Program Change Request

New Program Proposal

Date Submitted: 07/06/22 9:16 am

Viewing: **DTSCBS-MIDA : Data Science: Music Industry Data Analytics Concentration**

Last edit: 07/11/22 4:38 pm

Changes proposed by: schubert

Submitter: 5-2664	User ID:	schubert	Phone:

Program Status	Active
Academic Level	Undergraduate
Type of proposal	Concentration
Select a reason for this new program	Adding New Concentration
Effective Catalog Year	Spring 2023
College/School Code	College of Engineering (ENGR)
Department Code	Data Science (DASC)
Program Code	DTSCBS-MIDA
Degree	Bachelor of Science
CIP Code	

3. 07/07/22 10:27 am Kevin Hall (kdhall): Approved for ENGR Dean Initial
4. 07/07/22 11:38 am Alice Griffin (agriffin): Approved for Director of Curriculum Review and Program Assessment
5. 07/11/22 4:38 pm Gina Daugherty (gdaugher): Approved for Registrar Initial
6. 07/11/22 5:01 pm Doug Miles (dmiles): Approved for Institutional Research
7. 07/11/22 5:19 pm Karl Schubert (schubert): Approved for DASC Chair
8. 07/11/22 5:30 pm Manuel Rossetti (rossetti): Approved for ENGR Curriculum Committee
9. 07/12/22 10:35 am Kevin Hall (kdhall): Approved for ENGR Faculty
10. 07/14/22 1:55 pm Jeannie Hulen (jhulen): Approved for ARSC Dean

11. 07/17/22 6:01 pm Alan Ellstrand (aellstra): Approved for WCOB Dean
12. 07/20/22 8:43 am Kevin Hall (kdhall): Approved for ENGR Dean
13. 07/20/22 8:51 am Suzanne Kenner (skenner): Approved for Global Campus
14. 07/20/22 9:27 am Kathryn Sloan (ksloan): Approved for Provost Review

30.3001 - Computational Science.

Program Title

Data Science: Music Industry Data Analytics Concentration

Program Delivery
Method

On Campus

Is this program interdisciplinary?

Yes

College(s)/School(s)

College/School Name
College of Engineering (ENGR)
Fulbright College of Arts and Sciences (ARSC)
Walton College of Business (WCOB)

Does this proposal impact any courses from another College/School?

Yes

College(s)/School(s)

College/School Name
Fulbright College of Arts and Sciences (ARSC)
Walton College of Business (WCOB)

What are the total hours needed to complete the program?	21

Program Requirements and Description

Requirements

Music Industry Data Analytics Concentration Courses

Required Courses:		15
MLIT 1333	Popular Music	
MUIN 3213	21st Century Music Industry	
MUIN 4103	Legal Aspects of the Music Industry	
MUIN 4553	Live Music Business	
MUIN 4563	Artist Development	
Elective Music Industry Data Analytics Courses (Choose one of the following two-course sequences):		6
Sequence 1: Business Sequence		
ISYS 4293	Business Intelligence	
MKTG 3433	Introduction to Marketing	
Sequence 2: Technology Sequence		
CSCE 4143	Data Mining	
CSCE 4613	Artificial Intelligence	
Total Hours		21

8-Semester Plan

Data Science B.S. with Music Industry Data Analytics Concentration Eight-Semester Plan

First Year	Units	
	Fall	Spring
MATH 2554 Calculus I (ACTS Equivalency = MATH 2405)[1]	4	
State Minimum Core Natural Science Elective with Lab (Satisfies General Education Outcome 3.4)	4	
ENGL 1013 Composition I (ACTS Equivalency = ENGL 1013) (Satisfies General Education Outcome 1.1)	3	

Course	Fall	Spring
DASC 1001 Introduction to Data Science	1	
DASC 1104 Programming Languages for Data Science	4	
MATH 2564 Calculus II (ACTS Equivalency = MATH 2505)		4
ECON 2143 Basic Economics: Theory and Practice (Satisfies General Education Outcome 3.3)		3
ENGL 1033 Technical Composition II (ACTS Equivalency = ENGL 1023) (Satisfies General Education Outcome 1.2)		3
DASC 1204 Introduction to Object Oriented Programming for Data Science		4
DASC 1222 Role of Data Science in Today's World		2
Year Total:	16	16

Second Year	Units	
	Fall	Spring
DASC 2594 Multivariable Math for Data Scientists	4	
STAT 3013 Introduction to Probability[4]	3-4	
or INEG 2314 Statistics for Industrial Engineers I		
DASC 2213 Data Visualization and Communication	3	
DASC 2113 Principles and Techniques of Data Science	3	
State Minimum Core Fine Arts Elective (Satisfies General Education Outcome 3.1)[2]	3	
SEVI 2053 Business Foundations (Data Science Majors-only section)		3
STAT 3003 Statistical Methods[4]		3
or INEG 2323 Probability and Stochastic Processes for Industrial Engineers		
DASC 2103 Data Structures & Algorithms		3
DASC 2203 Data Management and Data Base		3
MLIT 1333 Popular Music		3
Year Total:	16	15

Third Year	Units	
	Fall	Spring
PHIL 3103 Ethics and the Professions (Satisfies General Education Outcome 5.1)	3	
DASC 3103 Cloud Computing and Big Data	3	
MUIN 3213 21st Century Music Industry	3	
State Minimum Core Natural Science with Lab (Satisfies General Education Outcome 3.4)	4	
State Minimum Core Social Sciences Elective (General Education Outcomes 3.2 and 3.3)[2]	3	
DASC 3203 Optimization Methods in Data Science		3
DASC 3213 Statistical Learning		3
MUIN 4103 Legal Aspects of the Music Industry		3
State Minimum Core U.S. History or Government Elective (Satisfies General Education Outcome 4.2)[2]		3
State Minimum Core Social Sciences Elective (Satisfied General Education Outcomes 3.3 and 4.1)[2]		3
Year Total:	16	15

Fourth Year	Units

	Fall	Spring
DASC 4892 Data Science Practicum I	2	
DASC 4113 Machine Learning	3	
DASC 4123 Social Problems in Data Science and Analytics	3	
MUIN 4553 Live Music Business	3	
MUIN 4563 Artist Development	3	
DASC 4993 Data Science Practicum II (Satisfies General Education Outcome 6.1)		3
Concentration Elective		3
Concentration Elective		3
General Education Elective[3]		2-3
Year Total:	14	12

Total Units in Sequence:	120

[1]Students have demonstrated successful completion of the learning indicators identified for learning outcome 2.1, by meeting the prerequisites for MATH 2554.

[2]Students must complete the State Minimum Core requirements as outlined in the Catalog of Studies. The courses that meet the state minimum core also fulfill many of the university's General Education requirements, although there are additional considerations to satisfy the general education learning outcomes. Students are encouraged to consult with their academic adviser when making course selections.

[3]Students are required to complete 40 hours of upper-division courses (3000-4000 level). It is recommended that students consult with their adviser when making course selections.

[4]Data Science Statistics and Computational Analytics Concentration students are advised to select STAT 3013/STAT 3003 to meet the prerequisites required in the concentration.

Program Costs

No additional costs are required.

Library Resources

Library resources are as included with the overall Data Science Program and the School of Music.

Instructional

Facilities

Instructional facilities are as included with the overall Data Science Program and the School of Music.

Faculty Resources

Faculty resources are the existing Data Science Program Faculty and the Department of Music Faculty.

List Existing Certificate or Degree Programs

that Support the Proposed Program

Program(s)
DTSCBS - Data Science, Bachelor of Science

Are Similar Programs available in the area?

No

Estimated Student Demand for Program	45
Scheduled Program Review Date	See DTSCBS Plan

Program Goals and Objectives

Program Goals and Objectives
A data science degree with a concentration in music industry data analytics is designed to provide data science graduates with the tools to succeed in the contemporary data-driven music and entertainment industry. Students will be able to apply their skills to the cutting-edge fields of music creator analytics, AI music creation, crypto music finance, consumer algorithms, and more in major corporations, start-up firms, and independent artist settings.

Learning Outcomes

Learning Outcomes
Upon completion of the Data Science program and this Concentration, students will: 1. Understand the basic history, law, and economics of the music industry   2. Analyze current music industry trends   3. Design promotional strategies for music and artists   4. Use data to make informed music industry decisions   5. Understand historical and current diversity, equity, and inclusion issues in the music industry.

Description and Justification for this request

Description of request	Justification for request
This is a request to add an additional concentration, the Music Industry Data Analytics (MIDA) concentration to the Data Science program.	The Department of Music and Fulbright College of Arts and Sciences have identified the need and this presents an opportunity for us to be a leader in this field. Target companies for hiring these students include Apple Music, Amazon, Netflix, Spotify, and streaming intermediaries.

Upload attachments

[Data Science MIDA Concentration - v23.pdf](#)

Reviewer Comments

Alice Griffin (agriffin) (07/06/22 8:03 am): Changed scheduled program review date to match the rest of the concentration fields.

Alice Griffin (agriffin) (07/06/22 8:27 am): Inserted "Satisfies General Education Outcome 1.2" as a comment for ENGL 1033 in spring of first year in eight semester plan.

Alice Griffin (agriffin) (07/06/22 8:36 am): Inserted footnote language consistent with the Accounting Analytics Concentration (as footnote symbols were already added to the eight semester plan). College is encouraged to review for accuracy.

Alice Griffin (agriffin) (07/06/22 8:40 am): Rollback: Please identify courses that satisfy General Education Outcomes for 5.1 and 6.1 in the eight semester plan.

Alice Griffin (agriffin) (07/07/22 11:36 am): ATTENTION REGISTRAR: The Undergraduate Council needs to be added to the approval workflow.

Gina Daugherty (gdaugher) (07/11/22 4:38 pm): Undergraduate Council added to workflow.

Key: 911