT 212 Aural Skills 4 1
TOTAL 44 (plan shows 56 music credits per the note above)

## UNIVERSITY CORE CURRICULUM:

FYS 101,102 First Year Seminar 3,3
GHS __ Global and Historical Studies 3,3
NW _ The Natural World 5
SW ___ The Social World (if needed) 3
TI Texts and Ideas 3
PWB
Physical Well-Being 1
TOTAL 24

COURSES REQUIRED FOR THE ACTUARIAL SCIENCE MAJOR:
MA 106* Calculus \& Anal Geometry 14
MA 107 Calculus \& Anal Geometry 2
MA 208 Calculus \& Anal Geometry 3
MA 310 Linear Algebra 3
MA $360 \quad$ Probability Theory $1 \quad 3$
MA 361 Statistical Theory 3
MA 362 Linear Regression and Time Series 3
MA 363 Probability Theory 2 3
MA 372 Loss Models 3
MA 395 Financial Mathematics 4
MA 397 Actuarial Mathematics $1 \quad 3$
MA 398 Actuarial Mathematics 2 3
MA 399 Financial Derivatives 3
Language 6 hours of the same language at the 200-level or higher
*Math placement test required; the student may need to take MA 101 (Algebra, 3 cr.) and/or MA 102
(Precalculus, 3 cr.) prior to MA 106. Students get credit for MA 106 if they receive a 4 or 5 on the Calculus AB AP exam; they receive credit for both MA 106 and MA 107 if they receive a 4 or 5 on the Calculus BC AP exam with a 4 or 5 on the $A B$ subscore.

Additional Recommended Courses for the Actuarial Science major (included in the plan above):
AC 203 Introduction to Accounting 1 3

CS 142 Intro to Comp Sc \& Programming 3
EC 231 Principles of Microeconomics 3
EC 232 Principles of Macroeconomics 3
FN 340 Corporate Finance 3
MA $495 \quad$ Math for Investments \& Financial Markets 3
MS 100 Business Applications with Excel 2
MS 265 Information Technology 3
TOTAL 23
NOTE: Nine credits of business courses exempts the student from taking a Social World elective.

In addition, Actuarial Science majors are strongly encouraged to pass the CAS/SOA Exams $P$ (probability) and FM (mathematics of finance), and obtain a summer internship while still an undergraduate.

