From GENERAL INFORMATION:

## Bachelor of Fine Arts (B.F.A.)

The B.F.A. degree is offered in the following areas:

• Art (Studio) *with concentrations in*

• Ceramics

• Digital Media

• Graphic Design

• Metalsmithing and Jewelry

• Painting

• Photography

• Printmaking

• Sculpture

• Art Education *with concentrations in*

• Ceramics

• Digital Media

• Graphic Design

• Metalsmithing and Jewelry

• Painting

• Photography

• Printmaking

• Sculpture

## Bachelor of Music (B.M.)

The B.M. degree is offered in

• Music *with concentrations in*

• Music Education

• Performance

## Bachelor of Science (B.S.)

The B.S. degree is offered in the following areas:

• Accounting

• Art Education

• Biology

• Chemical Dependency/Addiction Studies

• Chemistry *with concentrations in*

• Biological Chemistry

• Environmental Chemistry

• Professional Chemistry

• Community and Public Health Promotion *with concentrations in*

• Health and Aging

• Public Health Promotion

• Women’s Health

• Computer Information Systems

• Computer Science

* Data Science

• Early Childhood Education *with concentrations in*

• Teaching

• Community Programs

• Birth to Three

• Finance

• Health Care Administration

• Health Education

• Health Sciences

• Health Sciences *with concentrations in*

• Dental Hygiene Completion

• Human Services

• Medical Laboratory Sciences

• Respiratory Therapy Completion

• Management *with concentrations in*

• General Management

• Human Resource Management

• Operations Management

• Marketing

• Medical Imaging *with concentrations in*

• Nuclear Medicine Technology

• Radiologic Technology

• Certified RT Computed Tomography

• Certified Medical Imager Management

• Diagnostic Medical Sonography

• Physical Education

• Physics

• Special Education *with teaching concentrations in*

• Mild/Moderate Disabilities Elementary School Level

• Mild/Moderate Disabilities Elementary School Level and Severe Intellectual Disabilities

• Severe Intellectual Disabilities, Ages Three to Twenty-One

*\*Projected 2018; pending RIDE approval.*

• Technology Education *with concentrations in*

• Teaching

• Applied Technology

• Wellness and Exercise Science

A program leading to eligibility for specialization in adapted physical education is also available.

Minors are available in accounting, biology, chemistry, coaching, computer information systems, finance, health care administration, international business, management, and marketing.

|  |  |  |
| --- | --- | --- |
| FROM FAS section: |  |  |
|  | B.S. | Environmental Chemistry |
|  | B.S. | Professional Chemistry |
| Communication (p. ) | B.A. | Journalism |
|  | B.A. | Media Communication |
|  | B.A. | Public and Professional Communication |
|  | B.A. | Public Relations and Advertising |
|  | B.A. | Speech, Language, and Hearing Science |
| Computer Science (p. ) | B.A. |  |
| Computer Science (p. ) | B.S. |  |
| Data Science (p. ) | B.S. |  |
| Dance Performance (p. ) | B.A. |  |
| English (p. )  \*\* | B.A. |  |
|  | B.A. | Creative Writing |
| Environmental Studies (p. ) | B.A. |  |
| Film Studies (p. ) | B.A. |  |
| Gender and Women’s Studies (p. ) | B.A. |  |
| Geography (p. ) | B.A. |  |
| Global Studies (p. ) | B.A. |  |
| Health Sciences (p. ) | B.S. |  |
|  | B.S. | Dental Hygiene Completion |
|  | B.S. | Human Services |
|  | B.S. | Medical Laboratory Sciences |
|  | B.S. | Respiratory Therapy Completion |
| History (p. )  \*\* | B.A. |  |
| Justice Studies (p. ) | B.A |  |
| Liberal Studies (p. ) | B.A. |  |
| Mathematics (p. )  \*\* | B.A. |  |
| Medical Imaging (p. ) | B.S. | Certified RT Computed Tomography |
|  | B.S. | Certified Medical Imager Management |
|  | B.S. | Diagnostic Medical Sonography |

# PLACE BETWEEN DANCE AND ENGLISH in the FAS PROGRAMS:

# Data Science

**Department of Mathematics and Computer Science**

**Department Chair:** Stephanie Costa

**Data Science Program Faculty: Professors** Abrahamson, Costa, Humphreys, La Ferla, Sparks, Teixeira, Zhou; **Associate Professors** Burke, Christy, Gall, Harrop, Kovac, Pinheiro, Sarawagi; **Assistant Professors** Caswell, Medwid, Turki, Wang

Students **must** consult with their assigned advisor before they will be able to register for courses.

*Note: Students cannot count toward the major more than two courses with grades below C-.*

Data Science B.S.

COURSE REQUIREMENTS

Courses

Courses

|  |  |  |  |
| --- | --- | --- | --- |
| MATH 212 | Calculus I | 4 | F, Sp, Su |
| MATH 213 | Calculus II | 4 | F, Sp, Su |
| MATH 240 | Statistical Methods I | 4 | F, Sp, Su |
| MATH 245 | Principles of Data Science | 4 | F, Sp |
| MATH 314 | Calculus III | 4 | F, Sp |
| MATH 345 | Linear Models for Data Science | 4 | F |
| MATH 436 | Discrete Mathematics | 4 | F, Sp |
| MATH 441 | Probability | 4 | F |
| MATH 445 | Advanced Statistical Methods | 4 | Sp |
| MATH 460 | Seminar in Data Science | 3 | Sp |
| CSCI 157 | Introduction to Algorithmic Thinking in Python | 4 | F, Sp |
| CSCI 428 | Machine Learning | 4 | Spring |
| CIS 455 | Database Programming | 4 | F, Sp |
|  | -Or- |  |  |
| CSCI 455 | Introduction to Database Systems | 3 | F (odd years) |
| CIS 470 | Introduction to Data Science | 4 | F |
| CIS 472 | Data Visualization | 4 | As needed |
| ENGL 230 | Writing for Professional Settings | 4 | F, Sp, Su |
| PHIL 207 | Technology and the Future of Humanity | 3 | F, Sp |

Total Credit Hours: 65-66

# MATH - Mathematics

MATH 458 - History of Mathematics (4)

The history of mathematical thought and the development of mathematics from ancient to modern times are studied.

Prerequisite: MATH 300, with a minimum grade of C.

Offered: Fall.

MATH 460 – Seminar in Data Science (3)

Students will participate in a project in which they consider a scientific question, collect and analyze a substantial data set, and formally communicate their results.

Prerequisite: Math 445

Offered: Spring

MATH 461 - Seminar in Mathematics (3)

Students analyze, synthesize and expand on mathematics learned in preceding courses, culminating in a substantial project and presentation.

Prerequisite: MATH 441 and prior or concurrent enrollment in MATH 432.

Offered: Spring.

MATH 490 - Directed Study in Mathematics (3)

This course is open to students who have demonstrated superior ability in mathematics. Designed to be a substitute for a traditional course under the instruction of a faculty member. This course may be repeated for credit once with a change in content.

Prerequisite: Consent of instructor, department chair and dean.

Offered: As needed.

MATH 491 - Independent Study in Mathematics (1)

This course is open to students who have demonstrated superior ability in mathematics. Students select a topic and undertake concentrated research or creative activity mentored by a faculty member. This course may be repeated for credit once with a change in content.

Prerequisite: Consent of instructor, department chair and dean.

Offered: As needed.