

**DUAL DEGREE: B.A. IN MUSIC (from Butler University)
PLUS B.S. IN MECHANICAL ENGINEERING (from Purdue University)**

- Engineering contact: Jessica McCormick, 317-940-9021, jrmccorm@butler.edu
- The B.A. degree in Music requires 124 hours.
 - 66 hours must be non-music credits.
 - 40 hours must be 300 or 400-level courses.
- The Dual Degree of Music and Mechanical Engineering will fulfill the following Areas of Inquiry in the Butler University Core Curriculum: Perspectives of the Creative Arts, The Natural World, The Social World, and Analytical Reasoning. In addition, the B.A. Music curriculum fulfills the Writing Across the Curriculum, Speaking Across the Curriculum, and Social Justice and Diversity requirements 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.

Semester 1

AM 021*	Keyboard Skills 1	1
<i>*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.</i>		
AM ____	Major Instrument or Voice	2
ES ____	Major Ensemble	1
MT 101	Music Theory 1	3
MT 111	Aural Skills 1	1
FYS 101	First Year Seminar	3
PWB ____	Physical Well Being	1
CH 105	General Chemistry 1	5
DD 190	Elementary Engr Design	3

Semester 2

AM 022*	Keyboard Skills 2	1
AM ____	Major Instrument or Voice	2
ES ____	Major Ensemble	1
MT 102	Music Theory 2	3
MT 112	Aural Skills 2	1
FYS 102	First Year Seminar	3
CH 106	General Chemistry 2	5
MA 106**	Calculus & Anal. Geo. 1	4

***Math placement test required. There is the possibility that the student will need to take MA 101 (Algebra, 3 cr.) and/or MA 102 (Precalculus, 3 cr.) prior to MA 106 and MA 107.*

TOTAL Credit Hours: 20 20

Semester 3

AM 023	Keyboard Skills 3	1
AM ____	Major Instrument or Voice	2
ES ____	Major Ensemble	1
MT 201	Music Theory 3	3
MT 211	Aural Skills 3	1
CS 142	Intro to Comp Sc & Prog	3
MA 107	Calculus & Anal Geo. 2	4
PH 201	Intro to Anal. Physics 1	5

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
TI ____	Texts and Ideas	3
MA 208	Calculus & Anal. Geo. 3	4
PH 202	Intro to Anal. Physics 2	5

TOTAL Credit Hours: 20 20

Semester 5

AM ____	Major Instrument or Voice	2
ES ____	Major Ensemble	1
ME 330-C	Self-Representation for Mus	1
MH 308-SJD	Music in Global Contexts	3
COM 101	Rhetoric & the Amer Dem Tra	3
DD 297	MATLAB	1
MA 215	Linear Algebra	3
ME 22501	Mechanical Engineer Lab 1	1
PH 351-W	Analog Electronics	4
TOTAL Credit Hours:		19

Semester 6

AM ____	Major Instrument or Voice	2
ES ____	Major Ensemble	1
MH 305	Music History 1	2
GHS ____	Global and Historical Studies	3
MA 334	Differential Equations	3
ME 20000	Thermodynamics	3
ME 25001	Mechanical Engineer Lab 2	1
ME 27000	Basic Mechanics 1	3
TCM 360-W/C	Comm in Engineering Prac	2
TOTAL Credit Hours:		20

Semester 7

AM ____	Major Instrument or Voice	2
ES ____	Major Ensemble	1
MH 306-W	Music History 2	3
MA 359	Probability and Statistics	3
ME 27200	Mechanics of Materials	3
ME 27400	Basic Mechanics 2	3
ME 32501	Mechanical Engineer Lab 3	1
ME 33000	Modeling & Analy of Dyn Sys	3
TCM 250	Career Planning for Engineers	1
TOTAL Credit Hours:		20

Semester 8

AM ____	Major Instrument or Voice	2
ES ____	Major Ensemble	1
ME 430	E-Portfolio Capstone	0
MH 307	Music History 3	3
ME 26200	Engr Design, Ethics & Entre	2
ME 31000	Fluid Mechanics	3
ME 34000	Dynamic Systems & Meas	2
ME 34400	Intro to Eng Materials	3
ME 35001	Mechanical Engineer Lab 4	1
SW 220-EC	The Economy and Society	3
TOTAL Credit Hours:		20

Semester 9

AM ____	Major Instrument or Voice	2
ES ____	Major Ensemble	1
GHS ____	Global and Historical Studies	3
ME 31400	Heat and Mass Transfer	3
ME 37200	Design of Mechanics	1
ME 41400/45310	Therm-Fl/Machine Design	3
ME 42501	Mechanical Engineer Lab 5	1
____	Tech Elective	3
TOTAL Credit Hours:		19

Semester 10

AM ____	Major Instrument or Voice	2
ES ____	Major Ensemble	1
ENGR 20010	Engineering Internship	1
ME 46200	Capstone Design	3
ME 48200	Control Systems	3
ME 49700	Design, Standards & Cont Iss	1
____	Tech Elective	3
____	Tech Elective	3
TOTAL Credit Hours:		17

SUMMARY

REQUIRED MUSIC COURSES:

Note: The 10-semester sequence shown above includes AM 021 and AM 022, 12 additional hours of Applied Music, and 4 additional hours of Major Ensemble, 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
<i>*AM 031 & AM 032 if major instrument is piano</i>		
AM ____	Major Instrument or Voice	8
ES ____	Major Ensemble	6
ME 330-C	Self-Representation for Musicians	1
ME 430	E-Portfolio Capstone	0
MH 305	Music History and Literature 1	2
MH 306-W	Music History and Literature 2	3
MH 307	Music History and Literature 3	3
MH 308-SJD	Music in Global Contexts	3
MT 101	Music Theory 1	3
MT 111	Aural Skills 1	1
MT 102	Music Theory 2	3
MT 112	Aural Skills 2	1
MT 201	Music Theory 3	3
MT 211	Aural Skills 3	1
MT 202	Music Theory 4	3
MT 212	Aural Skills 4	1
TOTAL		44 <i>(plan shows 62 music credits per the note above)</i>

BUTLER UNIVERSITY CORE CURRICULUM:

FYS 101, 102	First Year Seminar	3, 3
GHS ____	Global & Historical Studies	3, 3
TI ____	Texts and Ideas	3
PWB ____	Physical Well Being/Marching Band	1
TOTAL		16

COURSES REQUIRED FOR THE MECHANICAL ENGINEERING DEGREE:

CH 105	General Chemistry 1	5
CH 106	General Chemistry 2	5
COM 101	Rhetoric & the Amer Dem Tradition	3
CS 142	Intro to Computer Sci & Prog	3
DD 190	Elementary Engineering Design	3
DD 297	MATLAB	1
ENGR 20010	Engineering Internship	1
MA 106**	Calculus & Anal Geometry 1	4
MA 107**	Calculus & Anal Geometry 2	4
MA 208	Calculus & Anal Geometry 3	4
MA 215	Linear Algebra	3
MA 334	Differential Equations	3
MA 359	Probability and Statistics	3
ME 20000	Thermodynamics	3
ME 22501	Mechanical Engineering Lab 1	1
ME 25001	Mechanical Engineering Lab 2	1
ME 26200	Engr Design, Ethics & Entrepren	2
ME 27000	Basic Mechanics 1	3
ME 27200	Mechanics of Materials	3

ME 27400	Basic Mechanics 2	3
ME 31000	Fluid Mechanics	3
ME 31400	Heat and Mass Transfer	3
ME 32501	Mechanical Engineering Lab 3	1
ME 33000	Modeling & Analysis of Dyn Sys	3
ME 34000	Dynamic Systems & Measure	2
ME 34400	Intro to Engineering Materials	3
ME 35001	Mechanical Engineering Lab 4	1
ME 37200	Design of Mechanics	1
ME 41400/45310	Therm-Fl Sys Des/Machine Des	3
ME 42501	Mechanical Engineering Lab 5	1
ME 46200	Capstone Design	3
ME 48200	Control Systems	3
ME 49700	Design, Standards, and Cont Issues	1
Tech Electives		9
PH 201	Intro to Analytical Physics 1	5
PH 202	Intro to Analytical Physics 2	5
PH 351-W	Analog Electronics	4
SW 220-EC	The Economy and Society	3
TCM 250	Career Planning for Engineers	1
TCM 360-W+C	Comm in Engineering Practice	2
	TOTAL	115

***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 AB subscore.*