Curriculum Changes for 2025-26 Academic Catalog

NEW MAJORS | MINORS

The following new majors/minors have been adopted starting the 2025-26 academic year. New courses pertaining to these programs are also noted below.

Actuarial Science (ASC), BS — **Mathematics Department**

Major — Dr. Meyer & Dr. Witz

Total Credits: 57 in the major | *15 in residence of 300+ level*
Required Courses (39 credits) • MAT 221, 222, 223, 333 • CSC 131, 231 • BAN 260 • ASC 321, 351, 421, 480 • DSC 421
Elective Courses (18 credits) • ***Business Electives: choose 6-12 credits from the following:*** o ACC 210, 332, 333 o BUS 181, 182, 201 o BAN 361 o FIN 220 • ***Technical Electives: choose 6-12 credits from the following:*** o CSC 311 o DSC 311 o MAT 224, 231, 352, 421

New Courses in ASC:

ASC 321 – Mathematical Theory of Interest (3 credits)

Actuaries focus on using math and statistics to evaluate risk and make strategic decisions. This course covers a range of topics relevant to actuaries, including measurement of interest rates, interest theory, and the pricing of bonds, mortgages, annuities, and other financial instruments. This course will also fully cover all content required by the Society of Actuaries Financial Mathematics (FM) Exam and its equivalents. This asynchronous online class has optional live sessions.

Prerequisite(s): MAT 221
Term Offered: Fall semesters
Modality: Taught asynchronous online by Rize faculty

ASC 351 – Probability for Actuaries (3 credits)

Actuaries and quantitative professionals deal primarily in probabilities. This course will cover a wide range of topics, introduce core probability concepts needed for actuarial and quantitative work, and enable students to apply concepts of probability to real-world scenarios. This course will also fully cover all content required by the Society of Actuaries P Exam and its equivalents. This asynchronous online class has optional live sessions.

Prerequisite(s): MAT 221, 222, 223

Term Offered: Spring semesters
Modality: Taught asynchronous online by Rize faculty

ASC 421 – Actuarial Science and Risk Management with R (3 credits)
This course focuses on team-based problem solving in actuarial science and risk management. Students will learn the fundaments of the R programming language, RStudio, and RMarkdown, and will use these tools to complete a range of projects. This asynchronous online class has optional live sessions.

Prerequisite(s): MAT 221, CSC 131, ASC 321
Term Offered: Spring semesters
Modality: Taught asynchronous online by Rize faculty

ASC 480 – Actuarial Science Capstone (2 credits)
A course where students will complete and present a project in actuarial science of their own choosing in consultation with an actuarial science faculty member.
Note: Students may take MAT 480 Senior Seminar to satisfy this requirement, provided that their project is approved by actuarial science faculty.

Prerequisite(s): Senior standing and consent of instructor
Term Offered: Fall semesters
Modality: Taught face-to-face on campus by WLC faculty

Business Analytics (BAN), BA — **Business Department**
Major & Minor — Dr. Kudek

MAJOR: Total Credits: 60 in the major | 15 in residence of 300+ level
Required Business Core Courses (24 total credits) • BUS 181, 182, 201 (or MAT 221), 301, 302 (new course), 303, 305, 480
Required Business Analytics Courses (15 credits) • BAN 260, 361, 362, 461, 463
Data Analytics Elective Courses (choose one 3-credit course) • BAN 490, BAN x91, COM 301, DSC 311, MKT 342
Additional Required Courses (18 credits) • ACC 210, COM 201, FIN 220, MAT 117, MGT 250, MKT 240

MINOR: Total Credits: 24
Required Business Analytics Courses (18 total credits) • BUS 181, 201, 301 • BAN 260, 361, 362
Elective Courses (choose 2, totaling 6 credits) • BAN 461, BAN 463, COM 301, DMK 446, DSC 311, MKT 342

New courses in BAN:
BAN 260 – Data Analytics (3 credits)
This course prepares students to understand, manage, and visualize data, while at the same time learning various tools, and communicate findings. This course seamlessly threads the topics of data wrangling, descriptive analytics, predictive analytics, and prescriptive analytics into a cohesive whole.

Students will get exposure to a variety of analytics tools and platforms (e.g. Excel, Tableau) as they develop skills in articulating the business value of analytics and communicating insights gained from a non-technical standpoint.

Prerequisite(s): None
Term Offered: Fall semester

BAN 362 – Data Visualization (3 credits)
This course prepares students for multiple careers by exposing students to various tools used to explore and communicate complex datasets using visualization techniques and systems. This will include the tools necessary to create interactive dashboards (e.g. Tableau, PowerBI). In addition, students will be able to produce basic data visualizations using a chosen dataset, compare methods for visualizing data, understand how these methods may guide users towards different conclusions and evaluate how effectively a visualization conveys target data, in an ethical manner.

Prerequisite(s): BAN 260
Term Offered: Fall semester

BAN 461 – Advanced Data Modeling Systems (3 credits)
This course focuses on advanced data modeling and enhanced applications of Excel software and other tools such as Python used within a corporate environment. Students learn how to: build on Excel's financial functions; Compare alternative systems to determine best use of technology for the issues faced in business setting.

Prerequisite(s): BAN 361
Term Offered: Spring semester

BUS 302 – AI Fundamentals for Business (3 credits)
Artificial Intelligence (AI) is redefining the business world, offering unprecedented opportunities for innovation, efficiency, and competitive advantage. This non-technical course explores the fundamentals of AI and its transformative influence across modern business operations. Understand how AI technologies are reshaping industries, workforces, and business models, while examining the ethical, legal, and societal implications that accompany its adoption. Develop critical thinking and creative problem-solving skills to strategically assess where and how AI can add value, and position yourself as a forward-thinking professional ready to navigate and leverage AI across business functions.

Prerequisite(s): Declared Business Major or consent of the instructor
Term Offered: Every semester

Data Science (DSC), BS **Mathematics Department**
Major & Minor Dr. Witz

MAJOR: Total Credits: 50 in the major | 15 in residence of 300+ level
Required Courses (37 credits) • MAT 221, 222, 223, 333 • MAT 351 or ASC 351 • CSC 131, 231, 311, 481 • DSC 311, 421

Electives (9 credits from the following) • MAT 352, 371 • CSC 361, 450 • BAN 260, 361, 362, 461, 463 • Other courses as approved
Capstone Experience (2-3 credits) • DSC 385 or CSC 485 or MAT 480

MINOR: Total Credits: 26
• MAT 221, 222, 351 • CSC 131, 231, 311 • DSC 311, 421

New courses in DSC:

DSC 421 – Machine Learning (3 credits)

An introduction to four major areas of supervised and unsupervised machine learning: regression, classification, clustering, and dimension reduction. Topics include linear and nonlinear regression methods, k-nearest neighbors, decision trees, and Principle Component Analysis. Types of error such as bias, variance, and irreducible error will be discussed along with their measures including MSE and MAE. Python or another programming language will be used.

Prerequisite: CSC 231, MAT 351 or ASC 351 or concurrent enrollment, MAT 333 or concurrent enrollment

DSC 485 – Data Science Capstone (2-3 credits)

A course where students will complete and present a project in data science of their own choosing in consultation with a data science faculty member.

Prerequisite: Senior standing and consent of instructor
Note: Students may take DSC 485 along with CSC 485 or MAT 480

Nutritional Sciences (NTS), BS Sport & Exercise Science/ Phy Ed. Dept.
Major & Minor Dr. Ryan & Prof. Schoen

MAJOR: Total Credits: 58 in the major | 15 in residence of 300+ level
To declare: Complete NTS 240, BIO 225, and CHE 161/68 with grades of "C" or higher & Interview with faculty
Required Courses (46-48 credits) • NTS 240, 255, 310, 325, 355, 450, 490 • BIO 202, 225, 255, 341 • CHE 161, 168 • PSY 101 • MAT 117 or DSC 311
General Electives (12 or more credits from the following) • Anthropology: ANT 322 • Biology: BIO 223 or 323*, 331, 360

- Biochemistry: BCH 350*
- Chemistry: CHE 221 (CHE 162/69 are prerequisites*), 228
- Nutritional Science: NTS 300, 415*
- Psychology: PSY 120

**denotes graduate school prerequisite*

MINOR: Total Credits: 22

- Required NTS courses (13 credits): NTS 240, 255, 325, 355
- Elective NTS courses (9 or more credits): NTS 300, 310, 415, 450, or 490

New courses in NTS:

NTS 310 – Food Economics (3 credits)

Food economics isn't just about numbers – it's about people. Inequalities in our global food system often mirror the broader disparities in society. By understanding these systems, we can bring about transformative change. This course tackles the essentials: preventing foodborne illnesses, mastering procurement, and ensuring production quality. You'll learn the real-world calculations behind food costs and discover how food systems can save lives. This asynchronous online class has optional live sessions. 3 hrs lecture

Prerequisite(s): NTS 240 and declared NTS major or minor
Term Offered: Spring semester
Modality: Taught asynchronous online by Rize faculty

NTS 325 – Lifecycle Nutrition (3 credits)

From preconception to adolescence, nutrition shapes our health trajectories. This course explores how early choices, like breastfeeding or formula feeding, impact a child's development milestones and potential food allergies. As children grow, we'll examine how dietary needs and relationships with food evolve, especially during adolescence. Learn about the pivotal role of nutrition during early life and how it can mold health and self-perception. This asynchronous online class has optional live sessions. 3 hrs lecture

Prerequisite(s): NTS 240 and declared NTS major or minor
Term Offered: Spring semester
Modality: Taught asynchronous online by Rize faculty

NTS 355 – Lifecycle Nutrition II (3 credits)

In adulthood, nutritional habits solidify. We'll explore how early adulthood sets foundational food choices, and middle adulthood introduces complexities with work, family, and the onset of chronic diseases. Lastly, we'll explore the challenges faced in geriatric nutrition, including the impacts of polypharmacy. Throughout, a recurring theme will be weight management, emphasizing its role in promoting sustained health and activity. This asynchronous online class has optional live sessions. 3 hrs lecture

Prerequisite(s): NTS 240 and declared NTS major or minor
Term Offered: Fall semesters
Modality: Taught asynchronous online by Rize faculty

NTS 415 – Medical Nutrition Therapy (3 credits)
Through this course, students will gain insights into how medical and social histories play a crucial role in accurate nutrition diagnoses. The course also highlights various counseling techniques and introduces therapeutic diets tailored to address specific health challenges. Emphasizing the importance of monitoring and evaluating outcomes, this course prepares students for effective and informed interventions. This asynchronous online class has optional live sessions. 3 hrs lecture

Prerequisite(s): NTS 240, 325, 355, and declared NTS major/minor
Term Offered: Spring semesters
Modality: Taught asynchronous online by Rize faculty

NTS 450 – Nutritional Sciences Capstone (2 credits)
The Nutritional Sciences capstone is a culminating course designed for senior students to synthesize their knowledge of nutritional science within a Christian framework. This course provides an opportunity for students to engage in a service-learning project to improve nutritional health in local or global communities. Students will consider research in the field, gather data to write a paper or proposal that explores how Christian principles influence their approach to nutrition science (e.g. ethical decision-making, stewardship of the body, and service to others).

Prerequisite(s): NTS 240 and declared NTS major or minor with senior standing
Term Offered: Spring semesters
Modality: Taught face-to-face on campus by WLC faculty

NTS 490 – Nutritional Sciences Internship
1-3 credit(s)
By arrangement with the department
Prerequisite(s): NTS 240 and declared NTS major or minor
Term Offered: Every semester
Modality: Variable

COURSE REVISIONS

Due to new majors, the following existing course codes/titles will be changing. These revised courses will continue to fulfill their respective existing requirements.

Previous Course Code	Revised Code
BIO 240 **Nutrition**	**NTS 240 – Principles of Human Nutrition (3 credits)** Essentials of normal nutrition and its relationship to the health and wellbeing of individuals and families will be emphasized. Included will be the study of the physiological, psychological, and economic aspects of obtaining an adequate diet. This course is required prior to applying to the nursing program. 3 hrs. lecture Prerequisite(s): None Term Offered: Every semester
BIO 310 **Biostatistics**	**DSC 311 – Applied Statistics (3 credits)**

	An introduction to modern statistical techniques used to analyze and interpret data. Experimental design, data collection, descriptive and inferential statistics will be covered. Inferential analyses covered include hypothesis testing for single means and proportions, difference between two means and proportions (t and z tests), paired means, multiple means (ANOVA), and linear regression and correlation. Statistical software program (e.g. R) use will be introduced. Prerequisite: Junior status or MAT 221 or MAT 117 Term Offered: Fall semester
CHE 105 **Food & Cooking Chemistry**	**NTS 255 – Food Science (4 credits)** The science behind the way food is prepared, and how it eventually tastes, demonstrates a number of important chemical concepts. This course will explore the chemistry of food and cooking through reading, discussion, and hands-on activities. 3 hrs. lec. 3 hrs. lab. Prerequisite(s): None Term Offered: Summer | General Education Lab Science
FIN 388 **Advanced Financial Modeling**	**BAN 361 - Data Modeling** This course focuses on an introduction to data modeling and practical applications of Excel software within a corporate environment. Students learn how to: utilize Excel's built-in financial functions; clean data; automate repetitive tasks; create custom functions; properly utilize data structures; and turn data into more useful and accessible information. Techniques for efficient data analysis and presentation are also discussed. Prerequisite(s): FIN 220 Term Offered: Fall semester
MKT 430 **Advanced Marketing Analysis**	**BAN 463 – Applications in Data Analytics** This course teaches students how to utilize advanced business theories and ongoing, required analyses to evaluate case studies of real world, well-known businesses. Students will have the chance to apply the tools introduced in previous courses (e.g Excel, Tableau, Python, R) in new settings. Specific topics include: competitive positioning; label development (branding, positioning, and claims); risk/investment; sports management/player stats; production alternatives. Prerequisite(s): BAN 461. Term Offered: Spring semester
SPE 300 **Sport Nutrition**	**NTS 300 – Sport Nutrition (3 credits)** This course will address essential aspects of nutrition and exercise physiology on human performance. Students will gain practical experience with nutrition's role in optimal body functioning and peak performance during various types of exercise and sport. Consideration will be given to energy balance, dietary analysis, eating disorders, ergogenic aids, and sport nutrition resources. 3 hrs. lecture Prerequisite(s): NTS 240 Term Offered: Spring semesters

THR 101 **Intro to Theatre**	**THR 101 – Theatre Appreciation (3 credits)** This course develops an understanding of and appreciation for theatre through introduction to the various components and expressions of story in performance and an examination of topics including genre, style, structure, purpose and cultural context, as well as the roles of the collaborative artists responsible for a theatre production. Focus will be on fulfilling the role of "knowledgeable critic." Attendance of on- and off-campus performances will be required-with ticket cost assumed by the student. Prerequisite(s): None Term Offered: Every semester | General Education Fine Arts Requirement

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NEW COURSES

The following new courses have been adopted for existing majors/minors, starting the 2025-26 academic year.

Computer Science (CSC) *Additional electives to the CSC major & minor*	**CSC 280: Internet of Things (3 credits)** The Internet of Things is transforming our world through an ever-increasing network of small devices such as smart TV's, remote temperature sensors, home automation, voice control, etc. You will get hands-on experience in writing code for small, connected devices. Prerequisite: CSC 231 | Term Offered: Odd Fall Semesters **CSC 340: Game Development (3 credits)** In this course students will design and implement a game. We will use a modern game engine and study common techniques that make games performant and easy to extend. Additionally, you'll gain experience using audio, visual, and input components. Prerequisite: CSC 311 | Term Offered: Even Spring Semesters **CSC 350: Security (3 credits)** This course introduces security concepts by investigating common vulnerabilities and implementing solutions. We will discuss best-practices for networking and web-based applications and general encryption techniques. Prerequisite: CSC 150, CSC 231 | Term Offered: Odd Spring Semesters **CSC 355: Advanced Web Development (3 credits)** This course focuses on designing and building full-stack websites using modern techniques. Students will use a variety of frameworks and design patterns while learning the best practices of each. Prerequisite: CSC 150, CSC 311, and Junior standing | Term Offered: Even Spring Semesters **CSC 450: Software Engineering (3 credits)** This course covers software creation over the entire development life cycle - from application design to a final product. We will create projects following modern coding and testing standards. Prerequisite: CSC 311, CSC 361, and Junior standing | Term Offered: Odd Spring Semesters

EXISTING MAJOR, MINOR, and PREREQUISITE CHANGES

For each department below, please see changes to major, minor, and prerequisite requirements (including restructuring of existing programs).

Restructuring of existing programs:

Art (ART)	**NOTE: "Graphic Design" is now removed from the Major description** Major now includes (36 total credits): • Required Courses (27 credits): ART 110, 120, 130, 140, 150, 320, 355, 491, 497 • Elective Courses (9 credits from the following): ART 300, 305, 315, 330, 335, 340, 360, 365, 370, 375, 380, 385, 410, 430, 440, 460, 465, 470, 480, 485, 490 Minor (15 credits): • Required: ART 110, 120, 130, 140, 355
Neuroscience (NEU) Major & Minor	Major includes 3 sections totaling 47-48 credits: required lab science core, required lecture core, and concluding "capstone cluster" option: • **Required Lab Science Core:** BIO 202, BIO 225, BIO 360 (or BIO 331), CHE 161/68, NEU 201, NEU 325 • **Required Lecture Core**: MAT 117 (or DSC 311), NEU 301, NEU 401, PSY 101 • **6 credits from electives** • **Capstone Cluster**: *one of the following combinations* o BIO 401 & 402 o BIO 401 & 403, with 1 additional credit of BIO 498, NEU 498. NEU 490, or PSY 490 o PSY 411 (with completed prerequisite of PSY 315) Minor (26 credits): • Core Courses: NEU 201, BIO 202, PSY 101, MAT 117 (or DSC 311) • 6 credits of NEU specified electives • 3 credits of BIO specified electives • 3 credits of PSY specified electives
Nursing (NUR) Major	Changes to only impact current freshman (24-25 entrance) & beyond: • NUR 350 (Population Health) – merger of NUR 240 & NUR 345 • Name changes: NUR 347 (Population Health Immersion) & NUR 348 (Population Health Practicum) • Credit changes: NUR 355 (Adult Health I) & NUR 375 (Adult Health II) – now 3 credits each • NUR 305 (Health Assessment) – 3 credits, with added NUR 307 (Health Assessment Lab) – 1 credit • *Revision of course rotation – see catalog sample plan* ***for current freshman (24-25) and beyond***
Theatre (THR) Major & Minor	Major includes 40 credits:

	• Required courses: THR 101 (Theatre Appreciation), THR 201, THR 210, THR 265, THR 275 (Theatrical Costuming & Stage Make-up), THR 285 (Theatre Lab – 1 credit per production / must be taken 3x), THR 301, THR 305, THR 310, THR 401 (Theatre as Vocation), THR 404 (Senior Capstone) • Optional electives: THR 291/391 (Special Topics), THR 430 (Methods of Teaching Theatre), THR 490 (Internship) Minor includes 20 credits: • THR 101, THR 201, THR 210, THR 285 (taken 2x), THR 301, THR 310, THR 410

Revisions to existing programs:

Computer Science (CSC)	Addition of CSC 280, 340, 350, 355, 450 as electives to major & minor *(see details noted in "New Courses" section above)*
Human Social Services (HSS)	Removal of THE 301 from HSS major & minor Addition of HSS 410 (Professional Ethics) requirement for minor *(already required for major)*
Mathematics (MAT)	Addition of ASC 351 as prerequisite for MAT 352 Addition of DSC 421 (Machine Learning) as Application Elective option for major
Philosophy (PHI)	Removal of PHI 101 as prerequisite for PHI 203, 321, 322 Addition of THE 105/110 as prerequisite for PHI 203, 321, 322
Presentation & Performance Minor Revisions *due to THR major changes*	• Required courses: COM 201, COM 333, COM 350, THR 210, THR 310 • One of the following: THR 291/391 (Special topics – focuses on performance) OR THR 285 (taken 3 times) (18 credits)
Psychology (PSY)	Addition of HSS 200 as an elective course to both PSY major & minor
Script & Storytelling Minor Revisions *due to THR major changes*	• Required courses: THR 201, THR 305, ENG 305 • One of the following: ENG 293 OR ENG 295 • One of the following: THR 101 OR THR 285 (taken 3 times) (18 credits)
Sport & Exercise Science (SPE)	Updated major requirements: • Minimum entrance GPA of 2.5 in all SPE major-required courses (including BIO 202, BIO 255, and either CHE 101 or 161/68)
Theology (THE)	Removal of THE 220, 227, and 228