Major Undergraduate Programs

Africana Studies (B.A.)

Bachelor of Arts Program Program Code: BA-AS Major Code: AFS

Africana Studies Interdisciplinary Unit Dean's Office, School of Arts and Science Marcus Watson, Coordinator Buckham A 120E (716) 878-3389 africana.buffalostate.edu/

Majors in Africana Studies explore the meanings of Black liberation and thus a world where humans learn to live in harmony with each other and the earth. Offering multidisciplinary courses across the arts and sciences, majors develop cultural competence, critical and creative thinking skills, and research, writing, and presentation skills.

Admissions Requirements

Any matriculated student in good academic standing may declare this program.

Program Requirements

General Education 23 Requirements		
33 credit hours		33
Required Foundational	A Courses (12 credit hours)	
AAS 100	INTRODUCTION TO AFRICANA STUDIES	3
AAS 200	BLACKS IN BUFFALO	3
AAS 343	WHY AFRICA MATTERS	3
AAS 485	ADVANCED SEMINAR IN AFRICANA STUDIES	3
Required Foundational B Courses (6 credit hours)		6
Choose two from the following:		
AAS 300	BLACK THOUGHT: THEORETICAL PERSPECTIVES ON CONSCIOUSNESS AND LIBERATION	
AAS/HIS 322	AFRICAN AMERICAN HISTORY	
AAS/SOC 326	BLACK FEMINIST THOUGHT	
AAS/PHI 360	AFRICANA PHILOSOPHY	

Histories and Cultures of Africa (3 credit hours)		3
Choose one from the following:		
AAS/MUS 209	SUB-SAHARAN AFRICAN MUSIC AND CULTURES	
AAS/ANT 305	MOTHER AFRICA	
AAS/HIS 337	AFRICA SINCE 1800	
The Humanities (3 credi	t hour)	3
Choose one from the fo	llowing:	
AAS 234	THE POLITICS OF BLACK DANCE IN AMERICA	
AAS 240	AFRICAN AMERICAN LITERATURE TO 1940	
AAS 241	AFRICAN AMERICAN LITERATURE SINCE 1940	
AAS 361	RACE AND PROGRESS	
AAS 366	AFRICAN AMERICAN ART	
The Social Sciences (3 cr	redit hour)	3
AAS 218 AFRICAN AMERICAN POLITICAL CULTURE		
AAS 351	SOCIOLOGY OF RACE AND ETHNICITY	
AAS 425	RACE, ETHNICITY, AND THE ADMINISTRATION OF JUSTICE	
Electives (6 credit hours	5)	6
Choose two from the fo	llowing that have not been used to satisfy any of the above requirements:	
AAS 189	TOPICS COURSE	
AAS 209	SUB-SAHARAN AFRICAN MUSIC AND CULTURES	
AAS 218	AFRICAN AMERICAN POLITICAL CULTURE	
AAS 221	THE HISTORY OF BLACK EDUCATION IN AMERICA	
AAS 230	DANCE TECHNIQUES FROM THE AFRICAN AMERICAN PERSPECTIVE	
AAS 234	THE POLITICS OF BLACK DANCE IN AMERICA	
AAS 240	AFRICAN AMERICAN LITERATURE TO 1940	
AAS 241	AFRICAN AMERICAN LITERATURE SINCE 1940	

AAS 300	BLACK THOUGHT: THEORETICAL PERSPECTIVES ON CONSCIOUSNESS AND LIBERATION	
AAS 305	MOTHER AFRICA	
AAS 306	AFRICA TO 1800	
AAS 321	THE AFRICAN AMERICAN FAMILY	
AAS 322	AFRICAN AMERICAN HISTORY	
AAS 326	BLACK FEMINIST THOUGHT	
AAS 333	AFRICAN INTERNATIONAL RELATIONS	
AAS 334/COM 333	RACE, CLASS, GENDER, AND SEXUALITY IN MEDIA	
AAS 337	AFRICA SINCE 1800	
AAS 351	SOCIOLOGY OF RACE AND ETHNICITY	
AAS 357	BLACKS IN TECHNOLOGY: INNOVATING THE FUTURE	
AAS 360	AFRICANA PHILOSOPHY	
AAS 361	RACE AND PROGRESS	
AAS 366	AFRICAN AMERICAN ART	
AAS 373	"SAVING" AFRICA	
AAS 380	ART OF AFRICA	
AAS 389	TOPICS IN AFRICANA STUDIES (1-3)	
AAS 421	DRAMA FROM THE AFRICAN AMERICAN PERSPECTIVE	
AAS 425	RACE, ETHNICITY, AND THE ADMINISTRATION OF JUSTICE	
AAS 488	INTERNSHIP (1-6)	
AAS 495	SPECIAL PROJECT (1-3)	
AAS 499	INDEPENDENT STUDY (3-9)	
All College Electives		
54 credit hours		54
Total Credit Hours		120

Students will:

- 1. recall the history and development of the discipline of Africana Studies, including its history, purpose, and unique Africancentered lens that may apply to all matter of phenomena
- 2. analyze how pertinent issues and perspectives of Africana Studies apply to Buffalo and Western New York (neighborhood, city, region, nation, and global locale)
- 3. assess the multidisciplinary nature of Africana Studies and explain how its multiple lenses offer unique problem-solving ideas across various real-world problems and professions
- 4. identify and explain systems of inequity and its intersectional nature across Africa and the African diaspora
- 5. use course concepts to decenter oppressive ideology in theory and practice

Anthropology (B.A.)

Bachelor of Arts Program Program Code: BA-AS Major Code: ANT

Anthropology Department Buckham Building A118 (716) 878-6110 anthropology.buffalostate.edu/

Anthropology is the exploration of what it means to be human. Although anthropology is often associated with faraway places and remote excavations, anthropologists are increasingly involved in research on such topics as education, health, food, migration, sports, tourism, and cultural identity. The study of anthropology provides a broad-based approach to the understanding of human culture (past and present) and human biology. The anthropological perspective is global, holistic, and involves considerable time-depth. The major exposes students to the primary subdivisions within the field: archaeology, cultural anthropology, and biological anthropology. The B.A. in anthropology prepares students for further academic training at the graduate level but can also lead directly to careers in nonacademic (applied) areas, such as forensics, contract archaeology, cultural resource management, museum work, social services, education, government, and market research. Internships, archaeological field schools, and a departmental honors program are available to students in this major.

Program Requirements

General Education 23 Requirements			
33 credit hours	33 credit hours		
Major Requirements (39	credit hours)		
Required Courses (12 cre	edit hours)		
ANT 100 HUMAN ORIGINS 3			
ANT 101	UNDERSTANDING CULTURE	3	
ANT 488	INTERNSHIP IN ANTHROPOLOGY	1-12	
Choose one of the three	capstone/seminars (3 credit hours)	3	
ANT 412 SEMINAR IN CULTURAL ANTHROPOLOGY			
ANT 415	SEMINAR IN ARCHAEOLOGY		
ANT 418	SEMINAR IN BIOLOGICAL ANTHROPOLOGY		
Archaeology (6 credit hours)		6	

Choose two courses from the following

ANT 250	HISTORICAL ARCHAEOLOGY	
ANT 310	MESOAMERICAN ARCHAEOLOGY	
ANT 312	ARCHAEOLOGY OF NORTH AMERICA	
ANT 329	WORLD ARCHAEOLOGY	
ANT 332	GENDER AND ARCHAEOLOGY	
ANT 377	POWER AND INEQUALITY: CIVILIZATION IN THE ANCIENT WORLD	
Biological Anthropology (6 credit hours)	6
Choose two courses from	the following	
ANT 321	PRIMATOLOGY ECOLOGY AND CONSERVATION	
ANT 323	DISEASE AND GLOBAL HEALTH	
ANT 324	THE HUMAN SKELETON	
ANT 325	FORENSIC ANTHROPOLOGY	
Cultural/Regional (6 cred	it hours)	6
Choose two courses from	the following	
ANT 300	ANT 300 INDIGENOUS PEOPLES OF WESTERN NORTH AMERICA	
ANT 301	INDIGENOUS PEOPLES OF EASTERN NORTH AMERICA	
ANT 305	MOTHER AFRICA	
ANT 307	URBAN ANTHROPOLOGY	
ANT 330	INDIGENOUS HAWAIIANS	
ANT 335	ETHNOPRIMATOLOGY	
ANT 341	INDIGENOUS ART OF NORTH AMERICA	
ANT 350	GLOBAL MARRIAGE PRACTICES	
ANT 361	ANTHROPOLOGY OF FOOD	
ANT 370	THE ANTHROPOLOGY OF CONTEMPORARY ISSUES	
ANT 373	"SAVING" AFRICA	
Experiential Course (3 cre	edit hours)	3
Choose one course from t	the following	

ANT 295	RESEARCH EXPERIENCE IN ANTHROPOLOGY (1-3)	
ANT 308	ARCHAEOLOGICAL METHOD (6)	
ANT 322	RESEARCH METHODS IN PRIMATOLOGY	
ANT 385	VISUAL ANTHROPOLOGY	
ANT 495	SPECIAL PROJECT (1-3)	
ANT 498	HONORS RESEARCH	
ANT 499	INDEPENDENT STUDY (3-9)	
Electives (6 credit hours)		6
Two electives from any area, selected through advisement		
All College Electives		48
Total Credit Hours		120

Students will:

- 1. Discuss the concept of culture.
- 2. Comprehend and describe, in writing, "ethnographic research".
- 3. Explain genetic inheritance, natural selection, and ideas of species change over time.
- 4. Compile a list of the major trends in human evolution.
- 5. Utilize the scientific method.
- 6. Categorize archaeological data and apply these data to the interpretation of the past.
- 7. Define race, racism, and ethnicity and their intersections with gender, class, and sexuality.
- 8. Recognize, accept, and respect individual, biological, and cultural diversity.

Applied Psychology (B.A.)

Bachelor of Arts Program Program Code: BA-AS Major Code: PYA

Psychology Department Buckham Hall A238 (716) 878-6215 psychology.buffalostate.edu/

The B.A. in Applied Psychology is focused on serving students interested in pursuing applied careers in psychology and related fields, including those potentially looking to enter the field with a bachelors or masters degree. While this degree is still rigorous and data/evidence based, it is designed to give students more experience in the field, greater skill at evaluating and using scientific data (rather than generating those data), and increased training in professional skills.

Applied Psychology majors are not permitted to take courses with a PSY prefix pass/fail.

Program Requirements

General Education 23 Requirements

33 credit hours 33

Psychology Major Requirements (36 credit Hours)		
Required Courses (12 credit hours)		
PSY 101	INTRODUCTION TO PSYCHOLOGY	3
PSY 350	STATISTICS IN PSYCHOLOGICAL RESEARCH ¹	3
PSY 360	EVALUATING PSYCHOLOGICAL SCIENCE	3
PSY 468	PROFESSIONAL SKILLS IN PSYCHOLOGY	3
Note: PSY 350, PSY 3	360 and PSY 468 must be taken in sequence.	
Content Courses (15	credit hours)	
	t one course from each of the following groups. The prerequisite for all 300-level courses ade of C or better, unless otherwise noted.	15
Biological and Cogni	tive Psychology	
PSY 304	LEARNING: THEORY AND RESEARCH	
PSY 308	SENSATION AND PERCEPTION	
PSY 321	COMPARATIVE ANIMAL BEHAVIOR	
PSY 330	THE PSYCHOLOGICAL POWER OF LANGUAGE	
PSY 333	BRAIN AND BEHAVIOR	
PSY 340	COGNITIVE PSYCHOLOGY	
Social/Personality P	sychology	
PSY 311	PERSONALITY: THEORY AND RESEARCH	
PSY 325	SOCIAL BEHAVIOR	
Developmental Psyc	chology	
PSY 301	PERSPECTIVES ON CHILD ABUSE AND ADVOCACY	
PSY 327	ADULT DEVELOPMENT AND AGING I	
PSY 355	LIFESPAN DEVELOPMENTAL PSYCHOLOGY	
PSY 356	CHILD DEVELOPMENT	
PSY 357	ADOLESCENT AND YOUNG ADULT DEVELOPMENT	
Clinical Psychology		
PSY 392	ABNORMAL PSYCHOLOGY ²	
PSY 393	ABNORMAL CHILD PSYCHOLOGY ²	

PSY 383 PSY 387
PSY 383
PSY 382
PSY 381
PSY 376
PSY 375
PSY 370
PSY 367
PSY 365
PSY 365

learning, PSY 488 Internship or PSY 495 Special Project course.

All College Electives

51 credit hours	51

Total Credit Hours 120

Students will:

- 1. Be able to select and critically evaluate existing literature in a given topic area of psychology.
- 2. Demonstrate the ability to evaluate beliefs and claims related to the discipline of psychology.
- 3. Be able to identify appropriate statistical techniques for a given research design.
- 4. Demonstrate the ability to communicate effectively based on topic area, review of literature and study outcomes.
- Be prepared for careers related to psychology or graduate studies.
- Develop professional skills in activities that strengthen preparation for job entry and applied graduate school admission.

Applied Psychology, B.A and Applied Behavior Analysis, M.S. Combined Pathway

Bachelor of Arts Program Program Code: BA-AS Major Code: PYA

Psychology Department Buckham Hall A238

¹ Prerequisite: At least sophomore status; Completion of the Mathematics and Quantitative Reasoning General Education requirement – only a MAT course at MAT 114 or higher.

² Prerequisite: PSY 101 with a Grade of C or higher and 3 additional hours of psychology.

(716) 878-6215 psychology.buffalostate.edu/

Master of Science Program Code: MSED-EP Major Code: ABA

Exceptional Education Department Ketchum Hall 204 (716) 878-3038 exceptionaleducation.buffalostate.edu/

Enrollment in this combined pathway allows highly qualified, currently-enrolled SUNY Buffalo State students to begin work on a M.S. degree in Applied Behavior Analysis (ABA) while completing a B.A. degree in Applied Psychology. Twelve (12) credits of designated master's courses would be incorporated into the B.A. program and count toward both the bachelor's degree and the master's degree.

Students in this pathway are not permitted to take courses with a PSY prefix pass/fail.

Admission Requirements

Admission into the combined pathway is highly selective. Matriculated undergraduate students may apply to the BA/MS pathway in their junior year and will complete all of the application requirements for the program. The admission application process includes a minimum GPA of 3.0 overall and in Psychology, a statement of intent, and names of 3 references.

General Education 23	3 Requirements	
33 credit hours		33
Psychology Major Re	quirements (36 credit Hours)	
Required Courses (12	2 credit hours)	
PSY 101	INTRODUCTION TO PSYCHOLOGY	3
PSY 350	STATISTICS IN PSYCHOLOGICAL RESEARCH ¹	3
PSY 360	EVALUATING PSYCHOLOGICAL SCIENCE	3
PSY 468	PROFESSIONAL SKILLS IN PSYCHOLOGY	3
Note: PSY 350, PSY 3	60 and PSY 468 must be taken in sequence.	
Content Courses (15	credit hours)	
	one course from each of the following groups. The prerequisite for all 300-level courses de of C or better, unless otherwise noted.	15
Biological and Cognit	ive Psychology	
PSY 304	LEARNING: THEORY AND RESEARCH	
PSY 308	SENSATION AND PERCEPTION	
PSY 321	COMPARATIVE ANIMAL BEHAVIOR	
PSY 330	THE PSYCHOLOGICAL POWER OF LANGUAGE	

PSY 333	BRAIN AND BEHAVIOR	
PSY 340	COGNITIVE PSYCHOLOGY	
Social/Personality Psychology		
PSY 311	PERSONALITY: THEORY AND RESEARCH	
PSY 325	SOCIAL BEHAVIOR	
Developmental Psychology		
PSY 301	PERSPECTIVES ON CHILD ABUSE AND ADVOCACY	
PSY 355	LIFESPAN DEVELOPMENTAL PSYCHOLOGY	
PSY 356	CHILD DEVELOPMENT	
PSY 357	ADOLESCENT AND YOUNG ADULT DEVELOPMENT	
Clinical Psychology		
PSY 392	ABNORMAL PSYCHOLOGY ²	
Applied Psychology and Diversity		
PSY 365	PSYCHOLOGY IN THE WORKPLACE	
PSY 367	ORGANIZATIONAL BEHAVIOR	
PSY 370	ENVIRONMENTAL PSYCHOLOGY I	
PSY 375	FORENSIC PSYCHOLOGY	
PSY 376	HEALTH PSYCHOLOGY	
PSY 379	PSYCHOLOGY OF MONEY	
PSY 381	PSYCHOLOGY OF CULTURE	
PSY 382	PSYCHOLOGY OF THE CONSUMER	
PSY 383	THE PSYCHOLOGY OF HUMAN SEXUAL BEHAVIOR	
PSY 387	PSYCHOLOGY OF GENDER	
PSY 388	PSYCHOLOGY OF DEATH AND DYING	
Advanced and Electives Selected b	by Advisement (9 credit hours)	
PSY 310	BEHAVIOR MODIFCATION	3
Two 400 level PSY electives (3 cre	dits each)	6

Service Learning/Internship

As part of the Required Course Content or Advanced and Elective courses, students must complete one PSY service-learning, PSY 488 Internship or PSY 495 Special Project course.

Required Graduate Courses	s	12
Students must complete ea	ach of the following EXE courses during senior year of Applied Psychology BA	
EXE 522	BEHAVIORAL ASSESSMENT, INSTRUCTION AND INTERVENTION	
EXE 544	BEHAVIORAL INTERVENTIONS FOR STUDENTS WITH CHALLENGING BEHAVIORS	
EXE 634	APPLIED BEHAVIOR ANALYSIS ³	
EXE 681	CLINICAL RECORDS AND ETHICAL PRACTICES FOR BEHAVIORAL ANALYSIS	
All College Electives		39
Total Credit Hours		120
Applied Behavior Analysis	MS Requirements (33 credit Hours)	
Prerequisite: Graduate sta	nding is required for each of the following	
EXE 522	BEHAVIORAL ASSESSMENT, INSTRUCTION AND INTERVENTION	3
EXE 544	BEHAVIORAL INTERVENTIONS FOR STUDENTS WITH CHALLENGING BEHAVIORS	3
EXE 634	APPLIED BEHAVIOR ANALYSIS ³	3
EXE 681	CLINICAL RECORDS AND ETHICAL PRACTICES FOR BEHAVIORAL ANALYSIS	3
EXE 644	ADVANCED APPLIED BEHAVIOR ANALYSIS ⁴	3
EXE 645	EFFECTIVE PRACTICES FOR SUPPORTING INDIVIDUALS WITH AUTISM SPECTRUM DISORDER	3
EXE 646	CULTURE, DIVERSITY, DISABILITY, AND EDUCATION	3
EXE 673	PERSONNEL SUPERVISION AND MANAGEMENT ⁵	3
EXE 683	SUPERVISED PRACTICUM: PERSONNEL SUPERVISION AND MANAGEMENT ⁶	3
EXE 684	PRACTICE-BASED RESEARCH IN EXCEPTIONAL EDUCATION ⁷	3
EXE 690	MASTER'S PROJECT IN EXCEPTIONAL EDUCATION	3
Total Graduate Credit Hou	rs	33

¹ Prerequisite: At least sophomore status; Completion of the Mathematics and Quantitative Reasoning General Education requirement – only a MAT course at MAT 114 or higher.

² Prerequisite: PSY 101 with a Grade of C or higher and 3 additional hours of psychology.

³ Prerequisite: EXE 500 or EXE 100 or instructor permission.

⁴ Prerequisite: EXE 634.

- ⁵ Prerequisite: EXE 644.
- ⁶ Prerequisite: EXE 673.
- ⁷ Prerequisite: Completion of all core courses except the research requirement and a minimum of 9 hours of coursework from the specialized program.

Students will:

- 1. Critically evaluate existing literature in a given topic area of psychology.
- 2. Generate a scientific hypothesis in a given area of psychology.
- 3. Demonstrate understanding of basic research designs used in psychology and related mental health fields,
- 4. Utilize appropriate statistical techniques for a given research design.
- 5. Apply valid conclusions based on topic area, hypothesis, review of literature, and study outcomes.

Art and Design (B.A.)

Bachelor of Arts Program Program Code: BA-AS Major Code: ARD

Art and Design Department Upton Hall 402 (716) 878-6032 artdesign.buffalostate.edu/

The BA in Art and Design degree is a studio focused liberal arts degree option which allows the art student the opportunity to discover and explore various media for their creative expression. Starting with a 27-credit foundation studies program, students are immersed in courses in drawing, two- and three-dimensional design, 2D and 3D digital design, and art history.

Students will select a four-course sequence in either ceramics, fibers, metals/jewelry, painting, photography and documentary studies, sculpture, or wood/furniture to further develop and refine their concepts and skills in both traditional and contemporary studio practices. Electives in design, fine art, and art education courses provide breadth.

No entrance portfolio is required for admission of incoming students (including both Freshman and Transfer students) who choose the BA-AS-ARD ART.

Students will enjoy the opportunity to display their strongest work in exhibitions and during special events. The Art and Design Department reserves the right to temporarily retain students' work for official purposes, such as exhibitions, program display, special events, and recruitment, etc.; and to use images of the students and/or their work for publicity, documentation, and recruitment.

Students are expected to assume the costs of materials used in courses. Some studio courses may have an additional charge for materials used in class. Students enrolled in a studio course are expected to work a minimum of two additional hours each week outside of class for each credit granted for that class and the hours gradually increase as the student progresses in the concentration.

Admissions Requirements

Any matriculated student in good academic standing may declare this program.

Program Requirements

General Education 23 Requirements

33 credit hours 33

Art and Design Major Requirements (54 credit hours)

Foundation Studies (27 credit hours)

AAD 101	DRAWING I	3
AAD 102	INTRODUCTION TO TWO-DIMENSIONAL DESIGN	3
AAD 103	INTRODUCTION TO THREE-DIMENSIONAL DESIGN	3
AAD 104	DIGITAL PRESENTATION METHODS	3
AAD 105	INTRODUCTION TO DIGITAL DESIGN AND FABRICATION	3
AAD 150	THEMES AND ISSUES IN THE CONTEMPORARY ARTS	3
AAD 251	ART HISTORY I	3
AAD 252	ART HISTORY II	3
AAD 470	SENIOR SEMINAR	3
Studio Concentrations		12
Select one Concentration/Empl	hasis. Four sequential courses in the same studio concentration.	
Ceramics		
DES 220	CERAMICS I	
DES 320	CERAMICS II	
DES 321	CERAMICS: JUNIOR STUDIO (3-12)	
DES 321	CERAMICS: JUNIOR STUDIO (3-12)	
Fibers		
DES 242	FIBERS I	
DES 342	FIBERS II	
DES 344	FIBERS: JUNIOR STUDIO	
DES 344	FIBERS: JUNIOR STUDIO	
Metals/Jewelry		
DES 230	INTRODUCTION TO JEWELRY MAKING	
DES 330	APPLIED JEWELRY TECHNIQUES	
DES 331	JEWELRY: JUNIOR STUDIO (3-12)	
DES 331	JEWELRY: JUNIOR STUDIO (3-12)	
or DES 336	METALSMITHING	
Wood/Furniture		
DES 250	WOOD DESIGN I	

DES 350	WOOD DESIGN II	
DES 351	WOOD DESIGN: JUNIOR STUDIO (3-12)	
DES 351	WOOD DESIGN: JUNIOR STUDIO (3-12)	
Painting		
FAR 210	INTRODUCTORY PAINTING	
FAR 311	INTERMEDIATE PAINTING I	
FAR 312	INTERMEDIATE PAINTING II	
FAR 313	ADVANCED PAINTING (3-9)	
Photography and Documento	ary Studies	
FAR 220	INTRODUCTORY PHOTOGRAPHY	
FAR 321	INTERMEDIATE PHOTOGRAPHY I	
FAR 323	ADVANCED PHOTOGRAPHY (3-9)	
FAR 323	ADVANCED PHOTOGRAPHY (3-9)	
Sculpture		
FAR 240	INTRODUCTORY SCULPTURE	
FAR 341	INTERMEDIATE SCULPTURE I	
FAR 342	INTERMEDIATE SCULPTURE II	
FAR 343	ADVANCED SCULPTURE (1-9)	
Electives in Art and Design		15
	our courses from the following prefixes. Courses must be outside of the Studio ive courses must be upper level.	
AED		
DES		
FAR		
All College Electives		
27-33 credit hours		27-33
Total Credit Hours		120

Students will demonstrate:

- 1. basic knowledge and understanding of materials and techniques in art.
- 2. basic ability to analyze works of art in terms of their subject, style, and intention, and a resulting development of visual sensitivity.

- 3. understanding of the cultural and historical context of art through time.
- 4. basic understanding of the creative process.
- 5. basic ability to write about works of art.

Art and Design (B.F.A.)

Bachelor of Fine Arts Program Program Code: BFA-AS Major Code: AAD

Art and Design Department Upton Hall 402 (716) 878-6032 artdesign.buffalostate.edu/

The B.F.A. in Art and Design offers a broad selection of program concentrations for the visual arts student; ceramics, design history, digital media arts, fibers, graphic design, metals/jewelry, painting, photography and documentary studies, product design, sculpture, and wood/furniture. This 78-credit hour degree, (81 credits for graphic design concentration), prepares students for advanced studies, graduate studies, or for beginning careers as professional designers, artists, or historians.

All concentrations have the same 27 credit required foundation studies course sequence so that whichever concentration is selected, all these courses will count toward that concentration's requirements. In addition to completing the major concentration course requirements, the remaining credits are completed in the required General Education 23 courses. To remain in, and graduate from the B.F.A. program a 2.5 GPA or higher in the major must be maintained.

For freshman, there is no entrance portfolio review for admission. Transfer students are urged to submit their portfolios the semester before transfer to facilitate placement in departmental courses and/or for possible portfolio review. For more specific information and additional program requirements please refer to each individual concentration program.

Students in the B.F.A. program will enjoy the opportunity to display their strongest work in exhibitions and during special events. The Art and Design Department reserves the right to temporarily retain students' work for official purposes, such as exhibitions, program display, special events, and recruitment, etc.; and to use images of the students and/or their work for publicity, documentation, and recruitment.

Students are expected to assume the costs of materials used in courses. Some studio courses may have an additional charge for materials used in class. Students enrolled in a studio course are expected to work a minimum of two additional hours each week outside of class for each credit granted for that class and the hours gradually increase as the student progresses in the concentration.

Admissions Requirements

Any matriculated student in good academic standing may declare this program.

Program Requirements

General Education	23 Requirements	
33 credit hours		
Foundation Studies	Courses - Required for all Concentrations (27 credit hours)	
AAD 101	DRAWING I	3
AAD 102	INTRODUCTION TO TWO-DIMENSIONAL DESIGN	3
AAD 103	INTRODUCTION TO THREE-DIMENSIONAL DESIGN	3

AAD 104	DIGITAL PRESENTATION METHODS	3
AAD 105	INTRODUCTION TO DIGITAL DESIGN AND FABRICATION	3
AAD 150	THEMES AND ISSUES IN THE CONTEMPORARY ARTS	3
AAD 251	ART HISTORY: FROM PREHISTORY TO MEDIEVAL PERIOD	3
AAD 252	ART HISTORY: FROM THE RENAISSANCE TO THE MODERN WORLD	3
AAD 470	SENIOR SEMINAR	3
or AAD 495 or HIS 400	SPECIAL PROJECT SENIOR SEMINAR IN HISTORY	

Concentrations

- Ceramics
- Design History
- Digital Media Arts
- Fibers
- Graphic Design
- Metals/Jewelry
- Painting
- Photography and Documentary Studies
- Product Design
- Sculpture
- Wood/Furniture

Art and Design (B.F.A.) - Ceramics Concentration

The B.F.A. concentration in Ceramics (CER) is a studio-intensive program of study that prepares students to produce work of professional competence focusing on mastery of relevant technical skills and individual creative expression with a strong emphasis on concept, craftsmanship, design, and aesthetics in both functional and sculptural ceramics. We offer wheel-throwing, hand-building, mold making, slip-casting, clay and glaze formulation, kiln theory, and studio practice.

For more information about the program, please visit http://artdesign.buffalostate.edu/ceramics

Ceramics Required Courses (21 credit hours)		
DES 220	CERAMICS I	3
DES 320	CERAMICS II	3
DES 321	CERAMICS: JUNIOR STUDIO	3
DES 321	CERAMICS: JUNIOR STUDIO	3-12
DES 421	CERAMICS: SENIOR STUDIO	3
DES 421	CERAMICS: SENIOR STUDIO	6
Interdisciplinary Courses (21 credit hours)		
DES 230	INTRODUCTION TO JEWELRY MAKING	3
DES 242	FIBERS I	3

DES 250	WOOD DESIGN I	3
DES 312	HISTORY OF CRAFT: INDUSTRIAL REVOLUTION TO THE PRESENT	3
DES 338	COMPUTER THREE-DIMENSIONAL MODELING AND RENDERING	3
FAR 240	INTRODUCTORY SCULPTURE	3
FAR 345	FIGURE MODELING	3
Interdisciplinary Electives (9 credit hours)		
Select three 3 credit hour courses from the following prefixes. Two of the three courses must be upper level.		
DES		

FAR

Art and Design (B.F.A.) - Design History Concentration

The B.F.A. in Design History (DEH) affords students the opportunity to explore the theory and hands-on-practice practice of design by merging the study of historical, theoretical, and stylistic contexts of design objects, with the science of creativity and a broad range of analog & digital design studio practices. Elective interdisciplinary options enable students to pursue individual research interests and to further explore studio practice in art and design studio courses.

For more information about the program, please visit https://artdesign.buffalostate.edu

Design History Req	uired Courses (21 credit hours)	
DES 215	INTRODUCTION TO DESIGN HISTORY	3
DES 312	HISTORY OF CRAFT: INDUSTRIAL REVOLUTION TO THE PRESENT	3
DES 314	HISTORY OF GRAPHIC DESIGN: INDUSTRIAL REVOLUTION TO THE PRESENT	3
FAR 325	HISTORY OF PHOTOGRAPHY	3
IDE 205	HISTORY OF INTERIOR DESIGN AND ARCHITECTURE I	3
IDE 254	HISTORY OF INTERIOR DESIGN AND ARCHITECTURE II	3
DES 317	DESIGN IN THE TWENTIETH CENTURY	3
or FAR 363	TWENTIETH-CENTURY ART HISTORY	
Interdisciplinary Co	ourses (21 credit hours)	
CRS 205	FOUNDATIONS IN CREATIVE THINKING	3
CRS 302	CREATIVE APPROACHES TO PROBLEM SOLVING	3
or FAR 364	ART SINCE 1940	
ENG 245	WRITING ABOUT THE ARTS	3
or ENG 305	CREATIVE WRITING: NARRATIVE	
FAR 374	THE HISTORY OF COLLECTING AND THE MUSEUM	3

FTT 348	FASHION, SOCIETY, AND HISTORY	3
HIS 300	RESEARCH AND WRITING SEMINAR	3
HIS/MST 380	INTRODUCTION TO THE MUSEUM	3
Interdisciplinary Ele	ectives (9 credit hours)	
Select any three 3 of	credit hour courses from the following prefixes. Two of the three courses must be upper level.	
DES		
FAR		
HIS		
THA		
FTT		
TED		
IDE		
MST		
CRS		

Art and Design (B.F.A.) - Digital Media Arts Concentration

The B.F.A. concentration in Digital Media Arts (DMA) is a studio-intensive and interdisciplinary program of study. Students in this program gain competencies in animation, sound and video production, 3D modeling, interactive design, and a range of related disciplines. Studio work begins at the freshmen level and advances with greater intensity as the student focuses their concentration via a menu of interdisciplinary choices between art, art history, communications, creative writing, music, theater, and television film arts, and then concludes with a capstone project.

For more information about the program, please visit https://artdesign.buffalostate.edu

Digital Media Arts Required Courses (21 credit hours)		
COM 312	BASIC MEDIA PRODUCTION	3
DES 338 or IDE 356	COMPUTER THREE-DIMENSIONAL MODELING AND RENDERING ADVANCED PARAMETRIC DESIGN	3
DES 378	WEB DESIGN 1	3
DES 379	MOTION DESIGN	3
DES 382	DIGITAL 3D 1	3
DES 489	MOTION DESIGN 2	3
DMP 221	INTRODUCTION TO SOUND RECORDING AND REINFORCEMENT	3

Interdisciplinary Courses (21 credit hours)

COM 100	MEDIA LITERACY	3
COM 215	INTRODUCTION TO VISUAL COMMUNICATION	3
COM 329	INTERMEDIATE VIDEO PRODUCTION	3
FAR 364	ART SINCE 1940	3
or DES 314	HISTORY OF GRAPHIC DESIGN: INDUSTRIAL REVOLUTION TO THE PRESENT	
TFA 201	INTRODUCTION TO TELEVISION AND FILM ARTS	3
Select one from the following (3 credit hours)		
ENG 245	WRITING ABOUT THE ARTS	3
ENG 300	WRITING FOR THE PROFESSIONS	3
ENG 305	CREATIVE WRITING: NARRATIVE	3
Interdisciplinary Electives (9 credit hours)		
DES		

FAR

Art and Design (B.F.A.) - Fibers Concentration

The B.F.A. concentration in Fibers (FIB) is a studio-intensive program of study focused on developing the aesthetic, conceptual, and technical skills necessary to foster creativity as students work toward expanding their individual identity as visual designers/artists. Emphasis in our program is placed on traditional and experimental uses of various fiber techniques. Exploration of a variety of materials and mixed media techniques are part of the innovative process to create unique wearable art garments, wall hanging artworks, or site-specific installations.

For more information about the program, please visit http://artdesign.buffalostate.edu/fibers

Fibers Required C	Courses (21 credit hours)	
DES 242	FIBERS I	3
DES 338	COMPUTER THREE-DIMENSIONAL MODELING AND RENDERING	3
DES 342	FIBERS II	3
DES 344	FIBERS: JUNIOR STUDIO	3
DES 344	FIBERS: JUNIOR STUDIO	3
DES 444	FIBERS: SENIOR STUDIO	3
DES 444	FIBERS: SENIOR STUDIO	3
Interdisciplinary C	Courses (21 credit hours)	
DES 220	CERAMICS I	3
DES 230	INTRODUCTION TO JEWELRY MAKING	3

DES 250	WOOD DESIGN I	3
DES 307 or FAR 210	COLOR THEORY INTRODUCTORY PAINTING	3
DES 312	HISTORY OF CRAFT: INDUSTRIAL REVOLUTION TO THE PRESENT	3
FTT 304	TEXTILE SURFACE DESIGN I	3
FTT 412 or FTT 413	CAD: APPAREL AND TEXTILE DESIGN FOR INDUSTRY CAD: WEAVE FOR INDUSTRY	3

Interdisciplinary Electives (9 credit hours)

Select any three 3 credit hour courses from the following prefixes. Two of the three courses must be upper level.

DES

FAR

Art and Design (B.F.A.) - Graphic Design Concentration

The B.F.A. concentration in Graphic Design (GRD) is a studio-intensive program of study. This concentration offers students a specialized studio-oriented education in preparation for graduate studies, or for entry-level careers as professional designers. Students develop professional competencies with industry-grade software and hardware, image making and manipulation, typography, composition, web design, motion graphics, interactive design, and professional practices. Students complete the program with an internship working directly with experienced designers and a capstone project. For more information about the program, please visit https://artdesign.buffalostate.edu/graphic-design

Graphic Des	sign Required Courses (39 credit hours)	
DES 270	VISUAL COMMUNICATION I	3
DES 271	LETTERING AND TYPOGRAPHY I	3
DES 307	COLOR THEORY	3
DES 314	HISTORY OF GRAPHIC DESIGN: INDUSTRIAL REVOLUTION TO THE PRESENT	3
DES 370	VISUAL COMMUNICATIONS II	3
DES 374	ADVERTISING DESIGN	3-6
DES 377	COMPUTER GRAPHICS II	3
DES 378	WEB DESIGN 1	3
DES 379	MOTION DESIGN	3
DES 380	ILLUSTRATION	3
DES 382	DIGITAL 3D 1	3
DES 473	GRAPHIC DESIGN	3-9

DES 488	INTERNSHIP	1-12
Interdisciplin	ary Courses (6 credit hours)	
FAR 220	INTRODUCTORY PHOTOGRAPHY I	3
FAR 364	ART SINCE 1940	3
Interdisciplinary Electives (9 credit hours)		
Select any three 3 credit hour courses from the following prefixes. Two of the three courses must be upper level.		
DES		
FAR		

Art and Design (B.F.A.) - Metals/Jewelry Concentration

The B.F.A. in Metals/Jewelry design (MJD) concentration is a studio-intensive program focused on the aesthetic, conceptual, and technical skills necessary to foster creativity. We offer metal fabrication, soldering, jewelry scale welding, casting, wax working, mold making, stone setting, metal forming, electroforming, surface treatments and glass enameling. Through this specialized studio practice, students develop an individual style as they prepare for a career as a professional designer/artist. For more information about the program, please visit https://artdesign.buffalostate.edu/metalsjewelry

Metals/Jewelry Required Courses (21 credit hours)			
DES 230	INTRODUCTION TO JEWELRY MAKING	3	
DES 330	APPLIED JEWELRY TECHNIQUES	3	
DES 331	JEWELRY: JUNIOR STUDIO	3-12	
DES 336	METALSMITHING	3	
DES 331	JEWELRY: JUNIOR STUDIO	3-12	
or DES 337	METALSMITHING: JUNIOR STUDIO		
DES 431	SENIOR JEWELRY STUDIO	3	
DES 431	SENIOR JEWELRY STUDIO	3	
Interdisciplinary Cours	ses (21 credit hours)		
DES 220	CERAMICS I	3	
DES 242	FIBERS I	3	
DES 250	WOOD DESIGN I	3	
DES 312	HISTORY OF CRAFT: INDUSTRIAL REVOLUTION TO THE PRESENT	3	
DES 338	COMPUTER THREE-DIMENSIONAL MODELING AND RENDERING	3	
FAR 240	INTRODUCTORY SCULPTURE	3	

Select one 3 credit hour course from the following:		
DES 320	CERAMICS II	
DES 342	FIBERS II	
DES 350	WOOD DESIGN II	
DES 488	INTERNSHIP (1-12)	
Interdisciplinary Ele	ectives (9 credit hours)	
Select any three 3 credit hour courses from the following prefixes. Two of the three courses must be upper level.		
DES		
FAR		

Art and Design (B.F.A.) - Painting Concentration

The B.F.A. concentration in Painting (PTG) is a studio-intensive program of study that prepares students to produce work of professional competence focusing on mastery of both traditional and contemporary practices and technical skills as well as individual creative expression with a strong emphasis on concept, and aesthetics informed by required Art History courses and topics.

For more information about the program, please visit https://artdesign.buffalostate.edu/painting

Painting Required Courses (21 credit hours)		
FAR 210	INTRODUCTORY PAINTING	3
FAR 311	INTERMEDIATE PAINTING I	3
FAR 312	INTERMEDIATE PAINTING II	3
FAR 313	ADVANCED PAINTING	3-9
FAR 313	ADVANCED PAINTING	3-9
FAR 313	ADVANCED PAINTING	3-9
FAR 410	SENIOR STUDIO IN PAINTING	3-6
Interdisciplin	nary Electives (21 credit hours)	
DES 317	DESIGN IN THE TWENTIETH CENTURY (or Art History 3XX upper-level)	3
FAR 102	DRAWING II	3
FAR 203	MODELING	3
FAR 230	INTRODUCTORY PRINTMAKING	3
FAR 240	INTRODUCTORY SCULPTURE	3
FAR 300	DRAWING III	3

FAR 400	DRAWING IV	3
Interdisciplina	ry Electives (9 credit hours)	
Select any three 3 credit hour courses from the following prefixes. Two of the three courses must be upper level.		
DES		
FAR		

Art and Design (B.F.A.) - Photography and Documentary Studies Concentration

The concentration in Photography and Documentary Studies (PDS) provides a foundation in darkroom and digital workflow while developing the student's artistic voice. Exploring a range of emerging and traditional technologies, the program covers a gamut of photographic practice whose subject areas include architecture, book arts, community projects, fashion, non-silver processes, partnerships in sustainability, portraiture, photogrammetry, studio lighting, and visual storytelling. The major also connects students with internships and professional pathways, while enhancing qualifications of students who wish to pursue graduate work. For more information about the program, please visit https://artdesign.buffalostate.edu/photography

Photography and Documentary Studies Required Courses (21 credit hours)		
FAR 220	INTRODUCTORY PHOTOGRAPHY I	3
FAR 321	INTERMEDIATE PHOTOGRAPHY I	3
FAR 323	ADVANCED PHOTOGRAPHY	3-9
FAR 323	ADVANCED PHOTOGRAPHY	3-9
FAR 325	HISTORY OF PHOTOGRAPHY	3
FAR 420	SENIOR STUDIO IN PHOTOGRAPHY	3-6
FAR 420	SENIOR STUDIO IN PHOTOGRAPHY	3-6
Interdisciplinary Courses (21	credit hours)	
COM 215	INTRODUCTION TO VISUAL COMMUNICATION	3
Select one from the followin	ng:	
FAR 364	ART SINCE 1940	3
or DES 317	DESIGN IN THE TWENTIETH CENTURY	
Select one from the followin	ng:	
COM 312	BASIC MEDIA PRODUCTION	3
SPC 326	FILM ANALYSIS AND EVALUATION	3
SPC 426	DOCUMENTARY FILM ANALYSIS	3
Select one from the followin	ng:	
ENG 245	WRITING ABOUT THE ARTS	3
or ENG 305	CREATIVE WRITING: NARRATIVE	

Solost one from the following:		
Select one from the following:		
IDE 104	SPATIAL CONCEPTS OF INTERIOR DESIGN	3
DES 220	CERAMICS I	3
DES 250	WOOD DESIGN I	3
FAR 240	INTRODUCTORY SCULPTURE	3
GEG 309	URBAN GEOGRAPHY	3
Select two from the following:		
FAR 230	INTRODUCTORY PRINTMAKING	3
DES 277	COMPUTER GRAPHICS I	3
DES 378	WEB DESIGN 1	3
DES 379	MOTION DESIGN	3
DES 382	DIGITAL 3D 1	3
Interdisciplinary Electives (9 cr	edit hours)	
Select any three 3 credit hour	courses from the following prefixes. Two of the three courses must be upper level.	
DES		
FAR		

Art and Design (B.F.A.) - Product Design Concentration

The B.F.A. concentration in Product Design (PDE) offers students a unique interdisciplinary curriculum of design, fine art, technology, and craft, geared towards preparing students for an exciting career in product design. Students will gain real world experiences outside of the classroom, form invaluable networking connections, and build a strong, focused portfolio through projects, professional critiques, and internship experiences. Emphasis is placed on functional aesthetic design, production, applied material, market research, and 3D digital learning.

For more information about the program, please visit http://artdesign.buffalostate.edu/productdesign

Product Design Requi	red Courses (21 credit hours)	
AAD 470	SENIOR SEMINAR	3
DES 338	COMPUTER THREE-DIMENSIONAL MODELING AND RENDERING	3
DES 488	INTERNSHIP	1-12
TEC 101	TECHNICAL DRAWING	3
TEC 200	TOTAL QUALITY MANAGEMENT	3
TEC 201	MATERIALS PROCESSING	3

TEC 302	CAD/CAM (COMPUTER AIDED DRAFTING/COMPUTER AIDED MANUFACTURING)	3
Interdisciplinary Cours	ses (21 credit hours)	
BUS 320	PRINCIPLES OF MARKETING	3
DES 317	DESIGN IN THE TWENTIETH CENTURY	3
or DES 312	HISTORY OF CRAFT: INDUSTRIAL REVOLUTION TO THE PRESENT	
TEC 402	ERGONOMICS	3
TED 123	PRINCIPLES OF MANUFACTURING	3
Select two from the fo	ollowing (6 credit hours):	
DES 220	CERAMICS I	3
DES 230	INTRODUCTION TO JEWELRY MAKING	3
DES 242	FIBERS I	3
DES 250	WOOD DESIGN I	3
FAR 240	INTRODUCTORY SCULPTURE	3
Select one from the fo	ollowing (3 credit hours):	
DES 320	CERAMICS II	3
DES 330	APPLIED JEWELRY TECHNIQUES	3
DES 342	FIBERS II	3
DES 350	WOOD DESIGN II	3
FAR 341	INTERMEDIATE SCULPTURE I	3
Interdisciplinary Electi	ives (9 credit hours)	
DES		
FAR		
TEC		
TED		

Art and Design (B.F.A.) - Sculpture Concentration

The B.F.A. concentration in Sculpture (SCL) majors explore contemporary trends and historic movements in art. This may include performance art, video, installation art, and more traditional processes of metal casting and welding or working in plastics, stone, wood carving, or fiberglass. Students learn techniques and skills necessary to work in the appropriate mediums needed to develop their personal aesthetic. Emphasis is placed on what it means to be a professional artist and on focusing the student's goals for after graduation.

For more information about the program, please visit https://artdesign.buffalostate.edu/sculpture

Sculpture Required Co	ourses (21 credit hours)	
FAR 240	INTRODUCTORY SCULPTURE	3
FAR 341	INTERMEDIATE SCULPTURE I	3
FAR 342	INTERMEDIATE SCULPTURE II	3
FAR 343	ADVANCED SCULPTURE	1-9
FAR 343	ADVANCED SCULPTURE	1-9
FAR 343	ADVANCED SCULPTURE	1-9
FAR 440	SENIOR STUDIO IN SCULPTURE	3-6
Interdisciplinary Cours	ses (21 credit hours)	
DES 220	CERAMICS I	3
DES 250	WOOD DESIGN I	3
FAR 102	DRAWING II	3
FAR 220	INTRODUCTORY PHOTOGRAPHY	3
FAR 230	INTRODUCTORY PRINTMAKING	3
FAR 345	FIGURE MODELING	3
FAR 364	ART SINCE 1940	3
or DES 317	DESIGN IN THE TWENTIETH CENTURY	
Interdisciplinary Electi	ves (9 credit hours)	
DES		
FAD.		

Art and Design (B.F.A.) - Wood/Furniture Concentration

FAR

The B.F.A. concentration in Wood/Furniture Design (WFD) is a studio-intensive program of study that will prepare students to produce professional work focused on technical skills and creative expression with a strong emphasis on concept, craftsmanship, and design. Instruction includes proper operation of tools and equipment, the execution of machine cut wooden joints and finishing techniques, an understanding of the physical properties of wood, furniture construction and joinery, and the process and assemble sequence. Students will gain experience with wood bending techniques, the fiberglass process, and studio practice. For more information about the program, please visit https://artdesign.buffalostate.edu/woodfurniture

Wood/Furniture	e Required Courses (21 credit hours)	
DES 250	WOOD DESIGN I	3
DES 350	WOOD DESIGN II	3

DES 351	WOOD DESIGN: JUNIOR STUDIO	3-12
DES 351	WOOD DESIGN: JUNIOR STUDIO	3-12
DES 451	WOOD DESIGN: SENIOR STUDIO	3-12
DES 451	WOOD DESIGN: SENIOR STUDIO	3-12
DES 451	WOOD DESIGN: SENIOR STUDIO	3-12
or DES 488	INTERNSHIP	
Interdisciplinary Cours	es (21 credit hours)	
TEC 101	TECHNICAL DRAWING	3
DES 220	CERAMICS I	3
DES 230	INTRODUCTION TO JEWELRY MAKING	3
DES 242	FIBERS I	3
DES 312	HISTORY OF CRAFT: INDUSTRIAL REVOLUTION TO THE PRESENT	3
DES 338	COMPUTER THREE-DIMENSIONAL MODELING AND RENDERING	3
FAR 240	INTRODUCTORY SCULPTURE	3
Interdisciplinary Election	ves (9 credit hours)	

Select any three 3 credit hour courses from the following prefixes. Two of the three courses must be upper level.

DES

FAR

- 1. Aesthetics and Visual Language: Students will demonstrate a mastery of the visual language of art and design through the aesthetic application of the formal elements and relational and organizational principles of art/design.
- 2. Craftsmanship: Students will demonstrate a mastery of advanced skills and techniques in the use of the materials, tools, and processes necessary to produce artwork from concept to finished object.
- 3. Creativity: Students will demonstrate a mastery of imaginative and advanced creative problem-solving abilities.
- 4. Conceptual Development: Students will demonstrate a mastery of referential, ideation, and conceptual framework leading to individual expression through a cohesive body of work.
- 5. Historical Perspective: Students will demonstrate an understanding of the history of the chosen medium and the place of design and its related areas in the history of art and society, including contemporary perspectives.
- 6. Professional Practice: Students will demonstrate a sophisticated level of artistic achievement through completion of a final project and exhibition of a body of creative work and a professional portfolio.

Art Education (PK-12, B.F.A.)

Bachelor of Fine Arts Program Program Code: BFA-AS Major Code: AED

Art and Design Department Upton Hall 402

Accredited: Council for the Accreditation of Educator Preparation (CAEP) (formerly NCATE)

Enrollment in all teacher education programs follows the guidelines for "Admission to Teacher Education Programs" found in this catalog. Applicants who do not yet meet all admissions criteria should consult with the department.

Professional Licensure: This program leads to a recommendation for NYS certification; please check for <u>certification requirements in</u> all other states

The BFA in Art Education program prepares students for initial certification to teach visual arts to pre-kindergarten through grade 12 (PK-12) in New York State schools. The program develops art education professionals who:

- understand contemporary art and culture and are committed to teaching students in meaningful and critical ways.
- consider teaching to be a dynamic and continuing process utilizing current media technology.
- are sensitive to issues of diversity, capable of adapting their teaching strategies to meet individual needs.
- are active in the professional, cultural, and art communities.
- have a depth of experience in at least one art making medium, with a solid breadth in several.

Requirements of Major

- For students to enroll and remain in the art education program, they must have a minimum GPA of 3.0, as mandated by New York State.
- An artwork portfolio review is required for admission to upper level courses of the program.
- Students complete a total of 10 studio electives beyond the four studio foundations courses, including a concentration in at least one studio area. This requires careful advisement to complete courses in a timely manner.
- Students are expected to assume the costs of materials they use in art education courses, and there may be an additional instructional charge for materials used in classes.
- Students are expected to work a minimum of two additional hours each week outside of class for each credit granted for that class
- Students are responsible for any additional certification requirements established by the New York State Education Department, Teacher Certification Division, including the NYS Teacher Certification Examinations and mandated seminars.
- 100 hours of observation with a certified teacher, as required by New York State, are built into required courses to be completed before student teaching.

Applicants who do not yet meet all admissions criteria should consult with the AED Program Coordinator.

Student Teaching

- Eligibility for student teaching is determined by the Art Education Program.
- Placement is arranged by the Art Education Student Teaching Coordinator.
- Student teaching experiences are provided in cooperating elementary, middle, and high schools.
- Transportation to/from the student teaching assignment is the student's responsibility.
- Students enrolled in the student teaching semester devote full time to their practicum assignment.
- Prior written approval must be obtained from the Art Education Program Coordinator for a student to enroll for any other coursework during a student teaching assignment, except for AED 400: Student Teaching Seminar.

Transfer Students

Students transferring to the art education major should follow the SUNY Fine Arts transfer path.

Those who wish to complete their programs in a timely manner should plan their schedules of coursework in art education with great care, and with an academic adviser.

Art teacher certification is a function of the Office of Teaching Initiatives, NYS Education Department, Albany— highered.nysed.gov/tcert/ For information, contact the Buffalo State Teacher Certification Office— teachercertification.buffalostate.edu

Post-baccalaureate (Certification-Only) Program:

This program is for students who have already earned a B.S./B.A./B.F.A. degree in a studio or visual arts-related area and are interested in earning art teacher initial certification.

Program Requirements

General Education Requi	rements	
33 credit hours		33
Art Education Major Requ	uirements (36 credit hours)	
Required Courses (24 cred	dit hours)	
AED 200	FUNDAMENTALS OF ART INQUIRY	3
AED 300	FOUNDATIONS IN ART EDUCATION	3
AED 301	THEORETICAL CONSTRUCTS IN ART EDUCATION	3
AED 302	FUNCTIONS AND PRACTICE IN ART EDUCATION	3
AED 315	ARTS IN LIVING	3
AED 398	ART, SOCIETY AND NEW MEDIA TECHNOLOGIES FOR ART EDUCATORS	3
AED 400	STUDENT TEACHING SEMINAR	3
ATS 325	ART FOR CHILDREN WITH DISABILITIES	3
Required Field Experience	e (12 credit hours)	
AED 303	ELEMENTARY STUDENT TEACHING IN ART	6
AED 304	SECONDARY STUDENT TEACHING IN ART	6
Fine Arts and Design Majo	or Requirements (57 credit hours)	
Required Fine Arts Course	es (15 credit hours)	
AAD 101	DRAWING I	3
FAR 102	DRAWING II	3
AAD 150	THEMES AND ISSUES IN THE CONTEMPORARY ARTS	3
AAD 251	ART HISTORY I	3
AAD 252	ART HISTORY II	3
Required Design Courses	(6 credit hours)	
AAD 102	INTRODUCTION TO TWO-DIMENSIONAL DESIGN	3
AAD 103	INTRODUCTION TO THREE-DIMENSIONAL DESIGN	3

Studio (AAD, FAR and DES) Electives Selected By Advisement	
Select 30 credit hours	30
Total Credit Hours	120

Students will:

- 1. Demonstrate an understanding of the central concepts, tools of inquiry, and structures of the visual arts they teach.
- 2. Demonstrate an understanding of instructional techniques, evaluation concepts, and effective classroom management strategies.
- 3. Develop and create planned learning experiences that encourage students' development of critical thinking, problem solving, and meaningful visual art making.
- 4. Demonstrate an understanding of how diverse children learn and develop, and provide engaging learning opportunities that support their intellectual, social, and personal development.
- 5. Consistently exhibit dispositions that are consistent with the TEU Teacher Dispositions and NYS Educator Code of Ethics.
- 6. Exhibit engagement in continued Professional Learning, Ethical Practice and Leadership.

Art History (B.A.)

Bachelor of Arts Program Program Code: BA-AS Major Code: ARH

Art and Design Department Upton Hall 402 (716) 878-6032 artdesign.buffalostate.edu/

The program in Art History trains students in the global history of art from antiquity to Contemporary Art. As one of the disciplines in the liberal arts, Art History is a foundation for graduate study and for careers in a wide variety of professions. Art history majors are prepared for graduate work in art history, arts administration, museum studies, arts librarianship, visual resource and archive curatorship, historic preservation and art conservation. Buffalo State art history majors who continue their studies on the graduate level may find employment in public and private agencies, libraries, galleries, museums, publishing houses, art dealerships, colleges, arts consultancies, commercial arts organizations and in tourism. It is strongly recommended that art history majors achieve basic reading knowledge in one foreign language before graduating. A minimum of two additional hours of course work outside of class for each credit granted for that class is expected each week.

Program Requirements

General Education 23 Re	quirements	
33 credit hours		33
Art History Major Requir	rements (42 credit hours)	
Required Courses (27 cre	edit hours)	
AAD 101	DRAWING I	3
AAD 150	THEMES AND ISSUES IN THE CONTEMPORARY ARTS	3
AAD 251	ART HISTORY I	3
AAD 252	ART HISTORY II	3

Select one Ancient Art co	urse from the following:	3
FAR 351	ART OF THE ANCIENT WORLD	
FAR 353	ART AND CULTURE OF EGYPT AND THE NEAR EAST	
FAR 354	ART AND CULTURE OF GREECE	
FAR 355	ART AND CULTURE OF ROME	
Select one Medieval Art c	ourse from the following:	3
FAR 352	ART AND CULTURE OF ISLAM	
FAR 356	EARLY MEDIEVAL ART	
FAR 357	LATE MEDIEVAL ART	
FAR 369	ART OF THE MIDDLE AGES	
Select one Renaissance/B	aroque Art course from the following:	3
FAR 358	ITALIAN RENAISSANCE ART, 1200-1480	
FAR 359	HIGH RENAISSANCE AND MANNERISM	
FAR 361	ITALIAN BAROQUE ART	
FAR 367	NORTHERN EUROPEAN ART 1600-1750	
FAR 373	VENETIAN ART, CULTURE AND ENVIRONMENT	
FAR 469	ART AND ARCHITECTURE IN SIENA	
Select one Modern/Conte	emporary Art course from the following:	3
FAR 325	HISTORY OF PHOTOGRAPHY	
FAR 362	NINETEENTH-CENTURY ART	
FAR 363	TWENTIETH-CENTURY ART HISTORY	
FAR 364	ART SINCE 1940	
FAR 365	AMERICAN ART I	
Select one Non-Western A	Art course from the following:	3
545.050	ART AND CHITURE OF ICLANA	

FAR 353	ART AND CULTURE OF EGYPT AND THE NEAR EAST	
FAR 375	ASIAN ART	
FAR 376	INDIAN ART	
FAR 377	ART OF CHINA AND JAPAN	
FAR 380	ART OF AFRICA	
Electives in Art History (1	5 credit hours)	
Select three from the following	lowing:	15
FAR 325	HISTORY OF PHOTOGRAPHY	
FAR 351	ART OF THE ANCIENT WORLD	
FAR 352	ART AND CULTURE OF ISLAM	
FAR 353	ART AND CULTURE OF EGYPT AND THE NEAR EAST	
FAR 354	ART AND CULTURE OF GREECE	
FAR 355	ART AND CULTURE OF ROME	
FAR 356	EARLY MEDIEVAL ART	
FAR 357	LATE MEDIEVAL ART	
FAR 358	ITALIAN RENAISSANCE ART, 1200-1480	
FAR 359	HIGH RENAISSANCE AND MANNERISM	
FAR 361	ITALIAN BAROQUE ART	
FAR 362	NINETEENTH-CENTURY ART	
FAR 363	TWENTIETH-CENTURY ART HISTORY	
FAR 364	ART SINCE 1940	
FAR 365	AMERICAN ART I	
FAR 366	AFRICAN AMERICAN ART	
FAR 367	NORTHERN EUROPEAN ART 1600-1750	
FAR 369	ART OF THE MIDDLE AGES	
FAR 371	ART CRITICISM AND THEORY	

FAR 372	MASTERWORKS OF ARCHITECTURE	
FAR 373	VENETIAN ART, CULTURE AND ENVIRONMENT	
FAR 374	THE HISTORY AND CULTURE OF ART COLLECTING AND THE PUBLIC MUSEUM	
FAR 375	ASIAN ART	
FAR 376	INDIAN ART	
FAR 377	ART OF CHINA AND JAPAN	
FAR 380	ART OF AFRICA	
FAR 382	MODERN AND CONTEMPORARY RUSSIAN ART	
FAR 386	ART AND THE EARLY MODERN GLOBAL ENCOUNTER	
FAR 389	TOPICS COURSE	
FAR 471	SENIOR SEMINAR IN ART HISTORY	
FAR 488	INTERNSHIP (1-15)	
AAD 499	INDEPENDENT STUDY (3-12)	
All College Electives		
39-45 credit hours		39-45
Total Credit Hours		120

Students will demonstrate:

- 1. basic knowledge of the diversity of art history across history and geographical regions.
- 2. basic knowledge and understanding of materials and techniques in art.
- 3. basic ability to analyze works of art in terms of style and content and a resulting development of visual sensitivity.
- 4. an understanding of the distinct cultural and historical contexts of artistic production and reception.
- 5. basic understanding of creative processes.
- 6. basic ability to write about works of art of all periods and world cultures.
- 7. in-depth knowledge of specific periods of art.
- 8. the ability to articulate advanced ideas and concepts in art history, with an understanding of their interrelationships.

Arts and Letters (B.A.)

Bachelor of Arts Program Program Code: BA-AS Major Code: ALT

Dean's Office, School of Arts and Sciences Rockwell Hall 222 (716) 878-6326 suny.buffalostate.edu/programs/arts-and-letters The B.A. degree program in Arts and Letters provides the opportunity to craft a customized major for students who are interested in the study of any of the forms of human expression, creativity, and culture, and whose career/life plans would be served by an academic scope broader than that offered by any single department. Because these graduates leave Buffalo State with communication and interpersonal skills, a sense of aesthetics, critical thinking abilities, attention to detail, and experience working independently or as part of a team, they can develop successful careers in administration, marketing, sales, law, business management, customer relations, human resource management, event planning, cultural tourism, and more. We urge all arts and letters majors to engage in an off-campus internship before graduation to enhance skills and because it is attractive to potential employers.

Students seeking double majors, or second degrees should be aware that Arts and Letters is rarely allowed as a second major or second degree, and only when the disciplines are significantly dissimilar.

Program Requirements	
General Education 23 Requirements	
33 credit hours	33
Arts and Letters Major Requirements (39 credit hours)	
Select a minimum of 21 credit hours upper division	
Primary Concentration (18 credit hours)	
Courses selected by advisement (at least 9 credit hours in upper division except student teaching) in one of the following areas:	18
Art Education (AAD and AED, with certain limitations)	
Communication (COM)	
Dance (DAN)	
Design (AAD, DES, and IDE)	
English (ENG)	
Fine Arts (AAD and FAR)	
Modern and Classical Languages (CHI, FRE, ITA, SPA, not allowing 101-102)	
Music (DMP and MUS)	
Philosophy and Humanities (HUM, PHI, and REL)	
Theater (THA)	
Secondary Concentration (9 credit hours)	
Select a second area from list above (at least 3 of the 9 credit hours must be in upper division)	9
Arts and Humanities Courses (9 credit hours)	9
Senior Paper or Project (3 credit hours)	

A capstone experience under the guidance of the faculty adviser, this activity must be approved by the adviser and the topic forwarded to the dean before work is begun.

~	
٠.	

All College Electives	
42-48 credit hours	42-48
Total Credit Hours	120

Students will:

- 1. demonstrate the ability to analyze and interpret creative processes and objectives as well as literary and visual/or performed language (e.g., idioms, styles, and conventions).
- 2. demonstrate the ability to engage in creative thought.
- 3. articulate and defend critically informed values.
- 4. demonstrate the ability to communicate the distinct characteristics of and relationships between the chosen areas of study within the arts and humanities.

Biology (B.A.)

Bachelor of Arts Program Program Code: BA-AS Major Code: BIO

Biology Department SAMC 166 (716) 878-5203 biology.buffalostate.edu/

The B.A. degree program in the biological sciences prepares students for several options, including various employment opportunities at the bachelor's degree level, and entrance to graduate or professional schools.

A departmental honors program is also available. Students should contact the department for additional information. BIO 111 is the required initial biology course in the program. Students must earn a C or better in BIO 111 to take more advanced biology courses.

Academic Performance Policy

Students who have a GPA of less than 2.0 in BIO-prefixed courses required for the major at the end of a semester will be placed on departmental probation. Students will then have two semesters to raise their GPA to a 2.0 or greater in BIO-prefixed required courses or they will be dismissed from the department.

Program Requirements

General Education 23 Requ	irements	
33 credit hours		33
Biology Major Requirement	es (40-43 credit hours)	
Required Courses (15 credit	hours)	
BIO 111	FOUNDATIONS OF BIOLOGY	3
BIO 211	INTRODUCTION TO CELL BIOLOGY AND GENETICS	4
BIO 213	INTRODUCTION TO ECOLOGY, EVOLUTION, AND BEHAVIOR	4

DIO 222	DIOLOGICAL FORM FUNCTION AND DIVERSITY	A
BIO 333	BIOLOGICAL FORM, FUNCTION AND DIVERSITY	4
Concentration Courses		
Students are required to co	omplete one of the following concentrations:	26-28
Integrative Biology Concen	ntration (26-28 credit hours)	
Select two from the follow	ving courses:	
BIO 314	ADVANCED CELL BIOLOGY (4)	
BIO 315	ECOLOGY (4)	
BIO 405	EVOLUTION	
BIO 440	APPLICATIONS IN BIOTECHNOLOGY	
Select 20 credits of elective	e biology courses at the 300 level or above.	
Electives may include up to	o 8 credits from BIO 308, BIO 309, BIO 311, and BIO 312	
Excludes BIO 322, BIO 324,	, and BIO 355	
and BIO 499 Independent	361/362 Biology Seminar, BIO 488 Biology Internship, BIO 495 Special Project, Study may be applied to the Biology elective requirement. Of this total, no more than 2 cr Seminar and 3 cr from BIO 488 Biology Internship may be used.	
Aquatic Biology Concentra	ition (25-26 credit hours)	25-26
BIO 300	BIOSTATISTICS (4)	
BIO 300 or MAT 311	BIOSTATISTICS (4) INTRODUCTORY PROBABILITY AND STATISTICS	
or MAT 311	INTRODUCTORY PROBABILITY AND STATISTICS	
or MAT 311 BIO 315	INTRODUCTORY PROBABILITY AND STATISTICS ECOLOGY (4)	
or MAT 311 BIO 315 BIO 405	INTRODUCTORY PROBABILITY AND STATISTICS ECOLOGY (4) EVOLUTION BIOLOGY INTERNSHIP (1-15)	
or MAT 311 BIO 315 BIO 405 BIO 488	INTRODUCTORY PROBABILITY AND STATISTICS ECOLOGY (4) EVOLUTION BIOLOGY INTERNSHIP (1-15)	
or MAT 311 BIO 315 BIO 405 BIO 488 Select three from the follo	INTRODUCTORY PROBABILITY AND STATISTICS ECOLOGY (4) EVOLUTION BIOLOGY INTERNSHIP (1-15)	
or MAT 311 BIO 315 BIO 405 BIO 488 Select three from the followard for the follo	INTRODUCTORY PROBABILITY AND STATISTICS ECOLOGY (4) EVOLUTION BIOLOGY INTERNSHIP (1-15) Diving: ICHTHYOLOGY (4)	
or MAT 311 BIO 315 BIO 405 BIO 488 Select three from the followard for the follo	INTRODUCTORY PROBABILITY AND STATISTICS ECOLOGY (4) EVOLUTION BIOLOGY INTERNSHIP (1-15) Diving: ICHTHYOLOGY (4) LIMNOLOGY (4)	
or MAT 311 BIO 315 BIO 405 BIO 488 Select three from the followard for the follo	INTRODUCTORY PROBABILITY AND STATISTICS ECOLOGY (4) EVOLUTION BIOLOGY INTERNSHIP (1-15) wing: ICHTHYOLOGY (4) LIMNOLOGY (4) FISHERIES BIOLOGY (4)	
or MAT 311 BIO 315 BIO 405 BIO 488 Select three from the followard for the follo	INTRODUCTORY PROBABILITY AND STATISTICS ECOLOGY (4) EVOLUTION BIOLOGY INTERNSHIP (1-15) IVALUATION ICHTHYOLOGY (4) LIMNOLOGY (4) FISHERIES BIOLOGY (4) STREAM ECOLOGY (4)	

All College Electives	
21-35 credit hours	21-35
Total Credit Hours	120

- 1. demonstrate an understanding of core concepts and principles in Biology
- 2. demonstrate proficiency in scientific writing
- 3. demonstrate technical proficiency in biological laboratory or field research including use of standard instrumentation and data analysis
- 4. demonstrate the ability to design, conduct and report investigations in biology

Biology (B.S.)

Bachelor of Science Program Program Code: BS-AS Major Code: BIL

The B.S. degree program in the biological sciences supplements a full curriculum in biology with significant ancillary science and mathematics courses. In addition to preparing students for careers at the bachelor's degree level, this degree program helps prepare students for graduate education in the fields of biology, health, and medicine.

A departmental honors program is also available. Students should contact the department for additional information. BIO 111 is the required initial biology course in the program. Students must earn a C or better in BIO 111 to take more advanced biology courses.

Academic Performance Policy

Students who have a GPA of less than 2.0 in BIO-prefixed courses required for the major at the end of a semester will be placed on departmental probation. Students will then have two semesters to raise their GPA to a 2.0 or greater in BIO-prefixed required courses or they will be dismissed from the department.

General Education 23	Requirements	
33 cr hrs		33
Required Courses (33	-34 cr hrs)	
BIO 111	FOUNDATIONS OF BIOLOGY	3
BIO 211	INTRODUCTION TO CELL BIOLOGY AND GENETICS	4
BIO 213	INTRODUCTION TO ECOLOGY, EVOLUTION, AND BEHAVIOR	4
BIO 300	BIOSTATISTICS	4
or MAT 311	INTRODUCTORY PROBABILITY AND STATISTICS	
BIO 303	GENETICS	4
BIO 314	ADVANCED CELL BIOLOGY	4

BIO 316	GENERAL MICROBIOLOGY	4
BIO 333	BIOLOGICAL FORM, FUNCTION AND DIVERSITY	4
BIO 440	APPLICATIONS IN BIOTECHNOLOGY	3
Electives (7-8 cr hrs)		
BIO 301	CELL PHYSIOLOGY (4)	
BIO 305	MOLECULAR BIOLOGY (4)	·
BIO 350	GENES IN POPULATIONS (4)	
BIO 402	COMPARATIVE ANIMAL PHYSIOLOGY (4)	
BIO 408	PLANT PHYSIOLOGY (4)	
BIO 435	CANCER BIOLOGY (4)	
BIO 450	RECOMBINANT DNA TECHNOLOGY (4)	
CHE 470	BIOCHEMISTRY I	
Select four credits o	f biology electives at the 300 level or above.	
Excludes BIO 308, B	IO 309, BIO 311, BIO 312, BIO 322, BIO 324 and BIO 355.	
Required Credit Hou	urs Outside the Major (24 cr hrs)	
CHE 111	FUNDAMENTALS OF CHEMISTRY I	
& CHE 113	and LABORATORY FOR FUNDAMENTALS OF CHEMISTRY I (4)	
CHE 112	FUNDAMENTALS OF CHEMISTRY II	
& CHE 114	and LABORATORY FOR FUNDAMENTALS OF CHEMISTRY II (4)	
CHE 201	ORGANIC CHEMISTRY I	
& CHE 203	and ORGANIC CHEMISTRY LABORATORY I (4)	
CHE 202	ORGANIC CHEMISTRY II	
& CHE 204	and ORGANIC CHEMISTRY LABORATORY II (4)	
PHY 107	GENERAL PHYSICS I (4)	
PHY 108	GENERAL PHYSICS II (4)	
All College Electives	13-27 credit hours	
Total Credit Hours		120
tudonts will:		

1. demonstrate an understanding of core concepts and principles in Biology

- 2. demonstrate proficiency in scientific writing
- 3. demonstrate technical proficiency in biological laboratory or field research including use of standard instrumentation and data analysis
- 4. demonstrate the ability to design, conduct and report investigations in biology

Business Administration (B.S.)

Bachelor of Science Program Program Code: BS-EP Major Code: BSA

Business, Economics, and Public Administration Chase Hall 322 (716) 878-4239 business.buffalostate.edu/

The bachelor of science degree in business administration prepares students for leadership roles in management and marketing in both domestic and international business public and nonprofit organizations. During the first two years of the program, students acquire a foundation in accounting and economics, as well as in the arts, humanities, and social and natural sciences. The last two years are devoted to upper-division courses in management, marketing, human resources, law, finance, operations management, and a capstone course in business strategy. Upon acceptance into the program, students will be required to choose and complete a 15-hour concentration in one of the following areas: management, marketing, or international business.

Admission Requirements

Transfer students are accepted into the program on a competitive basis. No freshmen are accepted directly into the program. Students interested in business as a major may be admitted as a pre-business major (0424) until completion of entrance requirements. Prior to acceptance into the program, students will be required to attain competency in mathematics, complete CWP 101 and CWP 102 with a C or better, and have a minimum cumulative GPA of 2.5.

Transfer students must take all concentration courses, the six hours of upper-division business elective courses, BUS 430, and <u>BUS 460</u> at Buffalo State College. Business transfer courses with D or less will not be accepted into the major.

General Education 23 Requirements		
33 credit hours		33
Business Administra	ation Major Requirements (60 credit hours)	
Business Core (39 c	eredit hours)	
ECO 201	PRINCIPLES OF MACROECONOMICS	3
ECO 202	PRINCIPLES OF MICROECONOMICS	3
BUS 312	FINANCIAL ACCOUNTING	3
BUS 313	MANAGERIAL ACCOUNTING	3
BUS 320	PRINCIPLES OF MARKETING	3
BUS 324	BUSINESS COMMUNICATION	3
BUS 325	HUMAN RESOURCE MANAGEMENT	3
BUS 334	BUSINESS LAW I	3

BUS 360	PRINCIPLES OF MANAGEMENT	3
FIN 314	CORPORATION FINANCE	3
ECO 305	STATISTICS FOR ECONOMICS	3
or MAT 311	INTRODUCTORY PROBABILITY AND STATISTICS	
BUS 460	OPERATIONS MANAGEMENT	3
BUS 430	STRATEGIC MANAGEMENT	3
Concentration (15 credit	hours)	
Select one of the followi	ng concentrations:	15
Marketing		
Management		
International Business		
Business Electives (6 cred	dit hours)	
concentration may be ta	s Department course that is not required in the business core or used in your ken as a business elective. The department recommends that students meet the ement through participation in the internship program, BUS 378.	6
All College Electives		
21-27 credit hours		21-27
Total Credit Hours		120
Marketing Concentration		
Select 15 credit hours fro	om the following:	15
BUS 321	DIGITAL MARKETING AND STRATEGY	
BUS 323	SALES METHODS AND TECHNIQUES	
BUS 327	ADVERTISING CONCEPTS AND PRACTICES	
BUS 329	SALES MANAGEMENT	
BUS 330	MARKETING MANAGEMENT	
BUS 347	RETAIL MANAGEMENT	
BUS 348	ELECTRONIC COMMERCE	
BUS 364	SUPPLY CHAIN MANAGEMENT	

BUS 368	SPORTS MANAGEMENT AND MARKETING	
BUS 403	CONSUMER BEHAVIOR	
BUS 404	MARKETING RESEARCH	
BUS 420	INTERNATIONAL MARKETING	
Total Credit Hours		15
Management Concentrati	ion	
Select 15 credit hours fr	rom the following:	15
BUS 300	INTERNATIONAL BUSINESS	
BUS 305	DIVERSITY AND INCLUSION IN THE WORKPLACE	
BUS 329	SALES MANAGEMENT	
BUS 330	MARKETING MANAGEMENT	
BUS 335	BUSINESS LAW II	
BUS 347	RETAIL MANAGEMENT	
BUS 350	CURRENT PRACTICES IN BUSINESS TECHNOLOGY	
BUS 364	SUPPLY CHAIN MANAGEMENT	
BUS 365	ENTREPRENEURSHIP	
BUS 366	MANAGEMENT INFORMATION SYSTEMS	
BUS 367	STRATEGIC MANAGEMENT OF INNOVATION AND TECHNOLOGY	
BUS 368	SPORTS MANAGEMENT AND MARKETING	
BUS 369	ORGANIZATIONAL CHANGE AND DEVELOPMENT	
BUS 424	INTERNATIONAL BUSINESS COMMUNICATION	
BUS 425	INTERNATIONAL AND CROSS-CULTURAL TRAINING	
BUS 473	INTERNATIONAL MANAGEMENT	
Total Credit Hours		15
International Business Co	ncentration	
Select 15 credit hours fr	om the following:	15
BUS 300	INTERNATIONAL BUSINESS	

Total Credit Hours		15
<u>FIN 400</u>	INTERNATIONAL FINANCE	
ECO 401	INTERNATIONAL ECONOMICS	
BUS 473	INTERNATIONAL MANAGEMENT	
BUS 425	INTERNATIONAL AND CROSS-CULTURAL TRAINING	
BUS 424	INTERNATIONAL BUSINESS COMMUNICATION	
BUS 420	INTERNATIONAL MARKETING	
BUS 417	INTERNATIONAL ACCOUNTING	
BUS 363	BUSINESS IN THE WESTERN HEMISPHERE	
BUS 305	DIVERSITY AND INCLUSION IN THE WORKPLACE	

Students are able to:

- 1. Demonstrate the use of specific Business content area.
- 2. Prepare and deliver an effective managerial presentation.
- 3. Demonstrate clear, concise, and correct writing in a paper on a business topic.
- 4. Identify and formulate the appropriate business problem given a complex case.
- 5. Solve a given business problem using appropriate tools.
- 6. Conduct oneself professionally in a business presentation.
- 7. Identify ethical dilemmas and suggest responsible courses of action in a business case.
- 8. Be evaluated as a successful team member by peers.
- 9. Participate in a group project that produces a successful product.
- 10. Demonstrate knowledge of the functional areas of a complex organization.
- 11. Prepare an internal analysis of the functional areas within a complex organization and determine how each adds value.

Business Administration and Business Management Combined Pathway (B.S. and M.S.)

Bachelor of Science Program Program Code: BS-SP Major Code: BSA

Master of Science Program Program Code: MS-SP Major Code: BSM

Business, Economics, and Public Administration Chase Hall 322 (716) 878-4239 business.buffalostate.edu/

Enrollment in the combined pathway allows highly qualified, currently enrolled SUNY Buffalo State students to begin work on a Master of Science (M.S.) in Business Management while completing a bachelor's degree in Business Administration. Nine credits of designated master's courses are incorporated into the bachelor's degree program and will count toward both the bachelor's degree and the master's degree.

The combined pathway requires 141 credits total, of which 30 are master's credits leading to the M.S. in Business Management. Students must meet all college, department, and relevant concentration guidelines.

The program requires careful planning that should begin by the second year of the student's undergraduate career at SUNY Buffalo State. The student and the primary advisor (or Program Chair) should consult in planning the undergraduate degree program so that the requirements met during undergraduate study and the nine credits of master's courses from the M.S. in Business Management program are included in the degree plan. Students must meet graduate expectations for academic progress and grade point average in their master's level courses to remain in the combined pathway.

Admission Requirements

Admission into the combined pathway is highly selective. Matriculated undergraduate students may apply to the B.S./M.S. pathway in their third year (junior year) of study and will complete all of the application requirements for the program. The admission application process includes a minimum GPA of 3.2, completion of 89 credit hours, 30 of which must include business core and prerequisite requirements (see below), and a letter of recommendation.

B.S. in Business Administration Program Requirements

General Education 23	Requirements	
33 credit hours		33
Business Administrati	ion Major Requirements (60 credit hours)	
Core Courses		
ECO 201	PRINCIPLES OF MACROECONOMICS	3
ECO 202	PRINCIPLES OF MICROECONOMICS	3
BUS 312	FINANCIAL ACCOUNTING	3
BUS 313	MANAGERIAL ACCOUNTING	3
BUS 320	PRINCIPLES OF MARKETING	3
BUS 334	BUSINESS LAW I	3
BUS 360	PRINCIPLES OF MANAGEMENT	3
FIN 314	CORPORATION FINANCE	3
ECO 305	STATISTICS FOR ECONOMICS	3
or MAT 311	INTRODUCTORY PROBABILITY AND STATISTICS	
BUS 460	OPERATIONS MANAGEMENT	3
BUS 430	STRATEGIC MANAGEMENT	3
Undergraduate Major Concentration Requirements (15 credit hours) 15		
Select one of the following concentrations:		
Marketing Concentration		

BUS 321	DIGITAL MARKETING AND STRATEGY
BUS 323	SALES METHODS AND TECHNIQUES
BUS 327	ADVERTISING CONCEPTS AND PRACTICES
BUS 329	SALES MANAGEMENT
BUS 330	MARKETING MANAGEMENT
BUS 347	RETAIL MANAGEMENT
BUS 348	ELECTRONIC COMMERCE
BUS 364	SUPPLY CHAIN MANAGEMENT
BUS 368	SPORTS MANAGEMENT AND MARKETING
BUS 403	CONSUMER BEHAVIOR
BUS 404	MARKETING RESEARCH
BUS 420	INTERNATIONAL MARKETING
Management Concentr	ration
Choose 15 credit hours fr	om the following:
BUS 300	INTERNATIONAL BUSINESS
BUS 305	DIVERSITY AND INCLUSION IN THE WORKPLACE
BUS 329	SALES MANAGEMENT
BUS 330	MARKETING MANAGEMENT
BUS 335	BUSINESS LAW II
BUS 347	RETAIL MANAGEMENT
BUS 350	CURRENT PRACTICES IN BUSINESS TECHNOLOGY
BUS 364	SUPPLY CHAIN MANAGEMENT
BUS 365	ENTREPRENEURSHIP
BUS 366	MANAGEMENT INFORMATION SYSTEMS
BUS 367	STRATEGIC MANAGEMENT OF INNOVATION AND TECHNOLOGY
BUS 368	SPORTS MANAGEMENT AND MARKETING
BUS 369	ORGANIZATIONAL CHANGE AND DEVELOPMENT

BUS 425	INTERNATIONAL AND CROSS-CULTURAL TRAINING	
BUS 473	INTERNATIONAL MANAGEMENT	
International Business Concentration		
Choose 15 credit hours	s from the following:	
BUS 300	INTERNATIONAL BUSINESS	
BUS 305	DIVERSITY AND INCLUSION IN THE WORKPLACE	
BUS 363	BUSINESS IN THE WESTERN HEMISPHERE	
BUS 417	INTERNATIONAL ACCOUNTING	
BUS 420	INTERNATIONAL MARKETING	
BUS 424	INTERNATIONAL BUSINESS COMMUNICATION	
BUS 425	INTERNATIONAL AND CROSS-CULTURAL TRAINING	
BUS 473	INTERNATIONAL MANAGEMENT	
ECO 401	INTERNATIONAL ECONOMICS	
FIN 400	INTERNATIONAL FINANCE	
Required Graduate Ma	ajor Courses (6 credit hours)	
BUS 624	BUSINESS COMMUNICATIONS IN A DIGITAL WORLD	3
BUS 640	STRATEGIC HUMAN RESOURCES	3
Undergraduate Major	Electives (3 credit hours)	3
Required Graduate-Lev	vel Major Elective (3 credit hours)	
BUS 630	MARKETING STRATEGY	3
All College Electives		0-27
Total Credit Hours		108-135
M.S. Business Management Program Requirements		
Required Graduate Major Courses		
Core Courses (24 Credit hours)		
BUS 612	ACCOUNTING INFORMATION FOR DECISION MAKING	3
BUS 624	BUSINESS COMMUNICATIONS IN A DIGITAL WORLD	3

BUS 630	MARKETING STRATEGY	3
BUS 640	STRATEGIC HUMAN RESOURCES	3
BUS 660	MANAGERIAL ANALYTICS AND DECISION MAKING	3
BUS 666	INFORMATION SYSTEMS MANAGEMENT	3
BUS 690	MASTER'S PROJECT	3
BUS 715	MANAGEMENT STRATEGY	3
Choose two of the following:		6
BUS 500	MARKETING OF SERVICES	
BUS 519	COMMUNICATION FOR LEADERS AND MANAGERS	
BUS 535	SMALL-BUSINESS OPERATIONS	
BUS 537	ANATOMY OF BANKING	
BUS 688	LEADERSHIP IN ORGANIZATIONS	
Total Credit Hours		30

Business and Marketing Education (B.S.)

Bachelor of Science Program Code: BS-EP Major Code: BME

Career, Technical, and Science Education Department Bacon Hall 112 (716) 878-4717 ctse.buffalostate.edu/

Accredited: Council for the Accreditation of Educator Preparation (CAEP) (formerly NCATE)

Professional Licensure: This program leads to a recommendation for NYS certification; please check for <u>certification requirements in all other states</u>

The B.S. degree program in business and marketing education leads to initial certification to teach business and marketing subjects in New York State.

Enrollment in all teacher education programs follows the guidelines for "Admission to Teacher Education Programs" found in this the catalog. Applicants who do not yet meet all admissions criteria should consult with the department.

Candidates should consult the Teacher Certification website for current seminars and workshops. https://teachercertification.buffalostate.edu/seminars-and-workshops

Program Requirements

General Education 23 Requirements

33 credit hours		33
Business Major Require	ments (30 credit hours)	
BUS 300	INTERNATIONAL BUSINESS	3
BUS 312	FINANCIAL ACCOUNTING	3
BUS 313	MANAGERIAL ACCOUNTING	3
BUS 320	PRINCIPLES OF MARKETING	3
BUS 324	BUSINESS COMMUNICATION	3
BUS 325	HUMAN RESOURCE MANAGEMENT	3
BUS 334	BUSINESS LAW I	3
BUS 350	CURRENT PRACTICES IN BUSINESS TECHNOLOGY	3
BUS 360	PRINCIPLES OF MANAGEMENT	3
BUS 430	STRATEGIC MANAGEMENT	3
Professional Education	Major Requirements (36 credit hours)	
CTE 301	FOUNDATIONS OF CAREER AND TECHNICAL EDUCATION	3
CTE 302	CURRICULUM AND EVALUATION IN CAREER AND TECHNICAL EDUCATION	3
CTE 303	INSTRUCTIONAL STRATEGIES IN CAREER AND TECHNICAL EDUCATION	3
CTE 306	CLASSROOM/LABORATORY MANAGEMENT	3
CTE 311	CAREER MENTORING	3
CTE 402	ASSESSMENT IN CAREER AND TECHNICAL EDUCATION	3
CTE 404	METHODS OF TEACHING CAREER AND TECHNICAL SUBJECTS	3
BME 415	STUDENT TEACHING IN BUSINESS EDUCATION I	6
BME 416	STUDENT TEACHING IN BUSINESS EDUCATION	6
CTE 421	CAREER AND TECHNICAL EDUCATION FOR STUDENTS WITH SPECIAL NEEDS	3
Required Courses in Oth	ner Fields (6 credit hours)	
EDU 416	TEACHING LITERACY IN MIDDLE AND SECONDARY SCHOOLS	3
SPF 303	EDUCATIONAL PSYCHOLOGY: MIDDLE AND SECONDARY EDUCATION	3

All College Electives	
15 credit hours	15
Total Credit Hours	120

Career and Technical Education (B.S.)

Evening study available Bachelor of Science Program Program Code: BS-EP

Major Code: CTE

Career, Technical, and Science Education Department Bacon Hall 112 (716) 878-4717 ctse.buffalostate.edu/

Accredited: Council for the Accreditation of Educator Preparation (CAEP) (formerly NCATE)

Enrollment in all teacher education programs follows the guidelines for "Admission to Teacher Education Programs" found in this catalog. Applicants who do not yet meet all admissions criteria should consult with the department.

Professional Licensure: This program leads to a recommendation for NYS certification; please check for <u>certification requirements in all other states</u>

This program prepares career and technical teachers for teaching positions in city high schools, area vocational schools (BOCES), technical institutes, correctional facilities, and community college technical programs. It provides theoretical and practical preparation in planning, instructing, and managing the learning environment for students who have or will have extensive work experience in agricultural education, business and marketing education, family and consumer sciences subject education, health careers education, technical education, or trade education. Students in career and technical education complete coursework in career and technical education to be recommended for initial certification (grades 712) in New York State in one of over 83 certification titles. A complete listing of Certification Titles and Codes for Career and Technical Subjects can be found on the New York State Education Department Web site:https://www.highered.nysed.gov/tcert/certificate/cte/certificate-titles.html.

Candidates should consult the Teacher Certification website for current seminars and workshops. https://teachercertification.buffalostate.edu/seminars-and-workshops

Admission Requirements

- One year full-time verified Occupational (trade) experience is a requirement for admission to this program.
- Admission review.
- Trade proficiency may be requested by a practical and theoretical examination.

General Education 23 Re	equirements	
33 credit hours		33
Major Field (30 credit ho	purs)	
TTE 100	COMPREHENSIVE THEORETICAL TRADE OR TECHNICAL SKILLS	15
TTE 200	COMPREHENSIVE THEORETICAL TRADE OR TECHNICAL PERFORMANCE SKILLS	15
Professional Requiremen	nts (30 credit hours)	

CTE 301	FOUNDATIONS OF CAREER AND TECHNICAL EDUCATION	3
CTE 302	CURRICULUM AND EVALUATION IN CAREER AND TECHNICAL EDUCATION	3
CTE 303	INSTRUCTIONAL STRATEGIES IN CAREER AND TECHNICAL EDUCATION	3
CTE 306	CLASSROOM/LABORATORY MANAGEMENT	3
CTE 311	CAREER MENTORING	3
CTE 402	ASSESSMENT IN CAREER AND TECHNICAL EDUCATION	3
CTE 404	METHODS OF TEACHING CAREER AND TECHNICAL SUBJECTS	3
CTE 421	CAREER AND TECHNICAL EDUCATION FOR STUDENTS WITH SPECIAL NEEDS	3
TTE 413	STUDENT TEACHING CAREER AND TECHNICAL EDUCATION	6
Required Courses in Othe	er Fields (6 credit hours)	
SPF 303	EDUCATIONAL PSYCHOLOGY: MIDDLE AND SECONDARY EDUCATION	3
EDU 416	TEACHING LITERACY IN MIDDLE AND SECONDARY SCHOOLS	3
All College Electives		
21 credit hours		21
Total Credit Hours		120

- 1. Candidates demonstrate readiness for entry level teaching positions and achieve at high levels
- 2. Candidates apply knowledge of child and adolescent development
- 3. Candidates master technical skills required in teaching and planning instruction that ensures growth and achievement for all students
- 4. Candidates implement instruction that engages and challenges all students to meet or exceed the learning standards
- 5. Candidates work with all students to create a dynamic learning environment that supports achievement and growth
- 6. Candidates use multiple measures to assess and document student growth, evaluate instructional effectiveness, and modify instruction
- 7. Candidates demonstrate professional responsibility
- 8. Candidates set individual goals and strive for growth
- 9. Candidates demonstrate subject matter content mastery
- 10. Candidates demonstrate application of subject matter content

Chemistry (B.S.)

Bachelor of Science Program Program Code: BS-AS Major Code:CHE

Chemistry Department SAMC 164 (716) 878-5204 chemistry.buffalostate.edu/ Accredited by the American Chemical Society (ACS)

The B.S. in Chemistry degree is an American Chemical Society Certified program, which equips graduates for entry-level positions as chemists in industrial or governmental laboratories, and also lays a solid foundation for those pursuing specialized graduate-level programs. The elective courses within the program play a crucial role in preparing students for diverse professions, including careers in various health-related fields, medicinal plant sciences, and emerging industries associated with energy and the environment.

Admission Requirements

Transfer Admission Requirements

Transfer students from two-year colleges should have earned credit for courses equivalent to the following to avoid possible delays in the completion of the degree program.

CHE 111	FUNDAMENTALS OF CHEMISTRY I	3
CHE 112	FUNDAMENTALS OF CHEMISTRY II	3
CHE 113	LABORATORY FOR FUNDAMENTALS OF CHEMISTRY I	1
CHE 114	LABORATORY FOR FUNDAMENTALS OF CHEMISTRY II	1
CHE 201	ORGANIC CHEMISTRY I	3
CHE 202	ORGANIC CHEMISTRY II	3
CHE 203	ORGANIC CHEMISTRY LABORATORY I	1
CHE 204	ORGANIC CHEMISTRY LABORATORY II	1
CHE 301	ANALYTICAL CHEMISTRY (recommended)	4
MAT 161	CALCULUS I	4
MAT 162	CALCULUS II	4
PHY 111	UNIVERSITY PHYSICS I	5
PHY 112	UNIVERSITY PHYSICS II	5

Transfer students must complete a minimum of 10 credits in chemistry at Buffalo State. Chemistry courses taken elsewhere may be substituted for similar courses at Buffalo State only if they have the same or equivalent prerequisites. Grades of C or better in CHE 111 and CHE 112 are required for transfer into the Chemistry B.S. program.

Chemistry courses not meeting these criteria may be transferred as elective credit.

Program Requirements

33 credit hours	33

Chemistry Major Requirements (42-44 credit hours)

Required Courses (38 credit hours)

CHE 111	FUNDAMENTALS OF CHEMISTRY I	3
CHE 112	FUNDAMENTALS OF CHEMISTRY II	3
CHE 113	LABORATORY FOR FUNDAMENTALS OF CHEMISTRY I	1
CHE 114	LABORATORY FOR FUNDAMENTALS OF CHEMISTRY II	1
CHE 201	ORGANIC CHEMISTRY I	3
CHE 202	ORGANIC CHEMISTRY II	3
CHE 203	ORGANIC CHEMISTRY LABORATORY I	1
CHE 204	ORGANIC CHEMISTRY LABORATORY II	1
CHE 301	ANALYTICAL CHEMISTRY	4
CHE 331	PRINCIPLES OF PHYSICAL CHEMISTRY	3
CHE 360	INTRODUCTION TO INORGANIC CHEMISTRY	3
CHE 403	INSTRUMENTAL ANALYSIS	3
CHE 404	INSTRUMENTAL ANALYSIS LAB	2
CHE 465	INTERGRATED PHYSICAL AND INORGANIC CHEMISTRY LABORATORY	2
CHE 470	BIOCHEMISTRY I	3
CHE 471	BIOCHEMICAL TECHNIQUES	2
In-depth Elective Cours	es (4- 6 cr)	
Select two from the fol	llowing	
CHE 325	MEDICATIONS	3
CHE 327	MEDICINAL PLANT CHEMISTRY	2
CHE 406	ANALYTICAL TOXICOLOGY	3
CHE 427	CANNABIS ANALYSIS	2
CHE 472	BIOCHEMISTRY II	3
Required Credit Hours Outside the Major (21-22 credit hours)		
MAT 161	CALCULUS I	4
MAT 162	CALCULUS II	4

Select one from the following:		
MAT 202	INTRODUCTION TO LINEAR ALGEBRA	
MAT 263	CALCULUS III (4)	
MAT 311	INTRODUCTORY PROBABILITY AND STATISTICS	
PHY 111	UNIVERSITY PHYSICS I	5
PHY 112	UNIVERSITY PHYSICS II	5
All College Electives		
21-24 credit hours		21-24
Total Credit Hours		120

- 1. establish a robust foundation in both the fundamentals and practical applications of chemistry subdisciplines, encompassing Analytical, Bio-, Inorganic, Organic, and Physical Chemistries.
- 2. develop proficiency in problem-solving, critical thinking, and analytical reasoning, specifically tailored to address challenges within the chemistry field.
- 3. demonstrate the ability to design and execute scientific experiments, strictly adhering to laboratory safety protocols, while meticulously recording and analyzing experimental results.
- 4. effectively communicate scientific findings through proficient oral, written, and electronic formats.
- 5. recognize the pivotal role of chemistry in addressing significant societal issues related to energy, health, environment, and medicine.
- 6. collaborate seamlessly as a valuable member of a problem-solving team within the realm of chemistry.
- 7. explore potential career paths upon fulfilling the program requirements.

Childhood Education (Grades 1–6, B.S.)

Bachelor of Science Program Program Code: BS-ED Major Code: CED

Elementary Education, Literacy and Educational Leadership Department Bacon Hall 302

(716) 878-5916

elementaryeducation.buffalostate.edu/

Accredited: Council for the Accreditation of Educator Preparation (CAEP) (formerly NCATE)

Enrollment in all teacher education programs follows the guidelines for "Admission to Teacher Education Programs" found in this catalog. Applicants who do not yet meet all admissions criteria should consult with the department.

Professional Licensure: This program leads to a recommendation for NYS certification; please check for <u>certification requirements in all other states</u>

Student Teaching

The program is clinically-rich with carefully designed field experiences that culminate in one full semester of student teaching. The culminating courses vary in placement for the Childhood education majors but usually include two supervised student teaching experiences. Eligibility and placement for each student teaching experience is determined by the department office in cooperation with public schools in the greater Buffalo area. It is expected that students will have at least one urban teaching experience. Successful Graduates will be recommended for New York State Initial Certification to teach children from first to sixth grade (Childhood, CED).

Transfer Students

Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of professional sequence courses applied to the Childhood education major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required 3.0 cumulative GPA for admission to the major. Students planning to transfer as juniors into the Childhood program and wishing to complete their program in four semesters must seek advisement at the institution in which they initially enrolled to assure that the prerequisite course equivalencies are met.

Candidates should consult the Teacher Certification website for current seminars and workshops. https://teachercertification.buffalostate.edu/seminars-and-workshops

Admission Requirements

Childhood education majors must complete one year of college-level study of one language other than English. Typically, two years of high school study of one language is equivalent to one year of college-level work. Childhood education majors must also complete a distribution requirement of at least 6 credit hours in each of the following areas: mathematics, science, social studies, and English (not including CWP 101 and CWP 102).

Many of the courses in our professional sequence are taught in authentic settings for clinically-rich mentored experiences. As a result, the teacher candidates will have observation, tutoring, and teaching experiences in a variety of placements in our Professional Development Schools Consortium. Childhood education majors are required to complete a 30-credit hour academic concentration in addition to the professional program requirements; the concentration seeks to broaden students' academic backgrounds. Descriptions of the approved concentrations can be found in the Elementary Education Department Handbook for Majors, available on the department Web site, or from the department office. Currently, the concentration may be chosen from: American studies, English, Spanish, Liberal Arts, mathematics, science, social studies or urban studies.

General Ed	ucation 23 Requirements	
30 credit h	ours ¹	30
Credit Hou	rs for Concentration	
30 credit h	ours	30
Distributio	n Courses beyond General Education	
9 credit ho	urs	9
Education	Major Requirements (54 credit hours)	
SPF 202	CHILD DEVELOPMENT AND EDUCATION	3
SPF 203	SCHOOL AND SOCIETY	3
EDU 201	INTRODUCTION TO EDUCATION	3
SPF 302	EDUCATIONAL PSYCHOLOGY: ELEMENTARY EDUCATION	3
EDU 211	INTRODUCTION TO LITERACY	3
EDU 310	TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL	3
EDU 311	THE TEACHING OF READING AND THE OTHER LANGUAGE ARTS IN THE ELEMENTARY SCHOOL	6

EDU 313	TEACHING SCIENCE IN EARLY CHILDHOOD AND CHILDHOOD SETTINGS	3
EDU 316	TEACHING ELEMENTARY SCHOOL MATHEMATICS	6
EXE 362	CLASSROOM MANAGEMENT AND POSITIVE BEHAVIOR SUPPORTS	3
EXE 371	FOUNDATIONS OF TEACHING CHILDREN WITH DISABILITIES	3
EDU 400	PRACTICUM IN ELEMENTARY TEACHING I	6
EDU 401	PRACTICUM IN TEACHING: INTERMEDIATE	6
EDU 402	SEMINAR IN EDUCATION	1-3
Total Credit Hours		123

¹ General Education courses may overlap with required courses in the major which could reduce the total number of credit hours required. Advisement is strongly encouraged.

The total number of required hours will vary with course selection. Students should refer to the Elementary Education Handbook and an academic adviser for more detailed information.

Childhood Education and English Extension (Grades 1–6 and English 7-9, B.S.)

Bachelor of Science Program Program Code: BS-ED Major Code: CEN

Elementary Education, Literacy and Educational Leadership Bacon Hall 302 (716) 878-5916 elementaryeducation.buffalostate.edu/

Accredited: Council for the Accreditation of Educator Preparation (CAEP) (formerly NCATE)

Enrollment in all teacher education programs follows the guidelines for "Admission to Teacher Education Programs" found in this catalog. Applicants who do not yet meet all admissions criteria should consult with the department.

Professional Licensure: This program leads to a recommendation for NYS certification; please check for <u>certification requirements in all other states</u>

Student Teaching

The program is clinically-rich with carefully designed field experiences that culminate in one full semester of student teaching. The culminating courses for the Childhood with English extension major include two supervised student teaching experiences with children at different age levels in different types of schools. Eligibility and placement for each student teaching experience is determined by the department offices in cooperation with public schools in the greater Buffalo area. It is expected that students in this major will have at least one urban teaching experience.

Graduates in this major will be recommended for New York State Initial Certification to teach children in grades 1-6 and 7-9 English.

Transfer Students

Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of professional sequence courses applied to the childhood education with English extension major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required 3.0 cumulative GPA for admission to the major. Students planning to transfer as juniors into the Childhood program with English extension and wishing to complete their programs in four or five semesters must seek advisement at the institution in which they initially enrolled to assure that the

prerequisite course equivalencies are met. Since graduates in extension programs will receive two certifications, it may require an additional semester of college work.

Candidates should consult the Teacher Certification website for current seminars and workshops. https://teachercertification.buffalostate.edu/seminars-and-workshops

Childhood with English extension education majors must complete one year of college-level study of one language other than English. Typically, two years of high school study of one language is equivalent to one year of college-level work. Childhood education with English extension majors must also complete a distribution requirement of at least 6 credit hours in each of the following areas: mathematics, science, social studies, and English (not including CWP 101 and CWP 102). English Extension Majors also complete a 30-credit-hour concentration in English as outlined in the elementary education handbook, available in Bacon 302 and the college website.

Many of the courses in our professional sequence are taught in authentic settings for clinically-rich mentored experiences. As a result, the teacher candidates will have observation, tutoring, and teaching experiences in a variety of placements in our Professional Development Schools Consortium. In addition, English Extension majors will take <u>ENG 463</u> in the semester prior to student teaching. See the English department for details about course availability and orientations.

General Education 23 Rec	quirements	
30 credit hours ¹		30
English Concentration		
24-30 credit hours (credit courses)	ts will vary when double dipped with General Education and Distribution	24-30
Distribution Courses beyo	ond General Education	
9 credit hours		9
Education Major Requirements (60 credit hours)		
SPF 202	CHILD DEVELOPMENT AND EDUCATION	3
SPF 203	SCHOOL AND SOCIETY	3
EDU 201	INTRODUCTION TO EDUCATION	3
SPF 302	EDUCATIONAL PSYCHOLOGY: ELEMENTARY EDUCATION	3
EDU 211	INTRODUCTION TO LITERACY	3
EDU 310	TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL	3
EDU 311	THE TEACHING OF READING AND THE OTHER LANGUAGE ARTS IN THE ELEMENTARY SCHOOL	6
EDU 313	TEACHING SCIENCE IN EARLY CHILDHOOD AND CHILDHOOD SETTINGS	3
EDU 316	TEACHING ELEMENTARY SCHOOL MATHEMATICS	6

EXE 362	CLASSROOM MANAGEMENT AND POSITIVE BEHAVIOR SUPPORTS	3
EXE 371	FOUNDATIONS OF TEACHING CHILDREN WITH DISABILITIES	3
ENG 463	METHODS, MATERIALS, AND PROFESSIONAL DEVELOPMENT FOR TEACHERS OF ENGLISH	6
ENG 464	STUDENT TEACHING IN MIDDLE SCHOOL/JUNIOR HIGH SCHOOL ENGLISH	6
EDU 402	SEMINAR IN EDUCATION	1-3
EDU 404	PRACTICUM IN ELEMENTARY TEACHING FOR EX ED & MIDDLE SCHOOL EX STUDENTS	6

Total Credit Hours 123-129

The total number of required hours will vary with course selection. Students should refer to the Elementary Education Handbook and an academic adviser for more detailed information.

Childhood Education and Mathematics Extension (Grades 1–6 and Mathematics 7-9, B.S.)

Bachelor of Science Program Program Code: BS-ED Major Code: CMT

Elementary Education, Literacy and Educational Leadership Bacon Hall 302 (716) 878-5916 elementaryeducation.buffalostate.edu/

Accredited: Council for the Accreditation of Educator Preparation (CAEP) (formerly NCATE)

Enrollment in all teacher education programs follows the guidelines for "Admission to Teacher Education Programs" found in this catalog. Applicants who do not yet meet all admissions criteria should consult with the department.

Professional Licensure: This program leads to a recommendation for NYS certification; please check for <u>certification requirements in all other states</u>

Student Teaching

The program is clinically-rich with carefully designed field experiences that culminate in one full semester of student teaching. The culminating courses for the Childhood with math extension major include two supervised student teaching experiences with children at different age levels in different types of schools. Eligibility and placement for each student teaching experience is determined by the department office in cooperation with public schools in the greater Buffalo area. It is expected that students in this major will have at least one urban teaching experience.

Graduates in this major will be recommended for New York State Initial Certification to teach children in grades 1–6 and 7-9 mathematics.

Transfer Students

Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of professional sequence courses applied to the Childhood education with mathematics extension major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required 3.0 cumulative GPA for admission to the major. Students planning to transfer as juniors into the Childhood program with math extension and wishing to complete their programs in four to five semesters must seek advisement at the institution in which they initially enrolled to assure that the

¹ General education courses may overlap with required courses in the major which could reduce the total number of credit hours required. Advisement is strongly encouraged.

prerequisite course equivalencies are met. Since the teacher candidate will graduate with recommendation for two certification areas, extension majors may need an additional semester of college work.

Candidates should consult the Teacher Certification website for current seminars and workshops. https://teachercertification.buffalostate.edu/seminars-and-workshops

Childhood with math extension education majors must complete one year of college-level study of one language other than English. Typically, two years of high school study of one language is equivalent to one year of college-level work. Childhood education majors must also complete a distribution requirement of at least 6 credit hours in each of the following areas: mathematics, science, social studies, and English (not including <u>CWP 101</u> and <u>CWP 102</u>).

Many of the courses in our professional sequence are taught in authentic settings for clinically-rich mentored experiences. As a result, the teacher candidates will have observation, tutoring, and teaching experiences in a variety of placements in our Professional Development Schools Consortium. Math extension majors also complete a 30-credit-hour concentration in mathematics as outlined in the elementary education handbook, available in Bacon 302 and on the Buffalo State website. In addition, math extension majors will take MED 309, a methods course, in the spring semester prior to their student teaching experience. See the mathematics department for course availability and orientation.

General Education 23	Requirements	
30 credit hours ¹		30
Math Concentration		
30 credit hours		30
Distribution Courses b	beyond General Education	
9 credit hours		9
Education Major Requ	uirements (57 credit hours)	
SPF 202	CHILD DEVELOPMENT AND EDUCATION	3
SPF 203	SCHOOL AND SOCIETY	3
EDU 201	INTRODUCTION TO EDUCATION	3
SPF 302	EDUCATIONAL PSYCHOLOGY: ELEMENTARY EDUCATION	3
EDU 211	INTRODUCTION TO LITERACY	3
EDU 310	TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL	3
EDU 311	THE TEACHING OF READING AND THE OTHER LANGUAGE ARTS IN THE ELEMENTARY SCHOOL	6
EDU 313	TEACHING SCIENCE IN EARLY CHILDHOOD AND CHILDHOOD SETTINGS	3
EDU 316	TEACHING ELEMENTARY SCHOOL MATHEMATICS	6
EXE 362	CLASSROOM MANAGEMENT AND POSITIVE BEHAVIOR SUPPORTS	3

EXE 371	FOUNDATIONS OF TEACHING CHILDREN WITH DISABILITIES	3
MAT 223	ELEMENTARY AND MIDDLE SCHOOL MATHEMATICS FROM AN ADVANCED STANDPOINT	4
MED 309	TEACHING MATHEMATICS IN THE MIDDLE SCHOOL	3
MED 407	STUDENT TEACHING OF MATHEMATICS IN JUNIOR HIGH/MIDDLE SCHOOL	6
EDU 402	SEMINAR IN EDUCATION	1-3
EDU 404	PRACTICUM IN ELEMENTARY TEACHING FOR EX ED & MIDDLE SCHOOL EX STUDENTS	6
Total Credit Hours		126

¹ General education courses may overlap with required courses in the major which could reduce the total number of credit hours required. Advisement is strongly encouraged.

The total number of required hours will vary with course selection. Students should refer to the Elementary Education Handbook and an academic adviser for more detailed information.

Childhood Education and Social Studies Extension (Grades 1–6 Social Studies and 7-9, B.S.)

Bachelor of Science Program Program Code: BS-ED Major Code: CSS

Elementary Education, Literacy and Educational Leadership Bacon Hall 302 (716) 878-5916 elementaryeducation.buffalostate.edu/

Accredited: Council for the Accreditation of Educator Preparation (CAEP) (formerly NCATE)

Enrollment in all teacher education programs follows the guidelines for "Admission to Teacher Education Programs" found in this catalog. Applicants who do not yet meet all admissions criteria should consult with the department.

Professional Licensure: This program leads to a recommendation for NYS certification; please check for <u>certification requirements in</u> all other states

Student Teaching

The program is clinically-rich with carefully designed field experiences that culminate in one full semester of student teaching. The culminating courses for the Childhood with social studies extension major include two supervised student teaching experiences with children at different age levels in different types of schools. Eligibility and placement for each student teaching experience is determined by the department office in cooperation with public schools in the greater Buffalo area. It is expected that students in this major will have at least one urban teaching experience.

Graduates in this major will be recommended for New York State Initial Certification to teach children in grades 1–6 and 7-9 social studies.

Transfer Students

Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of professional sequence courses applied to the childhood education with social studies major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required 3.0 cumulative GPA for admission to the major. Students planning to transfer as juniors into the Childhood program with social studies extension and wishing to complete their programs in four to five semesters must seek advisement at the institution in which they initially enrolled to assure that the

prerequisite course equivalencies are met. Since the teacher candidate will graduate with recommendation for two certification areas, extension majors may need an additional semester of college work.

Candidates should consult the Teacher Certification website for current seminars and workshops. https://teachercertification.buffalostate.edu/seminars-and-workshops

To be considered for admission to the Childhood Education with Social Studies Extension major (CSS), students must have an 85% High School average or a cumulative GPA of 3.0.

For students currently enrolled at Buffalo State, an acceptable application to the department includes evidence that the above requirements have been met. Applications to CSS are available in Bacon 302. Acceptance into the department enables students to proceed through the curricular courses of their selected major.

Childhood with Social Studies Extension education majors must complete one year of college-level study of one language other than English. Typically, two years of high school study of one language is equivalent to one year of college-level work. Childhood education with social studies extension majors must also complete a distribution requirement of at least 6 credit hours in each of the following areas: mathematics, science, social studies, and English (not including CWP 101 and CWP 102).

Social studies extension majors also complete a 30-credit-hour concentration in social studies as outlined in the elementary education handbook, available in Bacon 302 and on the college website.

Many of the courses in our professional sequence are taught in authentic settings for clinically-rich mentored experiences. As a result, the teacher candidates will have observation, tutoring, and teaching experiences in a variety of placements in our Professional Development Schools Consortium. In addition, social studies extension majors take <u>SSE 303</u> in the semester prior to student teaching. See the social studies education department for seat availability and orientation.

General Education	n 23 Requirements	
30 credit hours ¹		30
Social Studies Cor	ncentration	
30 credit hours		30
Distribution Cours	ses beyond General Education	
9 credit hours		9
Total Required Credit Hours in Education Major Requirements (57 credit hours)		
SPF 202	CHILD DEVELOPMENT AND EDUCATION	3
SPF 203	SCHOOL AND SOCIETY	3
EDU 201	INTRODUCTION TO EDUCATION	3
SPF 302	EDUCATIONAL PSYCHOLOGY: ELEMENTARY EDUCATION	3
EDU 211	INTRODUCTION TO LITERACY	3
EDU 310	TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL	3

EDU 311	THE TEACHING OF READING AND THE OTHER LANGUAGE ARTS IN THE ELEMENTARY SCHOOL	6
EDU 313	TEACHING SCIENCE IN EARLY CHILDHOOD AND CHILDHOOD SETTINGS	3
EDU 316	TEACHING ELEMENTARY SCHOOL MATHEMATICS	6
EXE 362	CLASSROOM MANAGEMENT AND POSITIVE BEHAVIOR SUPPORTS	3
EXE 371	FOUNDATIONS OF TEACHING CHILDREN WITH DISABILITIES	3
SSE 303	METHODS AND MATERIALS IN TEACHING MIDDLE SCHOOL SOCIAL STUDIES	3
SSE 409	STUDENT TEACHING OF SOCIAL STUDIES IN THE MIDDLE SCHOOL	6
EDU 402	SEMINAR IN EDUCATION	1-3
EDU 404	PRACTICUM IN ELEMENTARY TEACHING FOR EX ED & MIDDLE SCHOOL EX STUDENTS	6
Total Credit Hours		126

¹ General education courses may overlap with required courses in the major which could reduce the total number of credit hours required. Advisement is strongly encouraged.

The total number of required hours will vary with course selection. Students should refer to the Elementary Education Handbook and an academic adviser for more detailed information.

Communication Studies (B.A.)

Bachelor of Arts Program Code: BA-AS Major Code: COM

Communication Department Buckham Hall B120 (716) 878-3606 communication.buffalostate.edu/

This major allows students much flexibility to tailor a program of theory-based and applied courses. It meets the needs of students preferring a generalist approach to communication, as well as for students seeking a more academic, less applied approach. Compare this major with journalism, media production, and public relations and advertising.

Career Opportunities

Students in Communication Studies prepare for careers in corporate communication, social media management, consulting, government careers, research, media analysis, lobbying, speechwriting, fundraising, event management, sports communication, and other fields that require a liberal arts education enhanced with communication expertise. The major also provides a base for graduate education in communication, law, management, and other professional areas.

The profile of a successful communication studies graduate is a person with strong writing and speaking proficiency, keen ethical insight, competence in analyzing and thinking critically, and skill in working effectively both independently and in teams.

Academic Standards

Only grades of C or higher may be applied toward requirements for any communication degree; courses with lower grades must be repeated. Consistent with standards of the Accrediting Council for Education in Journalism and Mass Communication, the number of communication courses that students may take is capped, encouraging a broad-based liberal arts education. The department

encourages students to take minors or second majors and requires evidence of an academic concentration or area of expertise outside the Communication Department.

Admissions Requirements

COM 347

Incoming freshman and transfer students can declare the major.

See <u>communication.buffalostate.edu</u> for application forms and additional information, including a list of equivalent core courses at community colleges. Transfer students from two-year schools may apply only core courses toward this major for a maximum of 12 credits. Students generally require four semesters of study after completing communication core courses.

Program Requirements General Education 23 Requirements 33 credit hours 33 Communication Major Requirements (42 credit hours) Communication Core (12 credit hours) 3 **COM 100** MEDIA LITERACY or SPC 103 INTRODUCTION TO HUMAN COMMUNICATION **COM 210** INTRODUCTION TO MEDIA WRITING 3 3 COM 215 INTRODUCTION TO VISUAL COMMUNICATION **SPC 205** INTRODUCTION TO ORAL COMMUNICATION 3 Upper-Level Oral Communication Course (3 credit hours) Select one from the following: 3 **SPC 306 PUBLIC SPEAKING SPC 307 GROUP COMMUNICATON** MEDIA PERFORMANCE **SPC 315** Upper-Level Written Communication Course (3 credit hours) 3 Select one from the following: COM 303 WRITING FOR PRINT AND ONLINE JOURNALISM COM 304 WRITING FOR BROADCAST (TV, RADIO, FILM) **COM 308 PUBLIC RELATIONS WRITING** COM 325 **FEATURE WRITING** COM 390 SPECIAL TOPICS: JOURNALISTIC WRITING

DIGITAL AND BROADCAST PRODUCING

Upper-Level Visual Co	ommunication Course (3 credit hours)	
Select one from the f	following:	3
COM 312	BASIC MEDIA PRODUCTION	
COM 322	COMMUNICATION GRAPHICS	
COM 336	WEB AND SOCIAL MEDIA PRODUCTION	
Communication Theo	ry and Criticism (6 credit hours)	
Select two from the f	following:	6
COM 310	INTERNATIONAL COMMUNICATION	
COM 400	COMMUNICATION LAW	
COM 401	APPLIED COMMUNICATION RESEARCH	
SPC 309	PERSUASION AND PROPAGANDA	
SPC 311	INTERCULTURAL COMMUNICATION	
SPC 321	RHETORICAL CRITICISM	
SPC 326	FILM ANALYSIS AND EVALUATION	
SPC 333	RACE, CLASS AND GENDER IN THE MEDIA	
SPC 407	ORGANIZATIONAL COMMUNICATION	
SPC 422	MEDIA CRITICISM	
SPC 426	DOCUMENTARY FILM ANALYSIS	
Senior Seminar (3 cre	dit hours)	
COM 450	COMMUNICATION AND SOCIETY	3
Communication Elect	ives (12 credit hours)	
Select 12 credit hours	S:	12
COM 495	SPECIAL PROJECT (1-3)	
or COM 499	INDEPENDENT STUDY	
Or 300/400-level COI	M or SPC electives by advisement	
All College Electives		
39-45 credit hours		39-45
Total Credit Hours		120

- 1. understand and apply First Amendment principles and the law appropriate to professional practice relevant to the major
- 2. demonstrate an understanding of the history and role of professionals and institutions in shaping communication relevant to the major
- 3. demonstrate an understanding of gender and gender identity, race, ethnicity, class, sexual orientation, and, as appropriate, other forms of diversity, equity, and inclusion in domestic and global societies and their significance in the major
- 4. understand concepts and apply theories in the use and presentation of images and information relevant to the major
- 5. demonstrate an understanding of professional ethical principles and work ethically in pursuit of truth, accuracy, fairness and diversity
- 6. think critically, creatively and independently
- 7. conduct research and evaluate information by methods appropriate to the communication professions in which they work
- 8. write correctly and clearly in forms and styles appropriate for the communication professions, audiences and purposes they serve
- 9. critically evaluate their own work and that of others for accuracy, fairness, clarity, creativity, effective storytelling and/or professional style as appropriate to the major
- 10. apply basic numerical and statistical concepts appropriate to the major
- 11. apply tools and technologies appropriate to the major
- 12. demonstrate competence in professional speaking and presentational skills appropriate to the major

Computer Information Systems (B.S.)

Bachelor of Science Program Program Code: BS-SP Major Code: CIS

Computer Information Systems Department Technology Building 203 (716) 878-5528 cis.buffalostate.edu/

The CIS program prepares students for entry-level positions in business, industry, and government, such as: programming, systems analysis and design, database administration, web design and programming, cybersecurity, artificial intelligence, or network support, and provides students with the technical knowledge and managerial skills necessary for a wide range of subsequent career paths. There is a growing demand in all sectors for individuals with this combination of capabilities. The CIS program was developed with the cooperation of employers and information technology professionals and, unlike a computer science program, the emphasis of the program is on business, industry, and government applications of computers, rather than on computer theory.

Admission Requirements

Pre-university Students

Pre-university students are admitted directly into the CIS major. They must apply through Undergraduate Admissions. Once admitted, incoming students are advised about where to start in the curriculum.

Current Buffalo State Students

Any current Buffalo State undergraduate student in good academic standing may switch into the CIS major. They can do this by completing and submitting a 'Change of Major' form.

Transfer Students

Transfer students holding A.A.S or A.S. degrees in a parallel program (CIS, CS, IT, etc.) and transfer students who have completed some computer courses may apply for admission into the program. Transfer students are accepted directly into the CIS major on a competitive basis providing they have a minimum cumulative GPA of 2.5 and a minimum GPA of 2.0 in major courses from the transfer institution.

Program Requirements

General Education 23 Requirements

33 credit hours 33

Required Courses (24 credit hours) CIS 151 COMPUTER PROGRAMMING II 3 CIS 251 COMPUTER ORGANIZATION 3 CIS 370 SYSTEMS ANALYSIS AND DESIGN 3 CIS 380 DATABASE SYSTEMS I 3 CIS 400 .NET APPLICATION DEVELOPMENT 3 CIS 411 DATABASE SYSTEMS II 3 Electives (18 credit hours) 18 Electives (18 credit hours) 18 CIS 375 WEB DESIGN AND PROGRAMMING I 3 CIS 388 SERVICE LEARNING IN COMPUTING 3 CIS 391 INFORMATION TECHNOLOGY PROJECT MANAGEMENT 3 CIS 414 MULTIMEDIA AND USER INTERFACE DESIGN 3 CIS 415 MULTIMEDIA AND USER INTERFACE DESIGN 3 CIS 425 OBJECT-ORIENTED DEVELOPMENT 3 CIS 427 E-COMMERCE SYSTEMS 3 CIS 428 ADVANCED SYSTEMS APPLICATIONS 3 CIS 441 DATA STRUCTURES AND ALGORITHMS 3 CIS 451 DATA COMMUNICATIONS 3 CIS 461 PROGRAMMING WITH PYTHO	Computer Information Syst	ems Major Requirements (42 credit hours)	
CIS 151 COMPUTER PROGRAMMING II 3 CIS 251 COMPUTER ORGANIZATION 3 CIS 315 COMPUTER ORGANIZATION 3 CIS 370 SYSTEMS ANALYSIS AND DESIGN 3 CIS 380 DATABASE SYSTEMS I 3 CIS 400 .NET APPLICATION DEVELOPMENT 3 CIS 410 COMPUTER OPERATING SYSTEMS 3 CIS 411 DATABASE SYSTEMS II 3 Electives (18 credit hours) *** Electives (18 credit hours) *** Select from the following: 18 CIS 375 WEB DESIGN AND PROGRAMMING I 3 CIS 388 SERVICE LEARNING IN COMPUTING 3 CIS 391 INFORMATION TECHNOLOGY PROJECT MANAGEMENT 3 CIS 414 MULTIMEDIA AND USER INTERFACE DESIGN 3 CIS 415 MULTIMEDIA AND USER INTERFACE DESIGN 3 CIS 427 E-COMMERCE SYSTEMS 3 CIS 435 COMPUTER SEMINAR 3 CIS 442 ADVANCED SYSTEMS APPLICATIONS 3 CIS 451 DATA STRUCTURES AND ALGORITHMS <td colspan="3"></td>			
CIS 315 COMPUTER ORGANIZATION 3 CIS 370 SYSTEMS ANALYSIS AND DESIGN 3 CIS 380 DATABASE SYSTEMS I 3 CIS 400 .NET APPLICATION DEVELOPMENT 3 CIS 410 COMPUTER OPERATING SYSTEMS 3 CIS 411 DATABASE SYSTEMS II 3 Electrives (18 credit hours) 18 Elect from the following: 18 CIS 375 WEB DESIGN AND PROGRAMMING I 3 CIS 388 SERVICE LEARNING IN COMPUTING 3 CIS 391 INFORMATION TECHNOLOGY PROJECT MANAGEMENT 3 CIS 414 MULTIMEDIA METHODS, TOOLS, AND APPLICATIONS 3 CIS 415 MULTIMEDIA AND USER INTERFACE DESIGN 3 CIS 427 E-COMMERCE SYSTEMS 3 CIS 427 E-COMMERCE SYSTEMS 3 CIS 435 COMPUTER SEMINAR 3 CIS 442 ADVANCED SYSTEMS APPLICATIONS 3 CIS 451 DATA STRUCTURES AND ALGORITHMS 3 CIS 470 DATA COMMUNICATIONS 3 CIS 471 NETWORKI	CIS 151	COMPUTER PROGRAMMING I	3
CIS 370 SYSTEMS ANALYSIS AND DESIGN 3 CIS 380 DATABASE SYSTEMS I 3 CIS 400 .NET APPLICATION DEVELOPMENT 3 CIS 410 COMPUTER OPERATING SYSTEMS 3 CIS 411 DATABASE SYSTEMS II 3 Electives (18 credit hours) **** *******************************	CIS 251	COMPUTER PROGRAMMING II	3
CIS 380 DATABASE SYSTEMS I 3 CIS 400 .NET APPLICATION DEVELOPMENT 3 CIS 410 COMPUTER OPERATING SYSTEMS 3 CIS 411 DATABASE SYSTEMS II 3 Electrives (18 credit hours) Select from the following: 18 CIS 375 WEB DESIGN AND PROGRAMMING I 3 CIS 388 SERVICE LEARNING IN COMPUTING 3 CIS 391 INFORMATION TECHNOLOGY PROJECT MANAGEMENT 3 CIS 414 MULTIMEDIA METHODS, TOOLS, AND APPLICATIONS 3 CIS 415 MULTIMEDIA AND USER INTERFACE DESIGN 3 CIS 425 OBJECT-ORIENTED DEVELOPMENT 3 CIS 427 E-COMMERCE SYSTEMS 3 CIS 442 ADVANCED SYSTEMS APPLICATIONS 3 CIS 451 DATA STRUCTURES AND ALGORITHMS 3 CIS 451 DATA COMMUNICATIONS 3 CIS 470 DATA COMMUNICATIONS 3 CIS 471 NETWORKING LABORATORY II 3	CIS 315	COMPUTER ORGANIZATION	3
CIS 400 INET APPLICATION DEVELOPMENT 3 CIS 410 COMPUTER OPERATING SYSTEMS 3 CIS 411 DATABASE SYSTEMS II 3 Electives (18 credit hours) Select from the following: 18 CIS 375 WEB DESIGN AND PROGRAMMING I 3 CIS 388 SERVICE LEARNING IN COMPUTING 3 CIS 391 INFORMATION TECHNOLOGY PROJECT MANAGEMENT 3 CIS 414 MULTIMEDIA METHODS, TOOLS, AND APPLICATIONS 3 CIS 415 MULTIMEDIA AND USER INTERFACE DESIGN 3 CIS 425 OBJECT-ORIENTED DEVELOPMENT 3 CIS 427 E-COMMERCE SYSTEMS 3 CIS 435 COMPUTER SEMINAR 3 CIS 442 ADVANCED SYSTEMS APPLICATIONS 3 CIS 451 DATA STRUCTURES AND ALGORITHMS 3 CIS 451 PROGRAMMING WITH PYTHON 3 CIS 470 DATA COMMUNICATIONS 3 CIS 471 NETWORKING LABORATORY II 3 CIS 472 NETWORKING LABORATORY II 3	CIS 370	SYSTEMS ANALYSIS AND DESIGN	3
CIS 410 COMPUTER OPERATING SYSTEMS II 3 CIS 411 DATABASE SYSTEMS II 3 Electives (18 credit hours) Select from the following: 18 CIS 375 WEB DESIGN AND PROGRAMMING I 3 CIS 388 SERVICE LEARNING IN COMPUTING 3 CIS 391 INFORMATION TECHNOLOGY PROJECT MANAGEMENT 3 CIS 414 MULTIMEDIA METHODS, TOOLS, AND APPLICATIONS 3 CIS 415 MULTIMEDIA AND USER INTERFACE DESIGN 3 CIS 427 E-COMMERCE SYSTEMS 3 CIS 435 COMPUTER SEMINAR 3 CIS 442 ADVANCED SYSTEMS APPLICATIONS 3 CIS 443 DATA STRUCTURES AND ALGORITHMS 3 CIS 451 DATA STRUCTURES AND ALGORITHMS 3 CIS 470 DATA COMMUNICATIONS 3 CIS 471 NETWORKING LABORATORY II 3 CIS 472 NETWORKING LABORATORY II 3	CIS 380	DATABASE SYSTEMS I	3
CIS 411 DATABASE SYSTEMS II 3 Electives (18 credit hours) Select from the following: 18 Select from the following: 18 CIS 375 WEB DESIGN AND PROGRAMMING I 3 CIS 388 SERVICE LEARNING IN COMPUTING 3 CIS 391 INFORMATION TECHNOLOGY PROJECT MANAGEMENT 3 CIS 414 MULTIMEDIA AND USER INTERFACE DESIGN 3 CIS 425 OBJECT-ORIENTED DEVELOPMENT 3 CIS 427 E-COMMERCE SYSTEMS 3 CIS 435 COMPUTER SEMINAR 3 CIS 442 ADVANCED SYSTEMS APPLICATIONS 3 CIS 451 DATA STRUCTURES AND ALGORITHMS 3 CIS 461 PROGRAMMING WITH PYTHON 3 CIS 470 DATA COMMUNICATIONS 3 CIS 471 NETWORKING LABORATORY I 3 CIS 472 NETWORKING LABORATORY II 3	CIS 400	.NET APPLICATION DEVELOPMENT	3
Select from the following: 18 CIS 375 WEB DESIGN AND PROGRAMMING I 3 CIS 388 SERVICE LEARNING IN COMPUTING 3 CIS 391 INFORMATION TECHNOLOGY PROJECT MANAGEMENT 3 CIS 414 MULTIMEDIA METHODS, TOOLS, AND APPLICATIONS 3 CIS 415 MULTIMEDIA AND USER INTERFACE DESIGN 3 CIS 425 OBJECT-ORIENTED DEVELOPMENT 3 CIS 427 E-COMMERCE SYSTEMS 3 CIS 435 COMPUTER SEMINAR 3 CIS 442 ADVANCED SYSTEMS APPLICATIONS 3 CIS 445 DATA STRUCTURES AND ALGORITHMS 3 CIS 461 PROGRAMMING WITH PYTHON 3 CIS 470 DATA COMMUNICATIONS 3 CIS 471 NETWORKING LABORATORY II 3 CIS 472 NETWORKING LABORATORY II 3	CIS 410	COMPUTER OPERATING SYSTEMS	3
Select from the following:18CIS 375WEB DESIGN AND PROGRAMMING I3CIS 388SERVICE LEARNING IN COMPUTING3CIS 391INFORMATION TECHNOLOGY PROJECT MANAGEMENT3CIS 414MULTIMEDIA METHODS, TOOLS, AND APPLICATIONS3CIS 415MULTIMEDIA AND USER INTERFACE DESIGN3CIS 427E-COMMERCE SYSTEMS3CIS 427E-COMMERCE SYSTEMS3CIS 442ADVANCED SYSTEMS APPLICATIONS3CIS 451DATA STRUCTURES AND ALGORITHMS3CIS 461PROGRAMMING WITH PYTHON3CIS 470DATA COMMUNICATIONS3CIS 471NETWORKING LABORATORY II3	CIS 411	DATABASE SYSTEMS II	3
CIS 375 WEB DESIGN AND PROGRAMMING I 3 CIS 388 SERVICE LEARNING IN COMPUTING 3 CIS 391 INFORMATION TECHNOLOGY PROJECT MANAGEMENT 3 CIS 414 MULTIMEDIA METHODS, TOOLS, AND APPLICATIONS 3 CIS 415 MULTIMEDIA AND USER INTERFACE DESIGN 3 CIS 425 OBJECT-ORIENTED DEVELOPMENT 3 CIS 427 E-COMMERCE SYSTEMS 3 CIS 435 COMPUTER SEMINAR 3 CIS 442 ADVANCED SYSTEMS APPLICATIONS 3 CIS 451 DATA STRUCTURES AND ALGORITHMS 3 CIS 461 PROGRAMMING WITH PYTHON 3 CIS 470 DATA COMMUNICATIONS 3 CIS 471 NETWORKING LABORATORY II 3	Electives (18 credit hours)		
CIS 388 SERVICE LEARNING IN COMPUTING 3 CIS 391 INFORMATION TECHNOLOGY PROJECT MANAGEMENT 3 CIS 414 MULTIMEDIA METHODS, TOOLS, AND APPLICATIONS 3 CIS 415 MULTIMEDIA AND USER INTERFACE DESIGN 3 CIS 425 OBJECT-ORIENTED DEVELOPMENT 3 CIS 427 E-COMMERCE SYSTEMS 3 CIS 435 COMPUTER SEMINAR 3 CIS 442 ADVANCED SYSTEMS APPLICATIONS 3 CIS 451 DATA STRUCTURES AND ALGORITHMS 3 CIS 461 PROGRAMMING WITH PYTHON 3 CIS 470 DATA COMMUNICATIONS 3 CIS 471 NETWORKING LABORATORY II 3	Select from the following:		18
CIS 391 INFORMATION TECHNOLOGY PROJECT MANAGEMENT 3 CIS 414 MULTIMEDIA METHODS, TOOLS, AND APPLICATIONS 3 CIS 415 MULTIMEDIA AND USER INTERFACE DESIGN 3 CIS 425 OBJECT-ORIENTED DEVELOPMENT 3 CIS 427 E-COMMERCE SYSTEMS 3 CIS 435 COMPUTER SEMINAR 3 CIS 442 ADVANCED SYSTEMS APPLICATIONS 3 CIS 451 DATA STRUCTURES AND ALGORITHMS 3 CIS 461 PROGRAMMING WITH PYTHON 3 CIS 470 DATA COMMUNICATIONS 3 CIS 471 NETWORKING LABORATORY II 3 CIS 472 NETWORKING LABORATORY II 3	CIS 375	WEB DESIGN AND PROGRAMMING I	3
CIS 414 MULTIMEDIA METHODS, TOOLS, AND APPLICATIONS 3 CIS 415 MULTIMEDIA AND USER INTERFACE DESIGN 3 CIS 425 OBJECT-ORIENTED DEVELOPMENT 3 CIS 427 E-COMMERCE SYSTEMS 3 CIS 435 COMPUTER SEMINAR 3 CIS 442 ADVANCED SYSTEMS APPLICATIONS 3 CIS 451 DATA STRUCTURES AND ALGORITHMS 3 CIS 461 PROGRAMMING WITH PYTHON 3 CIS 470 DATA COMMUNICATIONS 3 CIS 471 NETWORKING LABORATORY II 3 CIS 472 NETWORKING LABORATORY II 4 CIS 4	CIS 388	SERVICE LEARNING IN COMPUTING	3
CIS 415 MULTIMEDIA AND USER INTERFACE DESIGN CIS 425 OBJECT-ORIENTED DEVELOPMENT 3 CIS 427 E-COMMERCE SYSTEMS CIS 435 COMPUTER SEMINAR CIS 442 ADVANCED SYSTEMS APPLICATIONS 3 CIS 451 DATA STRUCTURES AND ALGORITHMS CIS 461 PROGRAMMING WITH PYTHON 3 CIS 470 DATA COMMUNICATIONS 3 CIS 471 NETWORKING LABORATORY II 3 CIS 472 NETWORKING LABORATORY II 3 CIS 472 NETWORKING LABORATORY II 3 CIS 472 NETWORKING LABORATORY II 3 CIS 475 NETWORKING LABORATORY II 3 CIS 472 NETWORKING LABORATORY II 4 CIS 472 NETWORKING LABORATORY II 5 CIS 472 NETWORKING LABORATORY II	CIS 391	INFORMATION TECHNOLOGY PROJECT MANAGEMENT	3
CIS 425 OBJECT-ORIENTED DEVELOPMENT 3 CIS 427 E-COMMERCE SYSTEMS 3 CIS 435 COMPUTER SEMINAR 3 CIS 442 ADVANCED SYSTEMS APPLICATIONS 3 CIS 451 DATA STRUCTURES AND ALGORITHMS 3 CIS 461 PROGRAMMING WITH PYTHON 3 CIS 470 DATA COMMUNICATIONS 3 CIS 471 NETWORKING LABORATORY I 3 CIS 472 NETWORKING LABORATORY II 3	CIS 414	MULTIMEDIA METHODS, TOOLS, AND APPLICATIONS	3
CIS 427 E-COMMERCE SYSTEMS S CIS 435 COMPUTER SEMINAR 3 CIS 442 ADVANCED SYSTEMS APPLICATIONS 3 CIS 451 DATA STRUCTURES AND ALGORITHMS 3 CIS 461 PROGRAMMING WITH PYTHON 3 CIS 470 DATA COMMUNICATIONS 3 CIS 471 NETWORKING LABORATORY II 3 CIS 472 NETWORKING LABORATORY II 3	CIS 415	MULTIMEDIA AND USER INTERFACE DESIGN	3
CIS 435 COMPUTER SEMINAR 3 CIS 442 ADVANCED SYSTEMS APPLICATIONS 3 CIS 451 DATA STRUCTURES AND ALGORITHMS 3 CIS 461 PROGRAMMING WITH PYTHON 3 CIS 470 DATA COMMUNICATIONS 3 CIS 471 NETWORKING LABORATORY I 3 CIS 472 NETWORKING LABORATORY II 3	CIS 425	OBJECT-ORIENTED DEVELOPMENT	3
CIS 442 ADVANCED SYSTEMS APPLICATIONS CIS 451 DATA STRUCTURES AND ALGORITHMS 3 CIS 461 PROGRAMMING WITH PYTHON 3 CIS 470 DATA COMMUNICATIONS 3 CIS 471 NETWORKING LABORATORY I 3 CIS 472 NETWORKING LABORATORY II 3	CIS 427	E-COMMERCE SYSTEMS	3
CIS 451 DATA STRUCTURES AND ALGORITHMS 3 CIS 461 PROGRAMMING WITH PYTHON 3 CIS 470 DATA COMMUNICATIONS 3 CIS 471 NETWORKING LABORATORY I 3 CIS 472 NETWORKING LABORATORY II 3	CIS 435	COMPUTER SEMINAR	3
CIS 461 PROGRAMMING WITH PYTHON 3 CIS 470 DATA COMMUNICATIONS 3 CIS 471 NETWORKING LABORATORY I 3 CIS 472 NETWORKING LABORATORY II 3	CIS 442	ADVANCED SYSTEMS APPLICATIONS	3
CIS 470 DATA COMMUNICATIONS 3 CIS 471 NETWORKING LABORATORY I 3 CIS 472 NETWORKING LABORATORY II 3	CIS 451	DATA STRUCTURES AND ALGORITHMS	3
CIS 471 NETWORKING LABORATORY I 3 CIS 472 NETWORKING LABORATORY II 3	CIS 461	PROGRAMMING WITH PYTHON	3
CIS 472 NETWORKING LABORATORY II 3	CIS 470	DATA COMMUNICATIONS	3
	CIS 471	NETWORKING LABORATORY I	3
CIS 473 IT TECHNICAL SUPPORT 3	CIS 472	NETWORKING LABORATORY II	3
	CIS 473	IT TECHNICAL SUPPORT	3

CIS 475	WEB DESIGN AND PROGRAMMING II	3
CIS 478	CYBERSECURITY	3
CIS 480	INTRODUCTION TO ARTIFICIAL INTELLIGENCE	3
CIS 488	INTERNSHIP (3-15)	3-15
CIS 494	UNDERGRADUATE RESEARCH IN COMPUTING	3
CIS 495	SPECIAL PROJECT (1-3)	1-3
CIS 499	INDEPENDENT STUDY (3-12)	3-12

In addition to the above courses, one non-CIS course may be taken as an elective with the department chair's permission.

Residency Requirements

A minimum of 21 credit hours must be completed in the CIS department at Buffalo State College.

No more than 3 credit hours of CIS 488 may be used to fulfill the CIS elective requirement.

No more than 3 credit hours of CIS elective requirement can be satisfied by credit hours from CIS 495 and CIS 499.

All College Electives	
39-45 credit hours	39-45
Total Credit Hours	120

Upon completion of the program, students will be able to:

- 1. Code and analyze computer programs.
- 2. Assess the information systems (IS) needs of clients.
- 3. Design, develop, and implement information systems to meet the IS needs of clients.
- 4. Describe the capabilities of, and interaction between software and hardware.
- 5. Plan, organize, cooperate, and communicate effectively as members of IS teams.
- 6. Design data systems to represent and process real world data.
- 7. Design, test, and troubleshoot networked computer systems.

Criminal Justice (B.S.)

Bachelor of Science Program Program Code: BS-SP Major Code: CRJ

Criminal Justice Department
Cassety Hall Room 102
(716) 878-4517
criminaljustice.buffalostate.edu/

Students in the B.S. degree program in Criminal Justice receive a broad and comprehensive background that examines all aspects of crime and how society reacts to it. Students will learn about criminology—the causes and factors of crime; and the criminal justice system's role and function—including policing, courts, and corrections.

The program challenges students to think with diverse world views and intense study of current events. The program equips students to be the next generation of criminal justice practitioners, policymakers, and researchers for positions at the local, state, and federal levels; law school; or graduate study.

General Education 23 Requirements		
33 credit hours		33
Criminal Justice Major Requ	irements (42 credit hours)	
Core Courses (18 credit hou	rs)	
CRJ 101	INTRODUCTION TO CRIMINAL JUSTICE	3
CRJ 201	CRIMINAL LAW	3
CRJ 202	THE POLICE PROCESS	3
CRJ 204	THE CORRECTIONAL PROCESS	3
CRJ 303	CRIMINAL JUSTICE THEORY AND IDEOLOGY	3
CRJ 315	RESEARCH METHODS IN CRIMINAL JUSTICE	3
Supporting Courses (6 credit hours)		
Select two from the following	ng:	6
CRJ 250	INTRODUCTION TO INTELLIGENCE ANALYSIS	
CRJ 301	POLICE ORGANIZATION AND MANAGEMENT	
CRJ 302	CRIMINAL JUSTICE AND THE COMMUNITY	
CRJ 305	THE JUVENILE JUSTICE SYSTEM	
CRJ 306	PROBATION, PAROLE, AND COMMUNITY CORRECTIONS	
CRJ 307	COMPARATIVE CRIMINAL JUSTICE SYSTEM	
CRJ 308	CRIME PREVENTION	
CRJ 317	CONSTITUTIONAL ISSUES IN CRIMINAL JUSTICE	
CRJ 320	CRIMINAL COURTS	
CRJ 355	CRIME ANALYSIS	
Advanced Electives (6 credit hours)		
Select two from the following	ng:	6

CRJ 402 ADVANCED ADMINISTRATION IN CRIMINAL JUSTICE		
CRJ 404	WHITE-COLLAR AND CORPORATE CRIME	
CRJ 406	CORRECTIONAL INSTITUTIONS AND PROGRAMS	
CRJ 408	PROSEMINAR IN CRIMINAL JUSTICE 1	
CRJ 409	ADVANCED ISSUES IN LAW ENFORCEMENT	
CRJ 410	ORGANIZED CRIME	
CRJ 420	ADVANCED ISSUES IN PUNISHMENT AND CORRECTIONS	
CRJ 440	DRUGS, CRIME, AND DRUG POLICY	
CRJ 450	TERRORISM AND CRIMINAL JUSTICE	
CRJ 455	ADVANCED INTELLIGENCE ANALYSIS	
CRJ 470	ADVANCED SEMINAR IN CRIMINAL JUSTICE	
CRJ 485	MOCK TRIAL	
CRJ 488	INTERNSHIP IN CRIMINAL JUSTICE ² (3-15)	
CRJ 495	SPECIAL PROJECT ³ (1-3)	
CRJ 499	INDEPENDENT STUDY ³ (3-15)	
Senior Seminar and Diversity	y Requirement (3 credit hours)	
Select one from the following	ng:	
CRJ 425	RACE, ETHNICITY, AND THE ADMINISTRATION OF JUSTICE	
CRJ 430	GENDER AND THE ADMINISTRATION OF JUSTICE	
Statistics Core Requirement	(3 credit hours)	
Select one from the following	ng: 3	
CRJ 310	STATISTICS IN CRIMINAL JUSTICE	
ECO 305	STATISTICS FOR ECONOMICS	
MAT 311	INTRODUCTORY PROBABILITY AND STATISTICS	
PSY 350	STATISTICS IN PSYCHOLOGICAL RESEARCH	
SOC 299	SOCIAL STATISTICS	
Professional, Behavioral, an	nd Social Science Electives (6 credit hours)	
Select two courses from two different departments:		

ANT 325	FORENSIC ANTHROPOLOGY
BUS 312	FINANCIAL ACCOUNTING
BUS 334	BUSINESS LAW I
BUS 360	PRINCIPLES OF MANAGEMENT
CAS 301	PERSPECTIVES ON CHILD ABUSE AND ADVOCACY
CRS 302	CREATIVE APPROACHES TO PROBLEM SOLVING
ECO 302	WOMEN IN THE ECONOMY
ECO 312	URBAN ECONOMICS
ECO 350	PUBLIC FINANCE
ECO 360	INTRODUCTION TO THE ECONOMIC ANALYSIS OF LAW
ENG 300	WRITING FOR THE PROFESSIONS
ENG 302	TECHNICAL WRITING
FOR 312	CHEMISTRY AND CRIMINALISTICS (4)
HEW 320	PSYCHOACTIVE DRUGS AND HEALTH
HEW 425	ALCOHOL PROBLEMS
HIS 311	AMERICAN IMMIGRATION AND EMIGRATION
HIS 322	AFRICAN AMERICAN HISTORY
HIS 341	AFRICAN AMERICANS AND CIVIL RIGHTS
LIB 300	ADVANCED LIBRARY RESEARCH METHODS
PAD 435	ADMINISTRATIVE PRACTICES IN PUBLIC AND NONPROFIT SECTORS
PHI 304	PHILOSOPHY OF LAW
PHI 310	HISTORY OF ETHICS
PHI 314	RIGHTS AND RESPECT
PLN 325	MAPS AND MAPMAKING USING GIS
PLN 380	NEIGHBORHOOD PLANNING AND COMMUNITY DEVELOPMENT
PSC 305	ENVIRONMENTAL POLICY
PSC 312	LEGISLATIVE PROCESS
PSC 315	STATE AND LOCAL GOVERNMENT AND POLITICS

PSC 317	U.S. CONSTITUTIONAL LAW
PSC 319	GAY, LESBIAN, BISEXUAL, TRANSGENDER, QUESTIONING POLITICS
PSC 320	U.S. CIVIL LIBERTIES
PSC 321	CIVIL PROCEDURE
PSC 345	POLITICS AND HISTORY OF THE MIDDLE EAST
PSC 360	PUBLIC ADMINISTRATION
PSC 364	AMERICAN PUBLIC POLICY
PSC 421	DISCRIMINATION AND THE U.S. CONSTITUTION
PSY 325	SOCIAL BEHAVIOR
PSY 367	ORGANIZATIONAL BEHAVIOR
PSY 375	FORENSIC PSYCHOLOGY
PSY 376	HEALTH PSYCHOLOGY
PSY 392	ABNORMAL PSYCHOLOGY
PSY 393	ABNORMAL CHILD PSYCHOLOGY
PSY 480	PSYCHOTHERAPY: THEORY, RESEARCH, AND PROCEDURES
REL 321	WORLD RELIGIONS
SAF 305	FUNDAMENTALS OF SAFETY
SAF 310	PERSONAL SAFETY AND FIRST AID
SAF 340	COMMUNITY SAFETY
SSE 363	AMERICAN IDENTITY IN TRANSITION: DIVERSITY AND PLURALISM IN THE UNITED STATES
SOC 321	THE AFRICAN AMERICAN FAMILY
SOC 330	SOCIAL PSYCHOLOGY
SOC 340	SOCIOLOGY OF THE CITY
SOC 350	POWER, CLASS, AND INEQUALITY
SOC 351	SOCIOLOGY OF RACE AND ETHNICITY
SOC 353	ENVIRONMENT AND SOCIETY
SOC 370	SOCIOLOGY OF DEVIANT BEHAVIOR
SOC 380	COCIOLOGY OF CDIME
300 380	SOCIOLOGY OF CRIME

SOC 382	SOCIOLOGY OF LAW	
SOC 383	SOCIOLOGY OF PUNISHMENT AND CORRECTIONS	
SOC 390	SOCIOLOGY OF JUVENILE DELINQUENCY	
SOC 393	SOCIOLOGY OF MENTAL ILLNESS	
SPA 201	INTERMEDIATE SPANISH I	
SPC 306	PUBLIC SPEAKING	
SPC 307	GROUP COMMUNICATON	
SPC 311	INTERCULTURAL COMMUNICATION	
SWK 301	POVERTY AND ECONOMIC JUSTICE	
All College Electives		
39-45 credit hours		39-45
Total Credit Hours		120

The Criminal Justice Department offers three concentrations for students who would like to specialize in a particular field of criminal justice. To register for a concentration, please see the Department. Students who do not select a concentration are automatically placed in the integrated concentration that allows students to tailor their major by choosing their supporting and advanced electives to fit their educational and career goals.

Concentration in Policing

The primary objective of the policing concentration is to provide students with the appropriate foundation for understanding policing issues. It helps prepare students for professional careers in law enforcement available in federal, state, local, or private justice-related organizations.

Supporting Courses:

CRJ 301	POLICE ORGANIZATION AND MANAGEMENT	3
CRJ 317	CONSTITUTIONAL ISSUES IN CRIMINAL JUSTICE	3
Advanced Electives:		
CRJ 409	ADVANCED ISSUES IN LAW ENFORCEMENT	3
CRJ 440	DRUGS, CRIME, AND DRUG POLICY	3

Concentration in Corrections

The primary objective of the corrections concentration is to enhance students' knowledge of correctional programs, policies, and issues. It helps prepare students for professional careers in institutional or community-based correctional programs available in federal, state, local, or privately-run organizations.

Supporting Courses:

CRJ 302	CRIMINAL JUSTICE AND THE COMMUNITY	3
CRJ 306	PROBATION, PAROLE, AND COMMUNITY CORRECTIONS	3

Advanced Electives:		
CRJ 406	CORRECTIONAL INSTITUTIONS AND PROGRAMS	3
CRJ 420	ADVANCED ISSUES IN PUNISHMENT AND CORRECTIONS	3

Concentration in Intelligence Analysis

The primary objective of the intelligence analysis concentration is to allow students to develop competency and practical knowledge of intelligence analysis issues and techniques. It helps prepare students for professional careers in intelligence and/or crime analysis in government agencies or law enforcement available in federal, state, or local organizations.

Supporting Courses: CRJ 250 INTRODUCTION TO INTELLIGENCE ANALYSIS 3 CRJ 355 CRIME ANALYSIS 3 Advanced Electives: CRJ 450 TERRORISM AND CRIMINAL JUSTICE 3

3

Students are able to:

CRJ 455

- 1. Demonstrate knowledge of legal principles governing criminal justice.
- 2. Demonstrate an appropriate understanding of the theories and ideologies of crime and their interactive influences with criminal justice policies and practices.
- 3. Demonstrate knowledge of the organization and process in criminal justice agencies.

ADVANCED INTELLIGENCE ANALYSIS

- 4. Demonstrate knowledge of the effects of crime control efforts.
- 5. Demonstrate knowledge of the research process in criminal justice.
- 6. Demonstrate critical thinking.
- 7. Demonstrate preparation for a career in criminal justice or graduate study.

Criminal Justice Combined Pathway (B.S. and M.S.)

Bachelor of Science Program Program Code: BS-EP Major Code: CRJ Master of Science Program

Master of Science Program Program Code: MS-SP Major Code: CRJ

Criminal Justice Department
Cassety Hall Room 102
(716) 878-4517
criminaljustice.buffalostate.edu/

¹ CRJ 408 may be taken 3 times as long as 3 different topics are taken. Only two CRJ 408 courses will apply to the CRJ major. If you take more than 3 CRJ 408 courses, the extra courses will be invalid and you will not receive credit.

² CRJ 488 requires senior class standing, a minimum cumulative GPA of 3.0 at Buffalo State and/or Instructor Permission.

³ CRJ 495 and CRJ 499 require senior class standing and a minimum cumulative GPA of 3.0 at Buffalo State. No more than one CRJ 499 and/or CRJ 495 course may be used in the major and none may be used in the major if taken prior to successful completion of CRJ 315 without written consent of the department.

Enrollment in a combined pathway allows highly qualified, current SUNY Buffalo State students to work on the Master of Science in Criminal Justice while completing the bachelor's degree. Up to 12 credits of designated master's courses are incorporated into the bachelor's degree program and will count toward both the bachelor's degree and the master's degree.

Program Requirements

The combined pathway requires 144 credits total, of which 36 are master's credits leading to the MS in Criminal Justice. Students must meet all college, department and relevant concentration guidelines.

The program requires careful planning that should begin by the second year of the student's undergraduate career at SUNY Buffalo State. The student and the primary advisor (or department chair) should consult in planning the undergraduate degree program so that these requirements are met during undergraduate study and that the 12 credits of master's courses from the MS Program in Criminal Justice are included in the degree plan. Students must meet graduate expectations for academic progress and grade point average in their master's level courses to remain in the combined pathway.

Admission Requirements

Admission into the combined pathway is highly selective. Matriculated undergraduate students may apply to the BS/MS pathway in their third year (junior year) and will complete all of the application requirements for the program. The admission application process includes a minimum GPA of 3.2, completion of 89 credit hours, of which 30 credits must include criminal justice core and prerequisite requirements (see below), and a letter of recommendation.

Program Requirements B.S. in Criminal Justice

General Education 23 Requirements			
33 credit hours			
Criminal Justice Major Requirements (42 credit hours)			
Core Courses (18 credit hours)			
CRJ 101	INTRODUCTION TO CRIMINAL JUSTICE	3	
CRJ 201	CRIMINAL LAW	3	
CRJ 202	THE POLICE PROCESS	3	
CRJ 204	THE CORRECTIONAL PROCESS	3	
CRJ 303	CRIMINAL JUSTICE THEORY AND IDEOLOGY	3	
CRJ 315	RESEARCH METHODS IN CRIMINAL JUSTICE	3	
Statistics Core Requirements (3 credit hours)		3	
Select one course from the following:			
CRJ 310	STATISTICS IN CRIMINAL JUSTICE		
ECO 305	STATISTICS FOR ECONOMICS		
MAT 311	INTRODUCTORY PROBABILITY AND STATISTICS		
PSY 350	STATISTICS IN PSYCHOLOGICAL RESEARCH		
SOC 299	SOCIAL STATISTICS		
Senior Seminar and Diversity Requirement (3 credit hours)			

Select one course fro	om the following:	
CRJ 425	RACE, ETHNICITY, AND THE ADMINISTRATION OF JUSTICE	
CRJ 430	GENDER AND THE ADMINISTRATION OF JUSTICE	
Undergraduate Majo	or Electives	
Supporting Courses (6 credit hours)	6
Select two courses fr	rom the following:	
CRJ 250	INTRODUCTION TO INTELLIGENCE ANALYSIS	
CRJ 301	POLICE ORGANIZATION AND MANAGEMENT	
CRJ 302	CRIMINAL JUSTICE AND THE COMMUNITY	
CRJ 305	THE JUVENILE JUSTICE SYSTEM	
CRJ 306	PROBATION, PAROLE, AND COMMUNITY CORRECTIONS	
CRJ 307	COMPARATIVE CRIMINAL JUSTICE SYSTEM	
CRJ 308	CRIME PREVENTION	
CRJ 317	CONSTITUTIONAL ISSUES IN CRIMINAL JUSTICE	
CRJ 320	CRIMINAL COURTS	
CRJ 355	CRIME ANALYSIS	
Advanced Electives (6 credit hours for Intelligence Analysis, Policing, Corrections Concentrations)	6
Select two courses fr	rom the following:	
CRJ 406	CORRECTIONAL INSTITUTIONS AND PROGRAMS	
CRJ 409	ADVANCED ISSUES IN LAW ENFORCEMENT	
CRJ 420	ADVANCED ISSUES IN PUNISHMENT AND CORRECTIONS	
CRJ 440	DRUGS, CRIME, AND DRUG POLICY	
CRJ 450	TERRORISM AND CRIMINAL JUSTICE	
CRJ 455	ADVANCED INTELLIGENCE ANALYSIS	
Required Graduate N	Najor Courses (12 credit hours)	
CRJ 501	THEORETICAL PERSPECTIVES ON CRIME AND CRIMINAL JUSTICE *	3
CRJ 504	RESEARCH METHODS IN CRIMINAL JUSTICE *	3
CRJ 601	CORRECTIONAL STRATEGIES *	3

CRJ 606	LAW ENFORCEMENT ISSUES *	3
*courses used in B.S. and M	S. simultaneously	

Total Credit Hours: 120

Program Requirements M.S. in Criminal Justice

Required Graduate	Major Courses	
Core Courses (18 credit hours)		
All six required		
CRJ 501	THEORETICAL PERSPECTIVES ON CRIME AND CRIMINAL JUSTICE *	3
CRJ 504	RESEARCH METHODS IN CRIMINAL JUSTICE *	3
CRJ 601	CORRECTIONAL STRATEGIES *	3
CRJ 604	CRIMINAL COURTS *	3
CRJ 606	LAW ENFORCEMENT ISSUES *	3
CRJ 609	STATISTICS IN CRIMINAL JUSTICE *	3
*courses used in B	.S. and M.S. simultaneously	
Graduate Major Ele	ectives (15-18 credit hours)	15-18
CRJ 508	HISTORY OF CRIMINAL JUSTICE	
CRJ 511	ADVANCED CRIME ANALYSIS	
CRJ 590	INDEPENDENT STUDY (1-3)	
CRJ 602	ORGANIZATIONAL BEHAVIOR AND THE MANAGEMENT PROCESS IN CRIMINAL JUSTICE	
CRJ 603	ADMINISTRATION OF JUSTICE	
CRJ 608	SPECIAL TOPICS IN CRIMINAL JUSTICE	
CRJ 611	DATA-DRIVEN POLICING	
CRJ 620	WHITE-COLLAR CRIME	
CRJ 622	JUVENILE JUSTICE	
CRJ 624	COMPUTER APPLICATION	
CRJ 625	RACE AND ETHNICITY IN CRIMINAL JUSTICE	
CRJ 626	GENDER ISSUES IN CRIMINAL JUSTICE	
CRJ 630	CONSTITUTIONAL ISSUES IN CRIMINAL JUSTICE	

CRJ 635	CRIMINAL JUSTICE ETHICS	
CRJ 710	RESEARCH PROJECT	
Mandatory Exit Requirement (0-3 credit hours)		0-3
Select one from the following:		
Comprehensive Exam		0
CRJ 690	MASTER'S PROJECT	3

Total Credit Hours: 36

Dietetics Combined Pathway (B.S. and M.S.)

Bachelor of Science Program

Program Code: BS-EP Major Code: DIE

Master of Science Program Program Code: MS-SP Major Code: DIE

Health, Nutrition and Dietetics Department Caudell Hall 334 (716) 878-5913 hnd.buffalostate.edu/

Enrollment in a combined pathway allows highly qualified, current SUNY Buffalo State University students to work on the Master of Science in Dietetics while completing the bachelor's degree. Up to 12 Twelve credits of designated master's courses are incorporated into the bachelor's degree program and will count toward both the bachelor's degree and the master's degree. The undergraduate B.S. portion of the pathway is in-person. The M.S., Dietetics is online.

The Dietetics Combined Pathway has been accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) as Future Education Model (FEM) graduate program (Future Education Model Standards and Templates). FEM accreditation standards integrate didactic coursework with supervised experiential learning in a competency-based curriculum designed to prepare nutrition and dietetics practitioners for future practice. Effective January 1, 2024, the Commission on Dietetic Registration (CDR) will requires a minimum of a master's degree to be eligible to take the credentialing exam to become a registered dietitian nutritionist (RDN).

Admission Requirements

Admission into the combined pathway is highly selective. Matriculated undergraduate students may apply to the B.S. and M.S. pathway in their second year for a junior year start and will complete all of the application requirements for the program. The admission application process includes a minimum GPA of 2.75, completion of prerequisite courses (transfer student may transfer many of these courses) specified for the BS, Dietetics two letters of recommendation, two faculty interviews, and personal statement. To advance to the master's portion of the pathway, a GPA 3.0 is required.

Prerequisite courses include:

BIO 100 Principles of Biology

BIO 308 Human Anatomy and Physiology I

BIO 309 Human Anatomy and Physiology Lab

CHE 111/113 Fundamentals of Chemistry I and Laboratory I

CHE 112/114 Fundamentals of Chemistry II and Laboratory II

CHE 201/203 Organic Chemistry I and Laboratory I

CHE 322 Biological Chemistry

NFS 100 Introduction to Food Preparation NFS 102 Introductory Nutrition

NFS 200 Applied Food Chemistry

NFS 211 Applied Management in Dietetics I

NFS 230 Introduction to Dietetics NFS 302 Advanced Nutrition NFS 315 Life Cycle and Community Nutrition I PSY 101 Introduction to Psychology

Program Requirements

The combined pathway requires 144 140 credits total, of which 30 are master's credits leading to the M.S. in Dietetics. Students who complete the pathway become eligible to sit for the RDN credentialing exam: as the pathway includes 1000 hours of experiential learning and ACEND required competencies.

The program requires careful planning that should begin in the first year of the student's undergraduate career at SUNY Buffalo State University. The student their primary advisor should consult their major advisor each semester in planning the undergraduate degree program so that these degree requirements are met during undergraduate study. and that up to 12 credits of master's courses from the M.S. Program in Dietetics are included in the degree plan. Students must meet graduate expectations for academic progress and grade point average in their master's level courses to remain in the combined pathway.

Dietetics, B.S.

General Education Requirements		21
Required Undergradua	ite courses for the major	
NFS 100	INTRODUCTION TO FOOD PREPARATION	3
NFS 102	INTRODUCTORY NUTRITION	3
NFS 200	APPLIED FOOD CHEMISTRY	1
NFS 211	APPLIED MANAGEMENT IN DIETETICS I	3
NFS 230	INTRODUCTION TO DIETETICS	2
NFS 302	ADVANCED NUTRITION	3
NFS 311	APPLIED MANAGEMENT IN DIETETICS II	3
NFS 315	LIFE CYCLE AND COMMUNITY NUTRITION I	3
NFS 316	LIFE CYCLE AND COMMUNITY NUTRITION II	3
NFS 330	INTEGRATIVE AND FUNCTIONAL NUTRITION	1
NFS 401	MEDICAL NUTRITIONAL THERAPY I	4
NFS 402	MEDICAL NUTRITIONAL THERAPY II	3
NFS 403	MEDICAL NUTRITIONAL THERAPY III	3
NFS 405	PRINCIPLES OF NUTRITION EDUCATION	2
NFS 430	INTRODUCTION TO NUTRITION RESEARCH	3
NFS 445	NUTRITION CARE A	3
NFS 446	NUTRITION CARE B	3
NFS 447	NUTRITION CARE C	4

NFS 448	NUTRITION CARE D	4
NFS 449	NUTRITION CARE E	3
Required courses outs	ide the major (32 credit hours)	
BIO 100	PRINCIPLES OF BIOLOGY	3
BIO 308	SURVEY OF HUMAN ANATOMY AND PHYSIOLOGY	3
BIO 309	LABORATORY SURVEY OF HUMAN ANATOMY AND PHYSIOLOGY	1
BIO 355	SURVEY OF MICROBIOLOGY	3
CHE 111 & CHE 113	FUNDAMENTALS OF CHEMISTRY I and LABORATORY FOR FUNDAMENTALS OF CHEMISTRY I	4
CHE 112 & CHE 114	FUNDAMENTALS OF CHEMISTRY II and LABORATORY FOR FUNDAMENTALS OF CHEMISTRY II	4
CHE 201 & CHE 203	ORGANIC CHEMISTRY I and ORGANIC CHEMISTRY LABORATORY I	4
CHE 322	BIOLOGICAL CHEMISTRY	4
MAT 311	INTRODUCTORY PROBABILITY AND STATISTICS (or equivalent)	3
PSY 101	INTRODUCTION TO PSYCHOLOGY	3
Required Graduate co	urses (12 credit hours)	
NFS 601	LEADERSHIP AND PROJECT MANAGEMENT IN DIETETICS	3
*NFS 571	EXPERIENTIAL LEARNING IN FOOD SERVICE SYSTEMS IN HEALTH CARE	3
*NFS 605	CURRENT TRENDS IN NUTRITION *	3
*NFS 689	METHODS OF NUTRITIONAL RESEARCH *	3
*HEW 605	EPIDEMIOLOGY *	3
		122
Dietetics, M.S. Required Graduate ma	ajor courses	
NFS 550	GRADUATE PRACTICUM IN DIETETICS	3
*NFS 571	EXPERIENTIAL LEARNING IN FOOD SERVICE SYSTEMS IN HEALTH CARE	3
*NFS 601	LEADERSHIP AND PROJECT MANAGEMENT IN DIETETICS	3
*NFS 605	CURRENT TRENDS IN NUTRITION *	3
*HEW 605	EPIDEMIOLOGY *	3

NFS 607	EXPERIENTIAL LEARNING IN WEIGHT MANAGEMENT AND DIABETES PREVENTION AND TREATMENT	3
NFS 609	EXPERIENTIAL LEARNING IN ADVANCED MEDICAL NUTRITION THERAPY	3
NFS 612	NUTRITION COUNSELING	3
*NFS 689	METHODS OF NUTRITIONAL RESEARCH *	3
NFS 690	MASTER'S PROJECT	3
Total Graduate Credit Hours		30

Early Childhood and Childhood Education (Birth- Grade 6, Combined Program, B.S.)

Bachelor of Science Program Program Code: BS-ED Major Code: ECC

Elementary Education, Literacy and Educational Leadership Bacon Hall 302 (716) 878-5916 elementaryeducation.buffalostate.edu/

Accredited: Council for the Accreditation of Educator Preparation (CAEP) (formerly NCATE)

Enrollment in all teacher education programs follows the guidelines for "Admission to Teacher Education Programs" found in this catalog. Applicants who do not yet meet all admissions criteria should consult with the department.

Professional Licensure: This program leads to a recommendation for NYS certification; please check for <u>certification requirements in</u> all other states

Student Teaching

The program is clinically-rich with carefully designed field experiences that culminate in one full semester of student teaching. The culminating courses for the Combined education majors (ECC) include two supervised student teaching experiences. Eligibility and placement for each student teaching experience is determined by the department office in cooperation with public schools in the greater Buffalo area. It is expected that students in these majors will have at least one urban teaching experience. Successful Graduates will be recommended for New York State Initial Certification to teach children from birth through grade 6 (Combined Childhood and Early Childhood, ECC).

Transfer Students

Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of professional sequence courses applied to the Combined Childhood and Early Childhood education major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required 3.0 cumulative GPA for admission to the major. Students planning to transfer as juniors into the Combined program and wishing to complete their program in four semesters must seek advisement at the institution in which they initially enrolled to assure that the prerequisite course equivalencies are met. Since the teacher candidate will graduate with recommendation for two certification areas, Combined majors should anticipate an additional semester of college work.

Candidates should consult the Teacher Certification website for current seminars and workshops. https://teachercertification.buffalostate.edu/seminars-and-workshops

Combined Childhood and Early Childhood education majors must complete one year of college-level study of one language other than English. Typically, two years of high school study of one language is equivalent to one year of college-level work. Combined education majors must also complete a distribution requirement of at least 6 credit hours in each of the following areas: mathematics, science, social studies, and English (not including <u>CWP 101</u> and <u>CWP 102</u>).

Many of the courses in our professional sequence are taught in authentic settings for clinically-rich mentored experiences. As a result, the teacher candidates will have observation, tutoring, and teaching experiences in a variety of placements in our Professional Development Schools Consortium. Combined education majors are required to complete a 30-credit hour academic concentration in addition to the professional program requirements; the concentration seeks to broaden students' academic backgrounds. Descriptions of the approved concentrations can be found in the Elementary Education Department Handbook for Majors, available on the department website, or from the department office. Currently, the concentration may be chosen from: American studies, English, Liberal Arts, Spanish, mathematics, science, social studies or urban studies.

General Education	23 Requirements	
30 credit hours ¹		30
Concentration Req	juirements	
21-30 credit hours courses)	(credit hours will vary when double dipped with General Education and Distribution	21-30
Distribution Course	es beyond General Education	
9 credit hours		9
Education Major R	equirements (69 credit hours)	
SPF 202	CHILD DEVELOPMENT AND EDUCATION	3
SPF 203	SCHOOL AND SOCIETY	3
EDU 201	INTRODUCTION TO EDUCATION	3
SPF 302	EDUCATIONAL PSYCHOLOGY: ELEMENTARY EDUCATION	3
EDU 211	INTRODUCTION TO LITERACY	3
EDU 220	PROGRAMS FOR INFANTS AND TODDLERS	3
EDU 310	TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL	3
EDU 311	THE TEACHING OF READING AND THE OTHER LANGUAGE ARTS IN THE ELEMENTARY SCHOOL	6
EDU 313	TEACHING SCIENCE IN EARLY CHILDHOOD AND CHILDHOOD SETTINGS	3
EDU 316	TEACHING ELEMENTARY SCHOOL MATHEMATICS	6
EDU 329	INTEGRATED THEMATIC INSTRUCTION FOR YOUNG CHILDREN	6
EDU 326	EARLY LITERACY AND LANGUAGE DEVELOPMENT	3
EXE 362	CLASSROOM MANAGEMENT AND POSITIVE BEHAVIOR SUPPORTS	3
EXE 371	FOUNDATIONS OF TEACHING CHILDREN WITH DISABILITIES	3

EDU 400	PRACTICUM IN ELEMENTARY TEACHING I	6
EDU 402	SEMINAR IN EDUCATION	1-3
EDU 410	PRACTICUM IN EARLY CHILDHOOD TEACHING	6
EDU 411	PARENTS, SCHOOLS, AND COMMUNITY	3
Total Credit Hours		126-138

¹ General Education courses may overlap with required courses in the major, which could reduce the total number of credit hours required. Advisement is strongly encouraged.

The total number of required hours will vary with course selection. Students should refer to the Elementary Education Handbook and an academic advisor for more detailed information.

Early Childhood Education (Birth- Grade 2, B.S.)

Bachelor of Science Program Program Code: BS-ED Major Code: ECE

Elementary Education, Literacy and Educational Leadership Bacon Hall 302 (716) 878-5916 elementaryeducation.buffalostate.edu/

Accredited: Council for the Accreditation of Educator Preparation (CAEP) (formerly NCATE)

Enrollment in all teacher education programs follows the guidelines for "Admission to Teacher Education Programs" found in this catalog. Applicants who do not yet meet all admissions criteria should consult with the department.

Professional Licensure: This program leads to a recommendation for NYS certification; please check for <u>certification requirements in all other states</u>

Student Teaching

The program is clinically-rich with carefully designed field experiences that culminate in one full semester of student teaching. The culminating courses for the early childhood education majors may vary, but usually include one or two supervised student teaching experiences. Eligibility and placement for each student teaching experience is determined by the department office in cooperation with public schools in the greater Buffalo area. It is expected that students in these majors will have at least one urban teaching experience.

Successful Graduates will be recommended for New York State Initial Certification to teach children from birth through grade 2 (early childhood, ECE).

Transfer Students

Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of professional sequence courses applied to the early childhood education major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required 3.0 cumulative GPA for admission to the major. Students planning to transfer as juniors into the early childhood programs and wishing to complete their programs in four semesters must seek advisement at the institution in which they initially enrolled to assure that the prerequisite course equivalencies are met. Candidates should consult the Teacher Certification website for current seminars and workshops. https://teachercertification.buffalostate.edu/seminars-and-workshops

Early Childhood education majors must complete one year of college-level study of one language other than English. Typically, two years of high school study of one language is equivalent to one year of college-level work. Early childhood education majors must

also complete a distribution requirement of at least 6 credit hours in each of the following areas: mathematics, science, social studies, and English (not including <u>CWP 101</u> and <u>CWP 102</u>).

Many of the courses in our professional sequence are taught in authentic settings for clinically-rich mentored experiences. As a result, the teacher candidates will have observation, tutoring, and teaching experiences in a variety of placements in our Professional Development Schools Consortium. Early childhood education majors are required to complete a 30-credit hour academic concentration in addition to the professional program requirements; the concentration seeks to broaden students' academic backgrounds. Descriptions of the approved concentrations can be found in the Elementary Education Department Handbook for Majors, available on the department website, or from the department office. Currently, the concentration may be chosen from: American studies, English, Liberal Arts, Spanish, mathematics, science, social studies or urban studies.

General Education 23 Re	equirements	
30 credit hours ¹		30
Concentration Requirem	ents	
30 credit hours		30
Distribution Courses Bey	rond General Education	
9 credit hours		9
Education Major Require	ements (54 credit hours)	
SPF 202	CHILD DEVELOPMENT AND EDUCATION	3
EDU 201	INTRODUCTION TO EDUCATION	3
SPF 302	EDUCATIONAL PSYCHOLOGY: ELEMENTARY EDUCATION	3
EDU 211	INTRODUCTION TO LITERACY	3
EDU 220	PROGRAMS FOR INFANTS AND TODDLERS	3
EDU 311	THE TEACHING OF READING AND THE OTHER LANGUAGE ARTS IN THE ELEMENTARY SCHOOL	6
EDU 329	INTEGRATED THEMATIC INSTRUCTION FOR YOUNG CHILDREN	6
EDU 326	EARLY LITERACY AND LANGUAGE DEVELOPMENT	3
EXE 362	CLASSROOM MANAGEMENT AND POSITIVE BEHAVIOR SUPPORTS	3
EXE 371	FOUNDATIONS OF TEACHING CHILDREN WITH DISABILITIES	3
EDU 375	INTEGRATION OF TECHNOLOGY IN EDUCATION	3
EDU 400	PRACTICUM IN ELEMENTARY TEACHING I	6
EDU 402	SEMINAR IN EDUCATION	1-3

EDU 410	PRACTICUM IN EARLY CHILDHOOD TEACHING	6
EDU 411	PARENTS, SCHOOLS, AND COMMUNITY	3
Total Credit Hours		120

¹ General education courses may overlap with required courses in the major which could reduce the total number of credit hours required. Advisement is strongly encouraged.

The total number of required hours will vary with course selection. Students should refer to the Elementary Education Department Handbook and an academic adviser for more detailed information.

Earth Sciences (B.S.)

Bachelor of Science Program Code: BS-AS Major Code: EAS

Geosciences Department 160 Science and Math Complex (716) 878-6731 geosciences.buffalostate.edu/

The Earth Sciences program offers students the opportunity to develop a broad understanding of the earth as a dynamic, interacting system of land, sea, atmosphere, and solar system. Coursework in chemistry, calculus, and physics are required, but more courses in these areas are expected, particularly for students intent upon careers in the geosciences, or contemplating graduate study. Student majors are strongly encouraged to pursue independent research under faculty supervision and/or an internship experience. Students may find additional information about undergraduate research possibilities from faculty and by visiting the Office of Undergraduate Research Web site at undergraduateresearch.buffalostate.edu/ (http://undergraduateresearch.buffalostate.edu/). A departmental honors program also is available. Students should contact the department for additional information.

NOTE: Students seeking New York State Teacher Certification are advised to review the M.S.Ed. in Science Education degree program in the graduate catalog; this program requires completion of an undergraduate degree in a core science prior to admission. The program is designed to enable students to quickly and efficiently develop the knowledge and skills required for teaching and leads to initial NYS certification for those candidates meeting the program admission requirements. Contact the department for advisement on the quick admission and 4+1 pathways available for Buffalo State students.

General Education 23 Requirements		
33 credit hours		33
Earth Science Major Re	equirements (58-63 credit hours)	· · · · · · · · · · · · · · · · · · ·
Required GES Courses ((45-46 credit hours)	
Select 6 credit hours fro	om the following:	6
GES 101	INTRODUCTORY GEOLOGY	
GES 102	HISTORICAL GEOLOGY	
GES 111	OCEANOGRAPHY	
GES 123	ENVIRONMENTAL EARTH SCIENCE	

GES 124	NATURAL HAZARDS	
GES 132	THE SOLAR SYSTEM	
At least 7 credit ho	ours from the following:	7-8
GES 200	FIRST YEAR GEOLOGY EXPERIENCE	
GES 201	PHYSICAL GEOLOGY (4)	
GES 202	EARTH AND ENVIRONMENTS THROUGH TIME (4)	
All of the following	(26 credit hours):	
GES 131	INTRODUCTORY ASTRONOMY	3
GES 241	METEOROLOGY	3
GES 303	MINERALOGY	4
GES 306	SEDIMENTOLOGY AND STRATIGRAPHY	4
GES 307	GEOMORPHOLOGY	4
GES 408	STRUCTURAL GEOLOGY	4
GES 418	STRUCTURAL GEOLOGY FIELD EXPERIENCE	1
GES 428	GEOLOGICAL HAZARDS	3
Select 6 credit hou	rs from the following:	6
Upper-division Ast	ronomy (3 credit hours)	
GES 323	THIRD- YEAR RESEARCH AND FIELD METHODS EXPERIENCE	
GES 452	HYDROGEOLOGY	
Select one (3 credi	t hours)	3
GES 431	PLANETARIUM SEMINAR	
GES 472	GEOLOGY SENIOR SEMINAR	
Required Cognate	Courses (13-17 credit hours)	13-17
CHE 111 & CHE 113	FUNDAMENTALS OF CHEMISTRY I and LABORATORY FOR FUNDAMENTALS OF CHEMISTRY I (4)	
Select one of the fo	ollowing (3-5 credit hours)	3-5
PHY 107	GENERAL PHYSICS I (4)	

PHY 111	UNIVERSITY PHYSICS I (5)	
BIO 104	ENVIRONMENTAL BIOLOGY	
BIO 111	FOUNDATIONS OF BIOLOGY	
BIO 213	INTRODUCTION TO ECOLOGY, EVOLUTION, AND BEHAVIOR (4)	
Mathematics (3-5 credit	hours)	3-5
Choose one of the follow	ving:	
MAT 124	FUNCTIONS AND MODELING II	
MAT 126	APPLIED CALCULUS I (4)	
MAT 161/163	CALCULUS I	
GIS Course (3 credit hou	rs)	3
GEG 325	MAPS AND MAPMAKING USING GIS	
All College Electives		
19-29 credit hours		19-29
Total Credit Hours		120

Students will demonstrate:

- 1. demonstrate knowledge of fundamental concepts and principles of Earth Sciences
- 2. be able to work as part of a team and to communicate results
- 3. demonstrate critical thinking skills in Earth Sciences disciplines
- 4. be competent in scientific writing, and use of earth sciences literature
- 5. be able to collect, analyze and interpret field and laboratory data
- 6. be qualified in earth sciences-used computer hardware and software

Economics (B.A.)

Bachelor of Arts Program Program Code: BA-EP Major Code: ECO

Business, Economics, and Public Administration Chase Hall 322 (716) 878-4239 economics.buffalostate.edu/

The B.A. degree program in economics provides a solid foundation in the basic skills to formulate decisions as consumers, resource owners, and managers in business, government, and nonprofit organizations. This program is designed to prepare students to participate in the global economy by providing a strong focus on the international aspects of economics. Students who choose this program are encouraged to complement the international focus of the program by taking additional courses in history, political science, and geography. In addition to providing preparation for a variety of management positions in business, government and not-for-profits, the program offers an excellent preparation for graduate work in international business, economics, politics and law.

Admission Requirements

Transfer or uncommitted students must have a minimum GPA of 2.0 in all previous college credits.

Transfer Students

Most courses taken at an accredited institution and relevant to the B.A. degree program will be accepted, but the majority of courses applied to the major must be courses completed at Buffalo State. In most cases, grades for transfer courses will be used in computing the required minimum GPA for admission into the program.

Honors Option for the B.A. Program: An honors designation is available for students who have established high standards of achievement and demonstrated a capacity for independent work. Students should contact the department for information on admission and requirements.

General Education 23 Requirements		
33 credit hours		33
Economics Major Requirements (36 credit hours)		
Required Courses (24 credit	hours)	
ECO 201	PRINCIPLES OF MACROECONOMICS	3
ECO 202	PRINCIPLES OF MICROECONOMICS	3
ECO 305	STATISTICS FOR ECONOMICS	3
ECO 307	INTERMEDIATE MICROECONOMICS	3
ECO 308	INTERMEDIATE MACROECONOMICS	3
ECO 405	HISTORY OF ECONOMIC THOUGHT	3
ECO 490	SENIOR SEMINAR	3
Select at least one course from	om the following:	3
ECO 401	INTERNATIONAL ECONOMICS	
ECO 403	COMPARATIVE ECONOMIC SYSTEMS	
ECO 404	ECONOMIC DEVELOPMENT	
FIN 400	INTERNATIONAL FINANCE	
Economics Electives Selected by Advisement		
12 credit hours ¹		12
All College Electives		
51 credit hours		51

It is strongly recommended that students who plan to pursue a Ph.D. in economics also complete, as a minimum, MAT 161, MAT 162, and MAT 202.

Total Credit Hours 120

¹ Only 3 hours of ECO 488, ECO 495, or ECO 499 may be included.

Students will:

- 1. understand basic economics and finance concepts.
- 2. be able to create technical reports using economics and/or financial concepts.
- 3. be able to use economic and/or financial models to analyze economics and/or finance problems.
- 4. be able to use Excel, SAS, or other software to analyze data.
- 5. learn how to create and give presentations using programs such as PowerPoint.

Economics (B.S.)

Bachelor of Science Program Program Code: BS-EP Major Code: ECO

Business, Economics, and Public Administration Chase Hall 322 (716) 878-4239 economics.buffalostate.edu/

The B.S. degree program in economics provides a solid foundation in the basic skills and analytical techniques that are necessary to understand changes in the broad economic environment and be able to formulate decisions as consumers, resource owners, and managerial personnel in business, government, and nonprofit organizations. Students choose a concentration in either applied economics or financial economics and complete additional required courses and specialized electives. Both concentrations prepare students for entry-level management positions in business, government, and nonprofit organizations, and provide excellent preparation for graduate work in business administration, economics, and law. Financial economics is the rigorous study of financial markets (bonds, derivatives, swaps, and equities) and their related institutions.

Transfer Students

Most courses taken at an accredited institution and relevant to the B.S. degree program will be accepted, but the majority of courses applied to the major must be courses completed at Buffalo State. In most cases, grades for transfer courses will be used in computing the required GPA for admission into the program.

Admission Requirements

Transfer or uncommitted students must have a minimum GPA of 2.0 in previous college credits.

General Educatio	n 23 Requirements	
33 credit hours		33
Economics Major	Requirements (39-45 credit hours)	
Required Courses	s (27 credit hours)	
BUS 312	FINANCIAL ACCOUNTING	3
ECO 201	PRINCIPLES OF MACROECONOMICS	3
ECO 202	PRINCIPLES OF MICROECONOMICS	3

ECO 305	STATISTICS FOR ECONOMICS	3
ECO 307	INTERMEDIATE MICROECONOMICS	3
ECO 308	INTERMEDIATE MACROECONOMICS	3
ECO 424	ECONOMETRICS	3
ECO 490	SENIOR SEMINAR	3
MAT 126	APPLIED CALCULUS I	4
or MAT 161	CALCULUS I	
Concentrations (12-18 c	credit hours)	
Select one of the follow	ring concentrations: 1	12-18
Applied Economics Concentration		
Financial Economics Concentration		
All College Electives		
36-48 credit hours		36-48
Total Credit Hours		120

It is strongly recommended that students who plan to pursue a Ph.D. in economics also complete, as a minimum, MAT 161, MAT 162, and MAT 202.

¹ Students are required to select one of two concentrations. Only 3 credit hours of ECO 488, ECO 495, or ECO 499 may be included.

Annlied	Franchics	Concentration
ADDIIEU	ECOHOHICS	Concentration

ECO 320 or ECO 325	MANAGERIAL ECONOMICS INDUSTRIAL ORGANIZATION	3
ECO 405	HISTORY OF ECONOMIC THOUGHT	3
Select at least 6 credit h	ours from the following:	6
ECO 300	LABOR ECONOMICS	
ECO 301	ECONOMICS OF LABOR RELATIONS	
ECO 302	WOMEN IN THE ECONOMY	
ECO 304	MONEY AND BANKING	
ECO 312	URBAN ECONOMICS	
ECO 323	NYS GOVERNMENT AND BUDGET	

ECO 350	PUBLIC FINANCE	
ECO 355	THE ECONOMICS OF ENERGY AND THE ENVIRONMENT	
ECO 360	INTRODUCTION TO THE ECONOMIC ANALYSIS OF LAW	
ECO 401	INTERNATIONAL ECONOMICS	
ECO 403	COMPARATIVE ECONOMIC SYSTEMS	
ECO 404	ECONOMIC DEVELOPMENT	
ECO 411	REGIONAL ECONOMIC ANALYSIS	
ECO 488	INTERNSHIP (3-12)	
ECO 495	SPECIAL PROJECT (1-3)	
ECO 499	INDEPENDENT STUDY (3-12)	
FIN 400	INTERNATIONAL FINANCE	
GEG 305	PRINCIPLES OF ECONOMIC GEOGRAPHY	
Total Credit Hours		12
Financial Economics Cond	centration	
BUS 313	MANAGERIAL ACCOUNTING	3
ECO 304	MONEY AND BANKING	3
ECO 304 FIN 314	MONEY AND BANKING CORPORATION FINANCE	3
FIN 314		
FIN 314	CORPORATION FINANCE	3
FIN 314 Select at least 9 credit h	CORPORATION FINANCE nours from the following:	3
FIN 314 Select at least 9 credit here ECO 488	CORPORATION FINANCE hours from the following: INTERNSHIP (3-12)	3
FIN 314 Select at least 9 credit h ECO 488 ECO 495	CORPORATION FINANCE hours from the following: INTERNSHIP (3-12) SPECIAL PROJECT (1-3)	3
FIN 314 Select at least 9 credit h ECO 488 ECO 495 ECO 499	CORPORATION FINANCE hours from the following: INTERNSHIP (3-12) SPECIAL PROJECT (1-3) INDEPENDENT STUDY (3-12)	3
FIN 314 Select at least 9 credit h ECO 488 ECO 495 ECO 499 FIN 345	CORPORATION FINANCE nours from the following: INTERNSHIP (3-12) SPECIAL PROJECT (1-3) INDEPENDENT STUDY (3-12) ESTATE PLANNING	3
FIN 314 Select at least 9 credit h ECO 488 ECO 495 ECO 499 FIN 345 FIN 370	CORPORATION FINANCE nours from the following: INTERNSHIP (3-12) SPECIAL PROJECT (1-3) INDEPENDENT STUDY (3-12) ESTATE PLANNING TECHNICAL ANALYSIS OF FINANCIAL MARKETS	3
FIN 314 Select at least 9 credit h ECO 488 ECO 495 ECO 499 FIN 345 FIN 370 FIN 400	CORPORATION FINANCE nours from the following: INTERNSHIP (3-12) SPECIAL PROJECT (1-3) INDEPENDENT STUDY (3-12) ESTATE PLANNING TECHNICAL ANALYSIS OF FINANCIAL MARKETS INTERNATIONAL FINANCE	3

FIN 416	ADVANCED CORPORATION FINANCE	
FIN 417	DERIVATIVE SECURITIES	
FIN 418	BOND MARKETS	
FIN 419	MERGERS AND ACQUISITIONS	
Total Credit Hours		18

Students will:

- 1. understand basic economics and finance concepts.
- 2. be able to create technical reports using economics and/or financial concepts.
- 3. be able to use economic and/or financial models to analyze economics and/or finance problems.
- 4. be able to use Excel, SAS, or other software to analyze data.
- 5. be able to use Excel, SAS, or other software to analyze economic and/or financial models.
- 6. learn how to create and give presentations using programs such as PowerPoint.

Electrical Engineering Technology, Smart Grid (B.S.)

Evening study available.
Bachelor of Science Program
Program Code: BS-SP
Major Code: ETS

Engineering Technology Department Technology Building 126 (716) 878-6017 engineeringtechnology.buffalostate.edu/

The Electrical Engineering Technology, Smart Grid program is accredited by the Engineering Technology Accreditation Commission of <u>ABET</u> under the commission's General Criteria and Program Criteria for Electrical/Electronic(s) Engineering Technology and Similarly Named Programs.

About the Program

Electrical Engineering Technology, Smart Grid graduates work in the fields of electrical power generation, transmission, and distribution; industrial, commercial, and residential electrical power distribution; as well as power systems protection, control, and monitoring.

General Educatio	n 23 Requirements	
33 credit hours *		33
Electrical Enginee	ring Technology, Smart Grid Major Requirements (57 credit hours)	
ENT 104	ESSENTIALS OF ELECTRICAL ENGINEERING TECHNOLOGY	3
ENT 300	MATHEMATICS APPLICATIONS IN ENGINEERING TECHNOLOGY	3
ENT 301	MECHANICS I	3
ENT 330	ELECTRICAL CIRCUITS ANALYSIS I	3

ENT 332	ELECTRICAL CIRCUITS ANALYSIS II	3
ENT 340	BUILDING INFORMATION MODELING (BIM) USING REVIT MEP	3
ENT 341	ELECTRONICS	3
ENT 342	ADVANCED CIRCUIT ANALYSIS	3
ENT 371	ELECTRIC MACHINES	3
ENT 345	DIGITAL SYSTEMS	3
ENT 346	MICROCONTROLLERS	3
ENT 445	POWER ELECTRONICS	3
ENT 461	CONTROL SYSTEMS I	3
ENT 462	CONTROL SYSTEMS II	3
ENT 465	ELECTRICAL DESIGN I	3
ENT 466	ELECTRICAL DESIGN II	3
ENT 471	POWER SYSTEMS I	3
ENT 472	POWER SYSTEMS II	3
ENT 472 ENT 481	POWER SYSTEMS II RENEWABLE DISTRIBUTED GENERATION AND STORAGE	3
	RENEWABLE DISTRIBUTED GENERATION AND STORAGE	
ENT 481	RENEWABLE DISTRIBUTED GENERATION AND STORAGE	
ENT 481 Required Courses Outside	RENEWABLE DISTRIBUTED GENERATION AND STORAGE	3
ENT 481 Required Courses Outsic 25-30 credit hours	RENEWABLE DISTRIBUTED GENERATION AND STORAGE le of Major	3
ENT 481 Required Courses Outsic 25-30 credit hours PHY 107	RENEWABLE DISTRIBUTED GENERATION AND STORAGE de of Major GENERAL PHYSICS I (4)	3
ENT 481 Required Courses Outsice 25-30 credit hours PHY 107 or PHY 111	RENEWABLE DISTRIBUTED GENERATION AND STORAGE de of Major GENERAL PHYSICS I (4) UNIVERSITY PHYSICS I (5)	3
ENT 481 Required Courses Outsid 25-30 credit hours PHY 107 or PHY 111 PHY 108	RENEWABLE DISTRIBUTED GENERATION AND STORAGE de of Major GENERAL PHYSICS I (4) UNIVERSITY PHYSICS I (5) GENERAL PHYSICS II (4)	3
ENT 481 Required Courses Outside 25-30 credit hours PHY 107 or PHY 111 PHY 108 or PHY 112 CHE 111	RENEWABLE DISTRIBUTED GENERATION AND STORAGE de of Major GENERAL PHYSICS I (4) UNIVERSITY PHYSICS I (5) GENERAL PHYSICS II (4) UNIVERSITY PHYSICS II (5) FUNDAMENTALS OF CHEMISTRY I	3
ENT 481 Required Courses Outside 25-30 credit hours PHY 107 or PHY 111 PHY 108 or PHY 112 CHE 111 & CHE 111	RENEWABLE DISTRIBUTED GENERATION AND STORAGE de of Major GENERAL PHYSICS I (4) UNIVERSITY PHYSICS I (5) GENERAL PHYSICS II (4) UNIVERSITY PHYSICS II (5) FUNDAMENTALS OF CHEMISTRY I and LABORATORY FOR FUNDAMENTALS OF CHEMISTRY I (4) COMPUTER PROGRAMMING I	3
ENT 481 Required Courses Outside 25-30 credit hours PHY 107 or PHY 111 PHY 108 or PHY 112 CHE 111 & CHE 113 CIS 151	RENEWABLE DISTRIBUTED GENERATION AND STORAGE de of Major GENERAL PHYSICS I (4) UNIVERSITY PHYSICS I (5) GENERAL PHYSICS II (4) UNIVERSITY PHYSICS II (5) FUNDAMENTALS OF CHEMISTRY I and LABORATORY FOR FUNDAMENTALS OF CHEMISTRY I (4) COMPUTER PROGRAMMING I	3

MAT 202	INTRODUCTION TO LINEAR ALGEBRA **	
Math Option 2 (11 o	credit hours)	
MAT 161	CALCULUS I (4)	
MAT 162	CALCULUS II (4)	
MAT 315	DIFFERENTIAL EQUATIONS (3)	
Electives		6-10
Total Credit Hours		120

^{*} GE23 number of credits is 33. However, required courses outside of major, such as MAT 126 or MAT 161 satisfy Mathematics and Quantitative Reasoning in GE 23; CHE 111 or PHY 107/111 satisfy Natural Science and Scientific Reasoning in GE 23. Therefore, the number of remaining credits in GE 23 required by the program is (33 - 6) = 27 cr. [In GE 23 courses for each category are counted as 3 credits each. Therefore, the total number deducted is 6 credits].

Students will acquire:

- 1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline.
- 2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.
- 3. An ability to apply written, oral, and graphical communication in broadly defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.
- 4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes.
- 5. An ability to function effectively as a member or leader on a technical team.

Electrical Engineering Technology, Electronics (B.S.)

Evening study available
Bachelor of Science Program
Program Code: BS-SP
Major Code: ETE

Engineering Technology Department Technology Building 126 (716) 878-6017 engineeringtechnology.buffalostate.edu

The Electrical Engineering Technology, Electronics program is accredited by the Engineering Technology Accreditation Commission of <u>ABET</u> under the commission's General Criteria and Program Criteria for Electrical/Electronic(s) Engineering Technology and Similarly Named Programs.

About the Program

The Electrical Engineering Technology, Electronics program prepares students to design, test, and fabricate solid-state circuits and systems (both digital and analog), microwave systems, and control systems.

Electrical Engineering Technology, Electronics graduates work in electronic and digital circuit design, testing, and manufacturing; microwave wireless communications and telecommunications; and control systems and robotics.

^{**} MAT 202 for Track 1 and MAT 315 for Track 2 are preferred courses. Other mathematics courses such as Calculus III (MAT 263), or Discrete Mathematics (MAT 270) may be suggested by program advisement to better meet student's career choices.

33 credit hours *		33
Electrical Engineering	Technology, Electronics Major Requirements (57 credit hours)	
ENT 104	ESSENTIALS OF ELECTRICAL ENGINEERING TECHNOLOGY	3
ENT 300	MATHEMATICS APPLICATIONS IN ENGINEERING TECHNOLOGY	3
ENT 301	MECHANICS I	3
ENT 330	ELECTRICAL CIRCUITS ANALYSIS I	3
ENT 332	ELECTRICAL CIRCUITS ANALYSIS II	3
ENT 341	ELECTRONICS	3
ENT 342	ADVANCED CIRCUIT ANALYSIS	3
ENT 345	DIGITAL SYSTEMS	3
ENT 346	MICROCONTROLLERS	3
ENT 351	ANALOG CIRCUITS ANALYSIS	3
ENT 371	ELECTRIC MACHINES	3
ENT 441	COMMUNICATION TRANSMISSION TECHNOLOGY	3
ENT 446	DIGITAL SYSTEMS DESIGN AND ANALYSIS	3
ENT 442	RF AND MICROWAVE COMMUNICATIONS	3
ENT 452	ANALOG SYSTEMS DESIGN AND ANALYSIS	3
ENT 461	CONTROL SYSTEMS I	3
ENT 462	CONTROL SYSTEMS II	3
ENT 465	ELECTRICAL DESIGN I	3
ENT 466	ELECTRICAL DESIGN II	3
Requirements Outside	e of Major	
25-30 credit hours		25-30
CHE 111 & CHE 113	FUNDAMENTALS OF CHEMISTRY I and LABORATORY FOR FUNDAMENTALS OF CHEMISTRY I (4)	
CIS 151	COMPUTER PROGRAMMING I	
PHY 107	GENERAL PHYSICS I (4)	

or PHY 111	UNIVERSITY PHYSICS I (5)	
PHY 108 or PHY 112	GENERAL PHYSICS II (4) UNIVERSITY PHYSICS II (5)	
Math Option 1		
MAT 126	APPLIED CALCULUS I (4)	
MAT 127	APPLIED CALCULUS II (4)	
MAT 202	INTRODUCTION TO LINEAR ALGEBRA **	
Math Option 2		
MAT 161	CALCULUS I (4)	
MAT 162	CALCULUS II (4)	
MAT 315	DIFFERENTIAL EQUATIONS (3)	
Electives		6-10
Total Credit Hours		120

^{*} GE23 number of credits is 33. However, required courses outside of major, such as MAT 126 or MAT 161 satisfy Mathematics and Quantitative Reasoning in GE 23; CHE 111 or PHY 107/111 satisfy Natural Science and Scientific Reasoning in GE 23. Therefore, the number of remaining credits in GE 23 required by the program is (33 - 6) = 27 cr. [In GE 23 courses for each category are counted as 3 credits each. Therefore, the total number deducted is 6 credits].

Students will acquire:

- 1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline.
- 2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.
- 3. An ability to apply written, oral, and graphical communication in broadly defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.
- 4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes.
- 5. An ability to function effectively as a member or leader on a technical team.

English (B.A.)

Bachelor of Arts Program Program Code: BA-AS Major Code: ENG

English Department Ketchum Hall 213 (716) 878-5416 english.buffalostate.edu/

The English B.A. program in literature offers a liberal arts English major, the enhancement of writing skills, and electives to satisfy General Education requirements.

^{**} MAT 202 for Track 1 and MAT 315 for Track 2 are preferred courses. Other mathematics courses such as Calculus III (MAT 263), or Discrete Mathematics (MAT 270) may be suggested by program advisement to better meet student's career choices.

Admissions RequirementsAny matriculated student in good academic standing may declare this program.

33 credit hours English Major Requirements (42 credit hours) (27 credit hours must be upber-division) Required Courses (15 credit hours) ENG 190 INTRODUCTION TO LITERATURE 1 3 ENG 250 LITERARY MOVEMENTS 3 ENG 390 LITERARY CRITICISM AND THEORY 3 ENG 390 SENIOR SEMINAR IN LITERATURE 3 3 ENG 390 SENIOR SEMINAR IN LITERATURE 3 3 ENG 315 SHAKESPEARE ENG 312 REPRESENTATIVE WRITERS Pre-1900 options (9 credit hours be used to satisfy the pre-1900 requirements. Other courses (including ENG 210, ENG 220) may count toward this requirement, based on the course topic. ENG 315 SHAKESPEARE ENG 316 MEDIEVAL AND CLASSICAL LITERATURE ENG 317 MEDIEVAL AND RENAISSANCE LITERATURE ENG 318 SHAKESPEARE ENG 319 MEDIEVAL AND RENAISSANCE LITERATURE ENG 310 MEDIEVAL AND RENAISSANCE LITERATURE ENG 410 EIGHTEENTH-CENTURY ENGLISH LITERATURE ENG 411 THE AMERICAN NOVEL TO 1900 Electives (18 credit hours) Java Valvisement. Courses listed above that were not used to satisfy one of the above requirements can be used as an elective.	General Education 23	3 Requirements	
Required Courses (15 credit hours) ENG 190 INTRODUCTION TO LITERATURE 1 3 ENG 250 LITERARY MOVEMENTS 3 ENG 390 LITERARY CRITICISM AND THEORY 3 ENG 490 SENIOR SEMINAR IN LITERATURE 3 Select one of the following Major Figure courses: 3 ENG 315 SHAKESPEARE ENG 322 REPRESENTATIVE WRITERS Pre-1900 options (9 credit hours) 9 If ENG 315 or ENG 322 is used to satisfy the Major Figures requirement, it cannot be used to satisfy the pre-1900 requirements. Other courses: cincluding ENG 210, ENG 220) may count toward this requirement, based on the course topic. ENG 311 MEDIEVAL AND RENAISSANCE LITERATURE ENG 315 SHAKESPEARE ENG 315 SHAKESPEARE ENG 316 EIGHTEENTH-CENTURY ENGLISH LITERATURE ENG 315 SHAKESPEARE ENG 416 EIGHTEENTH-CENTURY ENGLISH LITERATURE ENG 442 THE AMERICAN NOVEL TO 1900 Electives (18 credit hours) 18 Select six ENG literature courses by advisement. Courses listed above that were not used to satisfy one of the above	33 credit hours		33
Required Courses (15 credit hours) ENG 190 INTRODUCTION TO LITERATURE 1 3 ENG 250 LITERARY MOVEMENTS 3 ENG 390 LITERARY CRITICISM AND THEORY 3 ENG 490 SENIOR SEMINAR IN LITERATURE 3 Select one of the following Major Figure courses: 3 ENG 315 SHAKESPEARE ENG 322 REPRESENTATIVE WRITERS Pre-1900 options (9 credit hours) 9 If ENG 315 or ENG 322 is used to satisfy the Major Figures requirement, it cannot be used to satisfy the pre-1900 requirements. Other courses (including ENG 210, ENG 220) may count toward this requirement, based on the course topic. ENG 130 BIBLICAL AND CLASSICAL LITERATURE ENG 315 SHAKESPEARE ENG 315 SHAKESPEARE ENG 316 GEIGHTEENTH-CENTURY ENGLISH LITERATURE ENG 317 THE AMERICAN NOVEL TO 1900 Electives (18 credit hours) 18 Select six ENG literature courses by advisement. Courses listed above that were not used to satisfy one of the above	English Major Requir	rements (42 credit hours)	
ENG 190 INTRODUCTION TO LITERATURE ¹ 3 ENG 250 LITERARY MOVEMENTS 3 ENG 390 LITERARY CRITICISM AND THEORY 3 ENG 390 SENIOR SEMINAR IN LITERATURE 3 Select one of the following Major Figure courses: 3 ENG 315 SHAKESPEARE ENG 322 REPRESENTATIVE WRITERS Pre-1900 options (9 credit hours) 9 If ENG 315 or ENG 322 is used to satisfy the Major Figures requirement, it cannot be used to satisfy the pre-1900 requirements. Other courses (including ENG 210, ENG 220) may count toward this requirement, based on the course topic. ENG 310 BIBLICAL AND CLASSICAL LITERATURE ENG 311 MEDIEVAL AND RENAISSANCE LITERATURE ENG 315 SHAKESPEARE ENG 315 THE AMERICAN NOVEL TO 1900 Electives (18 credit hours) 18 Select six ENG literature courses by advisement. Courses listed above that were not used to satisfy one of the above	(27 credit hours mus	t be upper-division)	
ENG 250 LITERARY MOVEMENTS 3 ENG 390 LITERARY CRITICISM AND THEORY 3 ENG 490 SENIOR SEMINAR IN LITERATURE 3 Select one of the following Major Figure courses: 3 ENG 315 SHAKESPEARE ENG 315 REPRESENTATIVE WRITERS Pre-1900 options (9 credit hours) 9 If ENG 315 or ENG 322 is used to satisfy the Major Figures requirement, it cannot be used to satisfy the pre-1900 requirements. Other courses (including ENG 210, ENG 220) may count toward this requirement, based on the course topic. ENG 130 BIBLICAL AND CLASSICAL LITERATURE ENG 131 MEDIEVAL AND RENAISSANCE LITERATURE ENG 315 SHAKESPEARE ENG 416 EIGHTEENTH-CENTURY ENGLISH LITERATURE ENG 442 THE AMERICAN NOVEL TO 1900 Electives (18 credit hours) by advisement. Courses listed above that were not used to satisfy one of the above	Required Courses (15	5 credit hours)	
ENG 390 LITERARY CRITICISM AND THEORY 3 ENG 490 SENIOR SEMINAR IN LITERATURE 3 Select one of the following Major Figure courses: 3 ENG 315 SHAKESPEARE ENG 322 REPRESENTATIVE WRITERS Pre-1900 options (9 credit hours) 9 If ENG 315 or ENG 322 is used to satisfy the Major Figures requirement, it cannot be used to satisfy the pre-1900 requirements. Other courses (including ENG 210, ENG 220) may count toward this requirement, based on the course topic. ENG 130 BIBLICAL AND CLASSICAL LITERATURE ENG 131 MEDIEVAL AND RENAISSANCE LITERATURE ENG 315 SHAKESPEARE ENG 416 EIGHTEENTH-CENTURY ENGLISH LITERATURE ENG 442 THE AMERICAN NOVEL TO 1900 Electives (18 credit hours) 5 Select six ENG literature courses by advisement. Courses listed above that were not used to satisfy one of the above	ENG 190	INTRODUCTION TO LITERATURE ¹	3
ENG 490 SENIOR SEMINAR IN LITERATURE 3 Select one of the following Major Figure courses: 3 ENG 315 SHAKESPEARE ENG 322 REPRESENTATIVE WRITERS Pre-1900 options (9 credit hours) 9 If ENG 315 or ENG 322 is used to satisfy the Major Figures requirement, it cannot be used to satisfy the pre-1900 requirements. Other courses (including ENG 210, ENG 220) may count toward this requirement, based on the course topic. ENG 130 BIBLICAL AND CLASSICAL LITERATURE ENG 131 MEDIEVAL AND RENAISSANCE LITERATURE ENG 315 SHAKESPEARE ENG 416 EIGHTEENTH-CENTURY ENGLISH LITERATURE ENG 442 THE AMERICAN NOVEL TO 1900 Electives (18 credit hours) 18 Select six ENG literature courses by advisement. Courses listed above that were not used to satisfy one of the above	ENG 250	LITERARY MOVEMENTS	3
Select one of the following Major Figure courses: ENG 315 SHAKESPEARE ENG 322 REPRESENTATIVE WRITERS Pre-1900 options (9 credit hours) 9 If ENG 315 or ENG 322 is used to satisfy the Major Figures requirement, it cannot be used to satisfy the pre-1900 requirements. Other courses (including ENG 210, ENG 220) may count toward this requirement, based on the course topic. ENG 130 BIBLICAL AND CLASSICAL LITERATURE ENG 131 MEDIEVAL AND RENAISSANCE LITERATURE ENG 315 SHAKESPEARE ENG 416 EIGHTEENTH-CENTURY ENGLISH LITERATURE ENG 442 THE AMERICAN NOVEL TO 1900 Electives (18 credit hours) 18 Select six ENG literature courses by advisement. Courses listed above that were not used to satisfy one of the above	ENG 390	LITERARY CRITICISM AND THEORY	3
ENG 315 SHAKESPEARE ENG 322 REPRESENTATIVE WRITERS Pre-1900 options (9 credit hours) 9 If ENG 315 or ENG 322 is used to satisfy the Major Figures requirement, it cannot be used to satisfy the pre-1900 requirements. Other courses (including ENG 210, ENG 220) may count toward this requirement, based on the course topic. ENG 130 BIBLICAL AND CLASSICAL LITERATURE ENG 131 MEDIEVAL AND RENAISSANCE LITERATURE ENG 315 SHAKESPEARE ENG 416 EIGHTEENTH-CENTURY ENGLISH LITERATURE ENG 442 THE AMERICAN NOVEL TO 1900 Electives (18 credit hours) 18 Select six ENG literature courses by advisement. Courses listed above that were not used to satisfy one of the above	ENG 490	SENIOR SEMINAR IN LITERATURE	3
ENG 322 REPRESENTATIVE WRITERS Pre-1900 options (9 credit hours) 9 If ENG 315 or ENG 322 is used to satisfy the Major Figures requirement, it cannot be used to satisfy the pre-1900 requirements. Other courses (including ENG 210, ENG 220) may count toward this requirement, based on the course topic. ENG 130 BIBLICAL AND CLASSICAL LITERATURE ENG 131 MEDIEVAL AND RENAISSANCE LITERATURE ENG 315 SHAKESPEARE ENG 416 EIGHTEENTH-CENTURY ENGLISH LITERATURE ENG 442 THE AMERICAN NOVEL TO 1900 Electives (18 credit hours) 18 Select six ENG literature courses by advisement. Courses listed above that were not used to satisfy one of the above	Select one of the foll	owing Major Figure courses:	3
Pre-1900 options (9 credit hours) If ENG 315 or ENG 322 is used to satisfy the Major Figures requirement, it cannot be used to satisfy the pre-1900 requirements. Other courses (including ENG 210, ENG 220) may count toward this requirement, based on the course topic. ENG 130 BIBLICAL AND CLASSICAL LITERATURE ENG 131 MEDIEVAL AND RENAISSANCE LITERATURE ENG 315 SHAKESPEARE ENG 416 EIGHTEENTH-CENTURY ENGLISH LITERATURE ENG 442 THE AMERICAN NOVEL TO 1900 Electives (18 credit hours) 18 Select six ENG literature courses by advisement. Courses listed above that were not used to satisfy one of the above	ENG 315	SHAKESPEARE	
If ENG 315 or ENG 322 is used to satisfy the Major Figures requirement, it cannot be used to satisfy the pre-1900 requirements. Other courses (including ENG 210, ENG 220) may count toward this requirement, based on the course topic. ENG 130 BIBLICAL AND CLASSICAL LITERATURE ENG 131 MEDIEVAL AND RENAISSANCE LITERATURE ENG 315 SHAKESPEARE ENG 416 EIGHTEENTH-CENTURY ENGLISH LITERATURE ENG 442 THE AMERICAN NOVEL TO 1900 Electives (18 credit hours) 18 Select six ENG literature courses by advisement. Courses listed above that were not used to satisfy one of the above	ENG 322	REPRESENTATIVE WRITERS	
requirements. Other courses (including ENG 210, ENG 220) may count toward this requirement, based on the course topic. ENG 130 BIBLICAL AND CLASSICAL LITERATURE ENG 131 MEDIEVAL AND RENAISSANCE LITERATURE ENG 315 SHAKESPEARE ENG 416 EIGHTEENTH-CENTURY ENGLISH LITERATURE ENG 442 THE AMERICAN NOVEL TO 1900 Electives (18 credit hours) Select six ENG literature courses by advisement. Courses listed above that were not used to satisfy one of the above	Pre-1900 options (9	credit hours)	9
ENG 131 MEDIEVAL AND RENAISSANCE LITERATURE ENG 315 SHAKESPEARE ENG 416 EIGHTEENTH-CENTURY ENGLISH LITERATURE ENG 442 THE AMERICAN NOVEL TO 1900 Electives (18 credit hours) Select six ENG literature courses by advisement. Courses listed above that were not used to satisfy one of the above	requirements. Other		
ENG 315 SHAKESPEARE ENG 416 EIGHTEENTH-CENTURY ENGLISH LITERATURE ENG 442 THE AMERICAN NOVEL TO 1900 Electives (18 credit hours) Select six ENG literature courses by advisement. Courses listed above that were not used to satisfy one of the above	ENG 130	BIBLICAL AND CLASSICAL LITERATURE	
ENG 416 EIGHTEENTH-CENTURY ENGLISH LITERATURE ENG 442 THE AMERICAN NOVEL TO 1900 Electives (18 credit hours) 18 Select six ENG literature courses by advisement. Courses listed above that were not used to satisfy one of the above	ENG 131	MEDIEVAL AND RENAISSANCE LITERATURE	
ENG 442 THE AMERICAN NOVEL TO 1900 Electives (18 credit hours) 18 Select six ENG literature courses by advisement. Courses listed above that were not used to satisfy one of the above	ENG 315	SHAKESPEARE	
Electives (18 credit hours) Select six ENG literature courses by advisement. Courses listed above that were not used to satisfy one of the above	ENG 416	EIGHTEENTH-CENTURY ENGLISH LITERATURE	
Select six ENG literature courses by advisement. Courses listed above that were not used to satisfy one of the above	ENG 442	THE AMERICAN NOVEL TO 1900	
	Electives (18 credit h	ours)	18
ENG 147 INTRODUCTION TO DIVERSE LITERATURES	ENG 147	INTRODUCTION TO DIVERSE LITERATURES	
ENG 151 INTRODUCTION TO POETRY	ENG 151	INTRODUCTION TO POETRY	

ENG 210	TOPICS IN BRITISH AND IRISH LITERATURE	
ENG 220	TOPICS IN AMERICAN LITERATURE	
ENG 221	FOUNDATIONS OF AMERICAN LITERATURE	
ENG 230	COMPARATIVE LITERATURE	
ENG 231	WOMEN IN LITERATURE	
ENG 240	AFRICAN AMERICAN LITERATURE TO 1940	
ENG 241	AFRICAN AMERICAN LITERATURE SINCE 1940	
ENG 243	INTRODUCTION TO LATINX LITERATURE	
ENG 255	THE SHORT STORY	
ENG 260	CHILDREN'S LITERATURE	
ENG 337	LITERATURE IN TRANSLATION	
ENG 345	MODERN WORLD LITERATURE	
ENG 353	AMERICAN INDIAN LITERATURE	
ENG 354	ETHNIC AMERICAN MINORITY LITERATURES	
ENG 356	SPECULATIVE FICTION	
ENG 361	CONTEMPORARY LITERATURE	
ENG 362	CHILDREN'S LITERATURE	
ENG 370	FOUNDATIONS OF LANGUAGE	
ENG 380	THE HISTORY OF THE PRINTED BOOK	
ENG 385	GENDER AND SEXUALITY IN LITERATURE	
ENG 447	SELECTED TOPICS IN DIVERSE LITERATURE	
ENG 450	STUDIES IN POETRY	
ENG 451	STUDIES IN FICTION	
ENG 452	STUDIES IN DRAMA	
ENG 461	YOUNG ADULT LITERATURE	
All College Electives		
45 credit hours		45
Total Credit Hours		120

- ¹ Must be taken immediately after completion of basic communication requirement or within first year of transfer to English Department.
- ² If students use <u>ENG 313</u> or <u>ENG 315</u> to satisfy their Major Figure requirement (see above), they cannot use it to satisfy their pre-1900 requirement.

Students will:

- 1. utilize literary terminology and the conventions of the field (including MLA-style citation) appropriately and effectively in describing and explicating texts from different genres, periods, and movements.
- 2. discuss historical developments in literature, including the development of different literary forms/ genres and of critical and theoretical methods for exploring texts, and be able to explicate in oral discussions and in critical essays a variety of forms and genres using these perspectives.
- 3. evaluate movements, periods, and representative figures in literature, and to make connections across and within genre, gender, racial, ethnic, and national border lines.

English Education (7–12, B.S.)

Bachelor of Science Program Program Code: BS-AS Major Code: ENS

English Department Ketchum Hall 213 (716) 878-5416 english.buffalostate.edu/

Accredited: Council for the Accreditation of Educator Preparation (CAEP) (formerly NCATE)

Enrollment in all teacher education programs follows the guidelines for "Admission to Teacher Education Programs" found in this catalog. Applicants who do not yet meet all admissions criteria should consult with the department.

Professional Licensure: This program leads to a recommendation for NYS certification; please check for <u>certification requirements in all other states</u>

The English B.S. degree program in secondary education leads to a New York State Initial Certificate for teaching English in grades 7–12.

Freshmen with a high school GPA below 85 and transfers with fewer than 30 credits or a GPA below 3.0 are admitted into the English major and may switch to English Education upon meeting departmental requirements. Freshmen with a high school GPA of 85 or above and transfers with more than 30 credits and a GPA of 3.0 or above can be admitted directly into English Education. Candidates should consult the Teacher Certification website for current seminars and workshops. https://teachercertification.buffalostate.edu/seminars-and-workshops

Admission Requirements

SUNY has a standard admissions requirement of a 3.0 GPA (4.0 scale) for entry into an educator preparation program at the undergraduate level or a rank in the top 30th percentile of the high school class for entry into an undergraduate educator preparation program as a first-year student.

Transfer students with a 3.0 GPA from either their last college or the combined average of all previous colleges, whichever is higher, will be admitted directly into the English Education BS.

Students who do not meet admissions requirements will be admitted into the English BA major until the 3.0 GPA is obtained.

Program Requirements

General Education 23 Requirements

33 credit hours 33

Total English Credits (81 cred	dit hours)	
Required Courses (12 credit	hours)	
Literary Analysis		
ENG 190	INTRODUCTION TO LITERATURE	3
Culturally Diverse Literature		
ENG 254	CULTURALLY DIVERSE AMERICAN LITERATURE IN MIDDLE AND HIGH SCHOOLS	3
ENG 385	GENDER AND SEXUALITY IN LITERATURE	3
ENG 461	YOUNG-ADULT LITERATURE	3
Major Course Areas (24 cred	it hours)	
British Literature (6 credit ho	ours) ¹	6
ENG 317	SHAKESPEARE FOR FUTURE TEACHERS	
Select any one of the followi	ng courses (3 credit hours):	
ENG 210	TOPICS IN BRITISH AND IRISH LITERATURE	
ENG 211	BRITISH LITERATURE 1700-1914	
ENG 212	BRITISH LITERATURE SINCE 1914	
ENG 313	MILTON	
ENG 315	SHAKESPEARE	
ENG 416	EIGHTEENTH-CENTURY ENGLISH LITERATURE	
American Literature (6 credit	t hours)	6
ENG 354	ETHNIC AMERICAN MINORITY LITERATURES	
Select any one of the followi	ng courses¹ (3 credit hours):	
ENG 147	INTRODUCTION TO DIVERSE LITERATURES	
ENG 220	TOPICS IN AMERICAN LITERATURE	
ENG 221	FOUNDATIONS OF AMERICAN LITERATURE	
ENG 240	AFRICAN AMERICAN LITERATURE TO 1940	
ENG 241	AFRICAN AMERICAN LITERATURE SINCE 1940	
ENG 243	INTRODUCTION TO LATINX LITERATURE	

 $^{^{1}}$ ENG 250, ENG 322, ENG 450, ENG 451, and ENG 452 may count (depending on the topic) with permission.

ENG 353	AMERICAN INDIAN LITERATURE	
ENG 442	THE AMERICAN NOVEL TO 1900	
ENG 447	SELECTED TOPICS IN DIVERSE LITERATURE	
World Literature (3 credit ho	ours)	3
Select one from the following	ng:	
ENG 337	LITERATURE IN TRANSLATION ²	
ENG 345	MODERN WORLD LITERATURE	
Creative Writing (3 credit ho	ours)	3
Select one from the following	ng:	
ENG 305	CREATIVE WRITING: NARRATIVE	
ENG 306	CREATIVE WRITING: POETRY	
Linguistics, Literature, Theor	ry or Writing Electives (6 credit hours)	6
Select two from the following	ng (6 credit hours):	
ENG 130	BIBLICAL AND CLASSICAL LITERATURE	
ENG 131	MEDIEVAL AND RENAISSANCE LITERATURE	
ENG 147	INTRODUCTION TO DIVERSE LITERATURES	
ENG 160	INTRODUCTION TO LITERATURE AND FILM	
ENG 170	INTRODUCTION TO CREATIVE WRITING	
ENG 201	THE CRAFT OF WRITING	
ENG 205	HISTORY OF CINEMA I	
ENG 206	HISTORY OF CINEMA II	
ENG 210	TOPICS IN BRITISH AND IRISH LITERATURE	
ENG 220	TOPICS IN AMERICAN LITERATURE	
ENG 221	FOUNDATIONS OF AMERICAN LITERATURE	
ENG 230	COMPARATIVE LITERATURE	
ENG 231	WOMEN IN LITERATURE	
ENG 240	AFRICAN AMERICAN LITERATURE TO 1940	

 $^{^{2}}$ ENG 250, ENG 322, ENG 450, ENG 451, and ENG 452 may count (depending on the topic) with permission.

ENG 241	AFRICAN AMERICAN LITERATURE SINCE 1940
ENG 243	INTRODUCTION TO LATINX LITERATURE
ENG 245	WRITING ABOUT THE ARTS
ENG 247	NATURE WRITING
ENG 255	THE SHORT STORY
ENG 266	WRITING THE PERSONAL: ESSAY, MEMOIR, AND AUTOBIOGRAPHY
ENG 300	WRITING FOR THE PROFESSIONS
ENG 301	ADVANCED COMPOSITION
ENG 302	TECHNICAL WRITING
ENG 303	LITERATURE IN FILM
ENG 304	FORMS OF FILM
ENG 305	CREATIVE WRITING: NARRATIVE
ENG 306	CREATIVE WRITING: POETRY
ENG 315	SHAKESPEARE
ENG 320	AUTOBIOGRAPHY AND MEMOIR
ENG 322	REPRESENTATIVE WRITERS
ENG 325	CREATIVE NON-FICTION
ENG 337	LITERATURE IN TRANSLATION
ENG 340	PLAYWRITING
ENG 345	MODERN WORLD LITERATURE
ENG 353	AMERICAN INDIAN LITERATURE
ENG 356	SPECULATIVE FICTION
ENG 361	CONTEMPORARY LITERATURE
ENG 362	CHILDREN'S LITERATURE
ENG 380	THE HISTORY OF THE PRINTED BOOK
ENG 390	LITERARY CRITICISM AND THEORY
ENG 402	ADVANCED CREATIVE WRITING: NARRATIVE
ENG 403	ADVANCED CREATIVE WRITING: POETRY

ENG 409	WRITING GRANTS AND PROPOSALS	
ENG 410	COMPOSITION AND RHETORICAL THEORY	
ENG 416	EIGHTEENTH-CENTURY ENGLISH LITERATURE	
ENG 442	THE AMERICAN NOVEL TO 1900	
ENG 447	SELECTED TOPICS IN DIVERSE LITERATURE	
ENG 450	STUDIES IN POETRY	
ENG 451	STUDIES IN FICTION	
ENG 452	STUDIES IN DRAMA	
ENG 499	INDEPENDENT STUDY (3-12)	
General Teacher Education (12 credit hours)	
EDU 416	TEACHING LITERACY IN MIDDLE AND SECONDARY SCHOOLS	3
EXE 100	NATURE AND NEEDS OF INDIVIDUALS WITH SPECIAL NEEDS	3
SPF 303	EDUCATIONAL PSYCHOLOGY: MIDDLE AND SECONDARY EDUCATION	3
SPF 403	HISTORICAL AND PHILOSOPHICAL FORCES INFLUENCING SECONDARY EDUCATION	3
English Education (33 credit	hours)	
ENG 200	FIELD EXPERIENCE IN SECONDARY ENGLISH EDUCATION	3
ENG 309	TEACHING AND EVALUATING WRITING	3
ENG 311	LANGUAGE, LITERACY AND CULTURE IN ENGLISH TEACHING	3
ENG 329	DIGITAL LITERACIES IN THE 7-12 ENGLISH CLASSROOM	3
ENG 463	METHODS, MATERIALS, AND PROFESSIONAL DEVELOPMENT FOR TEACHERS OF ENGLISH	6
ENG 464	STUDENT TEACHING IN MIDDLE SCHOOL/JUNIOR HIGH SCHOOL ENGLISH	6
ENG 465	STUDENT TEACHING IN SENIOR HIGH SCHOOL ENGLISH	6
ENG 466	SEMINAR IN STUDENT TEACHING FOR ENGLISH EDUCATION	3
All College Electives		0-6
Total Credit Hours		120

¹ Topics courses may be used to fulfill the British Literature requirement with approval of the department chair.

Students will:

- 1. demonstrate knowledge of English language arts subject matter content that specifically includes literature and multimedia texts as well as knowledge of the nature of adolescents as readers.
- 2. demonstrate knowledge of English language arts subject matter content that specifically includes language and writing as well as knowledge of adolescents as language users.
- 3. plan instruction and design assessments for reading and the study of literature to promote learning for all students.
- 4. plan instruction and design assessments for composing texts (i.e., oral, written, and visual) to promote learning for all students.
- 5. plan, implement, assess, and reflect on research-based instruction that increases motivation and active student engagement, builds sustained learning of English language arts, and responds to diverse students' context-based needs.
- 6. demonstrate knowledge of how theories and research about social justice, diversity, equity, student identities, and schools as institutions can enhance students' opportunities to learn in English Language Arts.
- 7. interact knowledgeably with students, families, and colleagues based on social needs and institutional roles, engage in leadership and/or collaborative roles in English Language Arts professional learning communities, and actively develop as professional educators.

English Literature Combined Pathway (B.A. and M.A.)

Bachelor of Arts Program Program Code: BA-AS Major Code: ENG

Master of Arts Program Program Code: MA-AS Major Code: ENG

English Department Ketchum Hall 213 (716) 878-5416 english.buffalostate.edu/

Enrollment in a combined pathway allows highly qualified, current SUNY Buffalo State students to work on the Master of Arts in English while completing the bachelor's degree in English. Up to 12 credits of designated master's courses are incorporated into the bachelor's degree program and will count toward both the bachelor's degree and the master's degree.

The program requires careful planning that should begin in the second year of the student's undergraduate career at SUNY Buffalo State. The student and the primary adviser (or department chair) should consult in planning the undergraduate degree program so that all requirements are met during undergraduate study and up to 12 credits of master's courses from the MA Program in English are included in the degree plan. Students must meet graduate expectations for academic progress and grade point average in their master's level courses to remain in the combined pathway.

Admission Requirements

Admission into the combined pathway is highly selective. Applicants must have completed 24 credit hours in English, at least 18 of which must be in literature courses, with an overall GPA of 2.75 and a cumulative GPA of 3.0 in all English classes. Matriculated undergraduate students may apply to the BA/MA pathway immediately before or in their third year (junior year) or as rising seniors. Students transferring to Buffalo State may apply to the program in their junior year. To remain in the program, students must maintain a GPA of 3.0 or higher in all their English courses.

B.A. English

Program Requirements

General Education Requirements

33 credit hours 33

Required Courses (15 credit hours)

ENG 190 INTRODUCTION TO LITERATURE 3

ENG 250	LITERARY MOVEMENTS	3
ENG 390	LITERARY CRITICISM AND THEORY	3
ENG 490	SENIOR SEMINAR IN LITERATURE	3
Select one of the follo	wing Major Figure courses (3 credit hours)	3
ENG 315	SHAKESPEARE	
ENG 322	REPRESENTATIVE WRITERS	
Undergraduate electives (18 credit hours) 18		
_	ate ENG literature courses by advisement. Courses that were not used to satisfy one of an be used as an elective. Up to three courses in the MA program (not including ENG)	

be used to satisfy the undergraduate elective requirement.

ENG courses on film, writing, and education cannot be used to fulfill the English B.A. elective requirement.

Required Graduat	te Courses (3 credit hours)	
ENG 601	RESEARCH IN LITERATURE AND LANGUAGE *	3
Choose up to 3 add	itional graduate elective courses (up to 9 credit hours)	0-9
Selected by advisen time.	nent. ENG 612, ENG 621, and ENG 623 may be taken up to three times with different topics each	
ENG 612	SELECTED TOPICS IN BRITISH LITERATURE **	
ENG 621	AMERICAN LITERATURE **	
ENG 623	LITERATURE OF CONTINENTAL EUROPE **	
ENG 638	STUDIES IN INDIVIDUAL WRITERS **	
ENG 639	STUDIES IN LITERARY GENRES **	
ENG 644	IDEOLOGY AND LITERATURE **	
ENG 645	LITERATURE AND SOCIAL JUSTICE **	
ENG 670	ADVANCED LINGUISTICS **	
At least three cours 1900 literature cour	es (9 credit hours) from among the undergraduate and graduate elective courses must be pre- rses.	

69-78

Students will:

Total Credit Hours

1. Demonstrate an in-depth knowledge of the periods, genres, and major writers of British and American literature, and an awareness of the various critiques and revisions of this literature's canon.

^{*} Required M.A. course that will be used in B.A. and M.A. simultaneously (3 credit hours).

^{**} Elective courses in the M.A. that will be used in B.A. and M.A. simultaneously (9 credit hours).

- 2. Demonstrate familiarity with major movements or writers of literatures in English outside British and American literature, and be able to place that literature within worldwide cultural and literary trends.
- 3. Describe and explain how the literature is affected by cultural and historical forces.
- 4. Analyze how ideas and attitudes about race, class, gender, nationhood, age, religion, and sexuality evolved through various periods of literary study.
- 5. Produce quality written work reflecting the conventions of the field, including current MLA format, marked by high standards of clarity, coherence, organization, and substantiation, and of various types including literary analysis/criticism, professional writing, research/scholarly writing, and informal/reflective writing.
- 6. Conduct both library and online research, by identifying and differentiating among various research methodologies.
- 7. Evaluate critical scholarship about literature, and integrate criticism into written and oral discussions of texts under study.
- 8. Write research papers that contribute new perspectives on current scholarly and methodological debates.

Environmental Geography (B.S.)

Bachelor of Science Program Program Code: BS-AS Major Code: EVG

Geosciences Department 160 Science and Math Complex (716) 878-6731 geosciences.buffalostate.edu/

Environmental geography is a subfield in geography that explores human-environment interactions. The B.S. in Environmental Geography provides students with the opportunity to study scientific understanding of how humans impact, manage, and conserve the natural environment, including landforms, water and soil resources, climate, and plant and animal communities. Courses in the program focus on understanding processes and patterns in the natural environment, as well as quantitative analysis and applied, hands-on experiences in the classroom and in the field. The program emphasizes modern technological methods, including Geographic Information Systems (GIS) and remote sensing, to prepare students with the skills to identify, explain, and find meaning in human-environment interactions.

General Education 23 Requirements		
33 credit hours		33
Required Courses (18 credit hours)		
GEG 101	WORLD NATURAL ENVIRONMENTS	3
GEG 102	HUMAN GEOGRAPHY	3
GEG 325	MAPS AND MAPMAKING USING GIS	3
GEG 390	QUANTITATIVE METHODS IN GEOSCIENCES	3
or MAT 311	INTRODUCTORY PROBABILITY AND STATISTICS	
GEG 396	RESEARCH METHODS	3
Select one course from the following:		
GEG 300	WORLD REGIONAL GEOGRAPHY	3
GEG 359	ARCTIC GEOGRAPHY FROM AN INUIT PERSPECTIVE	3

GEG 360	GEOGRAPHY OF ASIA	3
GEG 362	GEOGRAPHY OF THE UNITED STATES AND CANADA	3
Environmental Geography electives selected	ed by advisement (12 credit hours)	
ENS 300	ENVIRONMENTAL CASE STUDIES	
GEG 305	PRINCIPLES OF ECONOMIC GEOGRAPHY	
GEG 307	CONSERVATION AND ENVIRONMENTAL MANAGEMENT	
GEG 365	SOIL SCIENCE AND MANAGEMENT	
GEG 383	EXTREME WEATHER	
GEG 386	WEATHER AND SOCIETY	
GEG 418	REMOTE SENSING	
GEG 421	WATERSHED ANALYSIS	
GEG 423	BIOGEOGRAPHY	
GEG 478	GLOBAL CHANGE	
GES 307	GEOMORPHOLOGY (4)	
General electives selected by advisement.	Any three upper-division Geography courses (9 credit hours)	9
All College Electives		48
Total Credit Hours		120

Students will:

- 1. demonstrate the ability to answer questions by synthesizing geographic knowledge (i.e., Six Elements of Geography: A spatial world view; place and regions; physical systems; human systems; environment and society; and the uses of geography)
- 2. be able to acquire geographic information and assemble ideas and information from geographic literature and scholarship, and from primary and secondary sources.
- 3. be able to organize geographic information into maps, graphs, and other visual representations and analyze geographic information to seek patterns, relationships, and connections.
- 4. be able to prepare and deliver clear and convincing written presentations.
- 5. be able to prepare and deliver clear and convincing oral presentations.

Family and Consumer Sciences Education (B.S.)

Bachelor of Science Program Program Code: BS-EP Major Code: FCS

Career, Technical, and Science Education Department Bacon Hall 122

(716) 878-4717

ctse.buffalostate.edu/

Accredited: Council for the Accreditation of Educator Preparation (CAEP) (formerly NCATE)

Enrollment in all teacher education programs follows the guidelines for "Admission to Teacher Education Programs" found in this catalog. Applicants who do not yet meet all admissions criteria should consult with the department.

The Family and Consumer Sciences Education Undergraduate Program offers a broad knowledge of family and consumer sciences, plus skills in planning and communicating this knowledge to others.

The Bachelor of Science degree program in Family and Consumer Sciences Education leads to initial K-12 certification to teach Family and Consumer Sciences. Graduates from the Family and Consumer Sciences Education program are prepared to teach Family and Consumer Sciences. Students must meet with their academic advisor to verify all university requirements including upper division credit hours. The Bachelor of Science degree in Family and Consumer Sciences Education is necessary for certification in order to obtain a teaching position.

Candidates should consult the Teacher Certification website for current seminars and workshops. https://teachercertification.buffalostate.edu/seminars-and-workshops

General Education 23 Requirements				
33 credits		33		
Family and Consumer Sciences Major Requirements (30 credit hours)				
FTT 109	GARMENT CONSTRUCTION I	3		
FTT 206	SURVEY OF FASHION TEXTILES	3		
or FTT 349	HISTORY OF TEXTILES			
HEW 204	PERSONAL HEALTH	3		
NFS 100	INTRODUCTION TO FOOD PREPARATION	3		
NFS 102	INTRODUCTORY NUTRITION	3		
IDE 101	INTRODUCTION TO INTERIOR DESIGN	3		
SPF 202	CHILD DEVELOPMENT AND EDUCATION	3		
SPF 345	PARENTING	3		
SPF 353	HUMAN DEVELOPMENT DURING EARLY ADOLESCENCE AND ADOLESCENCE	3		
FIN 110	PERSONAL FINANCE	3		
or BUS 116	INTRODUCTION TO BUSINESS			
Professional Education Major Requirements (42 credit hours)				
CTE 301	FOUNDATIONS OF CAREER AND TECHNICAL EDUCATION	3		
CTE 302	CURRICULUM AND EVALUATION IN CAREER AND TECHNICAL EDUCATION	3		

CTE 303	INSTRUCTIONAL STRATEGIES IN CAREER AND TECHNICAL EDUCATION	3
CIE 303	INSTRUCTIONAL STRATEGIES IN CAREER AND TECHNICAL EDUCATION	.
CTE 306	CLASSROOM/LABORATORY MANAGEMENT	3
CTE 311	CAREER MENTORING	3
CTE 402	ASSESSMENT IN CAREER AND TECHNICAL EDUCATION	3
CTE 404	METHODS OF TEACHING CAREER AND TECHNICAL SUBJECTS	3
CTE 421	CAREER AND TECHNICAL EDUCATION FOR STUDENTS WITH SPECIAL NEEDS	3
FCS 415	STUDENT TEACHING I	6
FCS 416	STUDENT TEACHING II	6
EDU 416	TEACHING LITERACY IN MIDDLE AND SECONDARY SCHOOLS	3
SPF 303	EDUCATIONAL PSYCHOLOGY: MIDDLE AND SECONDARY EDUCATION	3
All College Electives		
15 credit hours		15
Total Credit Hours		120

Fashion and Textile Technology (B.S.)

Bachelor of Science Program Program Code: BS-EP Major Code: FTT

Fashion and Textile Technology Department Technology Building 303 (716) 878-3478 fashion.buffalostate.edu/

The Fashion and Textile Technology department at Buffalo State is the only baccalaureate department in Western New York that offers a variety of career preparation options for the multifaceted, global fashion industry. Faculty expertise, continuous updating of technology-based curriculum, and industry partnerships contribute to the strength of the program. Class sizes are small, allowing individual attention. Students are encouraged to participate in extracurricular programmatic activities and regional and national competitions. Students have achieved top honors in national apparel and textile design competitions. Internships are available in the Buffalo area as well as nationally and internationally. Affiliations with industry and professional organizations include the American Apparel and Footwear Association (AAFA); the Costume Society of America (CSA); American Collegiate Retailing Association (ACRA); the American Association of Textile Chemists and Colorists (AATCC); the National Retail Federation (NRF), and the Textile and Apparel Program Accreditation Commission (TAPAC); and the International Textile and Apparel Association (ITAA).

The Fashion and Textile Technology department is to prepare students for employment in the textile, apparel, and fashion industries. Employment opportunities exist in fashion merchandising/buying, retail management, digital textile design, apparel design, 3D design for textiles and apparel, apparel production, apparel product development, textile testing/quality control, home furnishings, and government agencies. Examples of available positions include product test engineer, creative service associate, marketing & styling operations, global product development, technical designer, engagement coordinator, fit expert, product designer, service/selling manager, strategic planning, omni service supervisor, regional manager, merchandise planner, fabric coordinator, production manager, merchandise analyst, apparel designer, operations manager, color developer, off-price buyer, stock/operation manager, etc.

The curriculum for the fashion and textile technology department is divided into two parts: the required 24 credit hours of core coursework; and one or more specialized concentrations: fashion retailing and fashion design.. Individuals who have extensive work experience in the fashion field are encouraged to explore earning college credit by course challenge or experiential learning. Fashion and textile technology majors may spend their senior year studying a specialty topic at the Fashion Institute of Technology (FIT) in New York City through the One-Year Visiting Student program to earn a B.S. from Buffalo State and an associate's degree from FIT. Study abroad opportunities are available in several countries. Scholarships and Financial Aid

Students may apply for departmental scholarships every spring. Financial assistance through the college is also available. Students in the department can apply for various industry-sponsored scholarships including the FSF Case Study Scholarship, NRF Foundation Scholarship, and AATCC scholarships.

General Education 23 Requirements				
33 credits		33		
Fashion and Textile Technology Major Requirements (51 credit hours)				
Required Core Courses (24 credit hours)				
FTT 110	FASHION AND CREATIVITY	3		
FTT 150	FASHION BRANDS ESSENTIALS	3		
FTT 206	SURVEY OF FASHION TEXTILES	3		
FTT 310	FASHION APPAREL PRODUCTION	3		
FTT 348	FASHION, SOCIETY, AND HISTORY	3		
FTT 358	FASHION TREND FORECASTING	3		
FTT 450	GLOBAL FASHION SYSTEMS	3		
FTT 461	FASHION PORTFOLIO AND PERSONAL BRANDING	3		
Concentration Courses (30 credit hours)				
Select one concentration from below:		30		
Fashion Retailing Concentration				
Fashion Design Concentration				
Recommended All College Electives				
DES 307	COLOR THEORY			
FTT 252	FASHION AESTHETICS AND STYLING			
FTT 349	HISTORY OF TEXTILES			

FTT 355	RESEARCH IN FASHION MERCHANDISING			
FTT 359	FASHION RETAIL ENVIRONMENT DESIGN			
FTT 365	FASHION DIGITAL RETAILING			
FTT 410	ADVANCED PRODUCT DEVELOPMENT			
FTT 452	FASHION SHOW PRODUCTION			
Courses may have additional prerequisites.				
All College Electives				
30-36 credit hours		30-36		
Total Credit Hours		120		
Fashion Retailing Concentr	ration			
FTT 252	FASHION AESTHETICS AND STYLING			
FTT 350	FASHION ANALYTICS			
FTT 359	FASHION RETAIL ENVIRONMENT DESIGN			
FTT 365	FASHION DIGITAL RETAILING			
FTT 452	FASHION SHOW PRODUCTION			
FTT 455	FASHION ENTREPRENEURSHIP			
FTT 475	FASHION RETAILING SEMINAR			
FTT 488	INTERNSHIP/FIELD EXPERIENCE (3-6)			
Select two from the follow	wing:			
BUS 201	FOUNDATIONS OF LEADERSHIP			
BUS 212	ACCOUNTING PRINCIPLES			
BUS 360	PRINCIPLES OF MANAGEMENT			
CRS 205	FOUNDATIONS IN CREATIVE THINKING			
FTT 250	FASHION BUYING AND MERCHANDISING PRINCIPLES			
FTT 355	RESEARCH IN FASHION MERCHANDISING	3		
Fashion Design Concentration				
FTT 109	GARMENT CONSTRUCTION I			

FTT 224	TECHNICAL APPAREL DESIGN I
FTT 303	FASHION ILLUSTRATION I
FTT 304	TEXTILE SURFACE DESIGN I
FTT 308	FASHION ILLUSTRATION II
FTT 324	GARMENT CONSTRUCTION II
FTT 326	DIGITAL FASHION DESIGN I
FTT 451	SENIOR PROJECT
Select two from the follo	owing:
FTT 327	DIGITAL FASHION DESIGN II
FTT 328	TECHNICAL APPAREL DESIGN II
FTT 329	GARMENT CONSTRUCTION III
FTT 350	FASHION ANALYTICS
FTT 365	FASHION DIGITAL RETAILING
FTT 413	CAD: WEAVE FOR INDUSTRY
FTT 455	FASHION ENTREPRENEURSHIP

Students will be able to:

- 1. Describe and analyze the organization and structure of fashion businesses and the interdependent nature of the global economy.
- 2. Differentiate consumer target markets including cultural aspects and how each market influences the design process and merchandising strategies.
- 3. Demonstrate leadership and teamwork skills and the ability to communicate ideas logically and creatively in oral, written, visual and digital formats.
- 4. Analyze and evaluate textile and apparel product characteristics in relation to consumer satisfaction, product cost, development, quality and performance.
- 5. Assess the environmental, social and ethical issues facing the global fashion industry and examine contemporary and emerging business practices.
- 6. Examine and apply technology within the fashion industry.

Forensic Chemistry (B.S.)

Bachelor of Science Program Program Code: BS-AS Major Code: FRC

Chemistry Department SAMC 164 (716) 878-5204 chemistry.buffalostate.edu/ Forensic Science Education Programs Accreditation Commission (FEPAC) accredited

Forensic chemistry is a program of professional study whose graduates are prepared to assume entry-level positions as forensic scientists in federal, state, local, and corporate laboratories.

Admission Requirements

Prospective majors must complete CHE 111, CHE 112, CHE 113 and CHE 114 (or the equivalents) with minimum grades of C before applying to the program. Students who have not yet met these requirements will be accepted into the pre-forensic chemistry program (FRCW) and will be formally admitted to the major upon completion of the previously stated requirements.

Admission Recommendations

Transfer students from two-year colleges should also have earned credit for courses equivalent to

CHE 201	ORGANIC CHEMISTRY I	3
CHE 202	ORGANIC CHEMISTRY II	3
CHE 203	ORGANIC CHEMISTRY LABORATORY I	1
CHE 204	ORGANIC CHEMISTRY LABORATORY II	1
MAT 161	CALCULUS I	4
MAT 162	CALCULUS II	4
MAT 163	USING TECHNOLOGY TO EXPLORE CALCULUS I	1
MAT 164	USING TECHNOLOGY TO EXPLORE CALCULUS II	1
PHY 111	UNIVERSITY PHYSICS I	5
PHY 112	UNIVERSITY PHYSICS II	5
BIO 211	INTRODUCTION TO CELL BIOLOGY AND GENETICS	4

To avoid possible delays in the completion of the degree program. Transfer students must complete a minimum of 10 credit hours in chemistry at Buffalo State. Chemistry courses taken elsewhere may be substituted for similar courses at Buffalo State only if they have equivalent prerequisites. Chemistry courses not meeting this criterion may be transferred as elective credit. Important Note: Individuals seeking an internship or employment in a forensic science laboratory may be required to undergo an extensive background check including a lie detector test, fingerprinting, and drug testing.

General Education 23 Requirements		
33 credit hours		33
Required Courses in	Chemistry (33 credit hours)	
CHE 111	FUNDAMENTALS OF CHEMISTRY I	3
CHE 112	FUNDAMENTALS OF CHEMISTRY II	3
CHE 113	LABORATORY FOR FUNDAMENTALS OF CHEMISTRY I	1

CHE 114	LABORATORY FOR FUNDAMENTALS OF CHEMISTRY II	1
CHE 201	ORGANIC CHEMISTRY I	3
CHE 202	ORGANIC CHEMISTRY II	3
CHE 203	ORGANIC CHEMISTRY LABORATORY I	1
CHE 204	ORGANIC CHEMISTRY LABORATORY II	1
CHE 301	ANALYTICAL CHEMISTRY	4
CHE 331	PRINCIPLES OF PHYSICAL CHEMISTRY	3
CHE 403	INSTRUMENTAL ANALYSIS	3
CHE 404	INSTRUMENTAL ANALYSIS LAB	2
CHE 470	BIOCHEMISTRY I	3
CHE 471	BIOCHEMICAL TECHNIQUES	2
Required Courses in For	ensic Science (19 credit hours)	
Forensic Science		
FOR 122	SCIENTIFIC CRIMINAL EVIDENCE ANALYSIS	3
FOR 312	CHEMISTRY AND CRIMINALISTICS	4
FOR 410	PROFESSIONAL PRACTICES IN FORENSIC SCIENCE	3
Advanced Forensic Scien	nce	
FOR 414	FORENSIC CHEMISTRY LABORATORY	3
FOR 416	CHEMICAL MICROSCOPY	3
or CHE 406	ANALYTICAL TOXICOLOGY	
Choose one from the fol	lowing (Capstone):	
FOR 412	INTERNSHIP IN CRIMINALISTICS	3
FOR 475	CAPSTONE RESEARCH IN FORENSIC CHEMISTRY	3
Required Courses in Biology (8 credit hours)		
BIO 211	INTRODUCTION TO CELL BIOLOGY AND GENETICS	4
BIO 303	GENETICS	4
or BIO 350	GENES IN POPULATIONS	
Upper Division Elective Courses (3-4 credit hours)		
Colook ok loook 2 amerikala	average that fall average	2.4

Total Credit Hours		120
2-3 credit hours		0-2
All College Electives		
PHY 112	UNIVERSITY PHYSICS II	5
PHY 111	UNIVERSITY PHYSICS I	5
MAT 311	INTRODUCTORY PROBABILITY AND STATISTICS	3
MAT 162	CALCULUS II	4
MAT 161	CALCULUS I	4
Required Credit Hours Ou	itside the Major (21 credit hours)	
PSY 375	FORENSIC PSYCHOLOGY	
GES 360	FORENSIC GEOSCIENCE	
FOR 497	FORENSIC MICROCOURSE (1-3)	
FOR 495	SPECIAL PROJECT (**) (1-3)	
FOR 416	CHEMICAL MICROSCOPY (*) (2)	
FOR 412	INTERNSHIP IN CRIMINALISTICS (**)	
CHE 472	BIOCHEMISTRY II	
CHE 406	ANALYTICAL TOXICOLOGY (*)	
CHE 360	INTRODUCTION TO INORGANIC CHEMISTRY	
CHE 325	MEDICATIONS	
CHE 310	LITERATURE OF CHEMISTRY	
BIO 450	RECOMBINANT DNA TECHNOLOGY	
BIO 316	GENERAL MICROBIOLOGY	
BIO 314	ADVANCED CELL BIOLOGY	
BIO 309	LABORATORY SURVEY OF HUMAN ANATOMY AND PHYSIOLOGY	
BIO 308	SURVEY OF HUMAN ANATOMY AND PHYSIOLOGY	
BIO 305	MOLECULAR BIOLOGY	
ANT 325	FORENSIC ANTHROPOLOGY	
ANT 324	THE HUMAN SKELETON	

- * May not be used as both an Advanced Forensic Science elective and as an elective course in this category.
- **May not be used as both a capstone course and as an elective course in this category.

- 1. demonstrate mastery of core knowledge in the area of Analytical Chemistry
- 2. demonstrate mastery of core knowledge in the area of Organic Chemistry
- 3. demonstrate mastery of basic concepts in the area of Physical Chemistry
- 4. demonstrate a mastery of basic concepts in the area of Biochemistry
- 5. use and understand the theory behind modern laboratory instrumentation
- 6. demonstrate ability to analyze and evaluate experimental data
- 7. be knowledgeable concerning safe laboratory practices
- 8. keep a legible and complete experimental record
- 9. be able to synthesize and characterize molecules
- 10. demonstrate adequate technical report writing skills
- 11. use a personal computer to analyze and collect scientific data
- 12. demonstrate adequate oral presentation skills
- 13. be prepared for a career in forensic chemistry or for advanced studies in Forensic Chemistry

Geology (B.S.)

Bachelor of Science Program Program Code: BS-AS Major Code: GEL

Geosciences Department 160 Science and Math Complex (716) 878-6731 geosciences.buffalostate.edu/

Professional Licensure: This program leads to a recommendation for New York State Professional Licensure certification; please check for certification requirements in all other states

The Geology program offers students a variety of opportunities to investigate the materials that constitute and the processes that shape the earth. Classroom, laboratory, and field work provide a base for careers related to energy, the environment, and the exploration for petroleum and mineral resources. Graduates of the program are prepared to enter these fields and/or pursue advanced study in the geosciences. The Geology program includes all the coursework necessary for graduates to be eligible for obtaining a New York State license as a Professional Geologist.

Student majors are strongly encouraged to pursue independent research under faculty supervision and/or an internship experience. Students may find additional information about undergraduate research possibilities from faculty and by visiting the Office of Undergraduate Research Web site at undergraduateresearch.buffalostate.edu/ (http://undergraduateresearch.buffalostate.edu/). A departmental honors program also is available. Students should contact the department for additional information.

General Educatio	n 23 Requirements	
33 credit hours		33
Geology Major Re	equirements (67-75 credit hours)	
Required GES cou	urses (39-40 credit hours)	
At least 7 credit h	nours from the following:	7-8
GES 200	FIRST YEAR GEOLOGY EXPERIENCE	
CEC 201	BLIVEICAL CEOLOGY (A)	

GES 202	EARTH AND ENVIRONMENTS THROUGH TIME (4)	
All of the following c	ourses (34 credit hours)	
GES 303	MINERALOGY	4
GES 306	SEDIMENTOLOGY AND STRATIGRAPHY	4
GES 307	GEOMORPHOLOGY	3
GES 323	THIRD- YEAR RESEARCH AND FIELD METHODS EXPERIENCE	3
GES 401	IGNEOUS AND METAMORPHIC PETROLOGY	4
GES 408	STRUCTURAL GEOLOGY	4
GES 418	STRUCTURAL GEOLOGY FIELD EXPERIENCE	3
GES 428	GEOLOGICAL HAZARDS	3
GES 452	HYDROGEOLOGY	3
GES 472	GEOLOGY SENIOR SEMINAR	3
Required Cognate Co	ourses (27-34 credit hours)	27-34
Chemistry (8 credit h	nours)	
CHE 111 & CHE 113	FUNDAMENTALS OF CHEMISTRY I and LABORATORY FOR FUNDAMENTALS OF CHEMISTRY I (4)	
CHE 112 & CHE 114	FUNDAMENTALS OF CHEMISTRY II and LABORATORY FOR FUNDAMENTALS OF CHEMISTRY II (4)	
Physics (8-10 credit h	hours)	
PHY 107	GENERAL PHYSICS I (4)	
or PHY 111	UNIVERSITY PHYSICS I	
PHY 108	GENERAL PHYSICS II (4)	
or PHY 112	UNIVERSITY PHYSICS II	
Mathematics (5-10 credit hours)		
Choose one of the fo	ollowing combinations:	
Combination 1:		
MAT 124 & MAT 126	FUNCTIONS AND MODELING II and APPLIED CALCULUS I (7)	

MAT 161	CALCULUS I (4)	
Combination 2:		
MAT 124 & MAT 311	FUNCTIONS AND MODELING II and INTRODUCTORY PROBABILITY AND STATISTICS (6)	
Combination 3:		
MAT 126 & MAT 127	APPLIED CALCULUS I and APPLIED CALCULUS II (8)	
Combination 4:		
MAT 161	CALCULUS I (4)	
AND		
MAT 162	CALCULUS II (4)	
GIS Course (6 credit hou	urs)	
GEG 325	MAPS AND MAPMAKING USING GIS	
GEG 425	FUNDAMENTALS OF GIS	
All College Electives		13-22
Total Credit Hours		120

- 1. demonstrate knowledge of fundamental concepts and principles of Geology
- 2. be able to work as part of a team and to communicate results
- 3. demonstrate critical thinking skills in Geology
- 4. be skilled in scientific writing, and use of geology literature
- 5. be able to collect, analyze and interpret field and laboratory data
- 6. be proficient in geology-used computer hardware and software

Health and Wellness (B.S.)

Bachelor of Science Program Program Code: BS-SP Major Code: HWP

Health, Nutrition and Dietetics Department Caudell Hall 334 (716) 878-5913 hnd.buffalostate.edu/

The major prepares students with the knowledge and skills needed to assume roles as health and wellness professionals in a variety of settings, such as: not-for-profit community health agencies; college health promotion; government public health agencies; corporate or worksite wellness; private business or personal training consultant; and health care organizations. Students are eligible to become Certified Health Education Specialists (CHES).

Admission Requirements

Applicants must have a minimum cumulative GPA of 2.0.

General Education 23 Requirements			
33 credit hours		33	
Health and Wellne	Health and Wellness Major Requirements (51 credit hours)		
Required Courses	(42 credit hours)		
BIO 101	HUMAN BIOLOGY (Students can take BIO 101, 100, or 111)	3	
Or BIO 100	PRINCIPLES OF BIOLOGY		
Or BIO 111	FOUNDATIONS OF BIOLOGY		
BIO 308	SURVEY OF HUMAN ANATOMY AND PHYSIOLOGY	3	
HEW 204	PERSONAL HEALTH	3	
HEW 225	INTRODUCTORY EPIDEMIOLOGY	3	
HEW 305	COMMUNITY HEALTH/WELLNESS	3	
HEW 312	METHODS AND MATERIALS IN HEALTH AND WELLNESS	3	
HEW 320	PSYCHOACTIVE DRUGS AND HEALTH	3	
or HEW 425	ALCOHOL PROBLEMS		
HEW 326	INTRODUCTION TO HEALTH DATA VISUALIZATION AND ANALYTICS	3	
or HEW 350	EPIDEMIOLOGY		
HEW 340	DIMENSIONS OF HUMAN SEXUALITY	3	
HEW 345	WELLNESS, FITNESS, AND AGING	3	
HEW 401	ASSESSMENT AND EVALUATION IN HEALTH WELLNESS	3	
HEW 411	CRITICAL ISSUES IN HEALTH AND WELLNESS	3	
HEW 412	COMMUNITY HEALTH PROMOTION PROGRAMS	3	
or HEW 488	INTERNSHIP		
NFS 102	INTRODUCTORY NUTRITION	3	
Electives (12 credit hours)			
Select from the fo	llowing:	12	
HEW 304	EXERCISE PHYSIOLOGY I		
HEW 306	EXERCISE PHYSIOLOGY II		

HEW 308	WOMEN'S HEALTH ISSUES	
HEW 310	HEALTH STANDARDS AND EMERGENCY CARE	
HEW 320	PSYCHOACTIVE DRUGS AND HEALTH (*)	
HEW 322	PRINCIPLES OF HEALTH PROMOTION SCIENCES (*)	
HEW 326	INTRODUCTION TO HEALTH DATA VISUALIZATION AND ANALYTICS (*)	
HEW 345	WELLNESS, FITNESS, AND AGING	
HEW 350	EPIDEMIOLOGY (*)	
HEW 412	COMMUNITY HEALTH PROMOTION PROGRAMS (*)	
HEW 425	ALCOHOL PROBLEMS (*)	
HEW 426	APPLIED DATA ANALYSIS FOR HEALTH PROMOTION SCIENCES	
HEW 488	INTERNSHIP (*) (3-12)	
MAT 311	INTRODUCTORY PROBABILITY AND STATISTICS	
PSY 355	LIFESPAN DEVELOPMENTAL PSYCHOLOGY	
PSY 376	HEALTH PSYCHOLOGY	
SOC 100	INTRODUCTION TO SOCIOLOGY	
All College Electives		
39-45 credit hours	5	36-45
Total Credit Hours	3	120

History (B.A.)

Bachelor of Arts Program Program Code: BA-AS Major Code: HIS

History and Social Studies Education Department Cassety Hall 302 (716) 878-5412 <u>history.buffalostate.edu/</u>

The program ensures both a knowledge and an understanding of the foundations of the development of humankind, stimulates thinking about interaction of ideas, develops facility with written and verbal expression, increases confidence in articulating ideas, and encourages the critical awareness of self so important to an educated individual. Special emphasis is placed on the development of the abilities to analyze, synthesize, and communicate.

A departmental honors program is also available. Students should contact the department for additional information.

Program Requirements General Education 23 Requirements 33 credit hours 33 History Major Requirements (39 credit hours) American History (6 credit hours) HIS 106 HISTORY OF AMERICAN LIFE I 3 HIS 107 HISTORY OF AMERICAN LIFE II 3 European History (6 credit hours) 6 Select two from the following: FOUNDATIONS OF WESTERN CIVILIZATION **HIS 115** HIS 116 **EUROPE SINCE 1500 HIS 117** TWENTIETH-CENTURY EUROPE World History (6 credit hours) 6 Two electives in Asian, African, Middle Eastern, or Latin American history Research and Writing Seminar (3 credit hours) HIS 300 3 RESEARCH AND WRITING SEMINAR 3 Historiography Seminar (3 credit hours) Coose one of the following: **HIS 400** SENIOR SEMINAR IN HISTORY HIS 490 SENIOR SEMINAR IN HISTORIOGRAPHY Upper-Division History Electives (15 credit hours) Select five 300 or 400-level courses by advisement 15 All College Electives 48 credit hours 48 **Total Credit Hours** 120

Students will:

- 1. demonstrate mastery of subject material
- 2. demonstrate knowledge of historiography
- 3. be able to identify and interpret primary sources

- 4. understand the relationship between cause and effect
- 5. appreciate different cultural patterns, behaviors, actions, and the influence of ideas on human behavior
- 6. be able to write clearly and effectively according to the standards and the conventions of the historical profession

Interior Design (B.F.A.)

Bachelor of Fine Arts Program Program Code: BFA-AS Major Code: INT

Art and Design Department Upton Hall 402 (716) 878-6032 artdesign.buffalostate.edu/interior-design

Council for Interior Design Accreditation (CIDA) Accredited

Professional Licensure: This program leads to a recommendation for NYS certification; please check for <u>certification requirements in all other states</u>.

The Interior Design B.F.A. degree offers students a specialized studio-oriented education in preparation for advanced or graduate studies, or for beginning careers as professional interior designers. Students gain a thorough knowledge of design processes and technical skills, including computer-aided design and traditional drafting and rendering. Construction methods, lighting design, materials specification, and color use are emphasized to support specializations within the major. Studios offer design exploration in spatial experimentation, residential design, retail design, public buildings, office planning, and industry standards for sustainable design principles, and culminates in the Undergraduate Thesis Project.

Interior design graduates are prepared for careers in independent practice and employment in interior design and architectural firms, institutions, corporations, and other settings. Following completion of this program, plus two years interior design work experience, students are eligible to apply and sit for the professional, nationally recognized NCIDQ (National Council for Interior Design Qualification) licensing exam. They may then apply for a "Certified Interior Designer" designation and the right to practice in New York State.

The Interior Design Department is committed to the intellectual, personal, and professional growth of the students. Through varied and increasingly complex coursework, coupled with a strong community-based project component, the students and faculty have and will continue to enhance the region in terms of residential, health care, and commercial designs, as well as culturally sensitive and public-interest projects. These projects connect the students, faculty, and community in a dynamic relationship, inspire students to expand their horizons, and create life-long learners. The program is rigorous and comprehensive, resulting in professional and innovative designers actively sought after by regional and national employers.

Requirements for Acceptance to Major

Prospective students interested in the Interior Design Program must complete these requirements to be considered for admission:

- 1. Successful completion of the Skills Competency Exam following <u>IDE 151</u>, <u>IDE 152</u>, and AAD 105. The one-day exam evaluates entry-level ability to visualize, design, and communicate spatial solutions to a simple problem through scaled drafting, rendering, and model-building.
- 2. A minimum cumulative GPA of 2.6 after the freshman year.
- 3. Transfer Students: Acceptance to the major is determined after an admissions review with the faculty of the Interior Design Program; transcripts, portfolio of work, and course syllabi are evaluated on a case-by-case basis. Completing this course sequence could take a full four years and it should not be assumed that transfer students can graduate in two years of admission.

Program Requirements

General Education 23 Requirements

33 credit hours 33

Interior Design Major Requirements (84 credit hours)

Required Art/Design History Courses (21 credit hours)		
AAD 251	ART HISTORY: FROM PREHISTORY TO MEDIEVAL PERIOD	3
AAD 252	ART HISTORY: FROM THE RENAISSANCE TO THE MODERN WORLD	3
AAD 104	DIGITAL PRESENTATION METHODS	3
AAD 105	INTRODUCTION TO DIGITAL DESIGN AND FABRICATION	3
IDE 104	SPATIAL CONCEPTS OF INTERIOR DESIGN	3
IDE 205	HISTORY OF INTERIOR DESIGN AND ARCHITECTURE I	3
IDE 254	HISTORY OF INTERIOR DESIGN AND ARCHITECTURE II	3
Required Interior Design	Courses (63 credit hours)	
IDE 101	INTRODUCTION TO INTERIOR DESIGN	3
IDE 151	MECHANICAL AND PERSPECTIVE DRAWING	3
IDE 152	RAPID IDEATION AND VISUALIZATION	3
IDE 201	INTERIOR DESIGN I	3
IDE 204	BUILDING MATERIALS - SELECTION, SPECIFICATIONS, AND ESTIMATING	3
IDE 206	EVIDENCE BASES DESIGN	3
IDE 251	INTERIOR DESIGN II	3
IDE 301	INTERIOR DESIGN III	3
IDE 302	COMPUTER APPLICATIONS FOR INTERIOR DESIGN I	3
IDE 303	CONSTRUCTION DOCUMENTATION AND INTERIOR DETAILING	3
IDE 351	INTERIOR DESIGN IV	3
IDE 352	COMPUTER APPLICATIONS FOR INTERIOR DESIGN II	3
IDE 355	LIGHTING DESIGN	3
IDE 356	ADVANCED PARAMETRIC DESIGN	3
IDE 401	INTERIOR DESIGN V	1-3
IDE 403	PROFESSIONAL PRACTICE	3
IDE 404	INTERIOR DESIGN THESIS RESEARCH	3

IDE 451	INTERIOR DESIGN VI THESIS STUDIO	3
IDE 488	INTERIOR DESIGN INTERNSHIP	3
All College Electives		
3 credit hours		3
Total Credit Hours		120

- 1. Aesthetics, Visual Language, and Creativity: Students will demonstrate a mastery of the visual language of art and design through the aesthetic application of the formal elements and relational and organizational principles of art/design, and a mastery of advanced creative problem-solving skills.
- 2. Technical and Cognitive Skills: Students will demonstrate a mastery of advanced skills in the use of the technical tools, techniques, and processes and cognitive (conceptual development) to produce work from concept to finished product.
- 3. Professional Practice: Students will present a final project or exhibition and a professional portfolio.

International Relations (B.A.)

Bachelor of Arts Program Program Code: BA-AS Major Code: INR

Government, Planning, and Philosophy Department Cassety Hall 202 (716) 878-6116

https://gpp.buffalostate.edu/

International relations (IR) focuses on understanding the interactions and interconnectedness of nation-states and other non-state participants in international affairs. IR practitioners investigate the crucial global issues and agendas of our times such as international and intrastate conflicts, sustainable development, terrorism, foreign policy, international trade and economic integration, international development, and the protection of human dignity.

The IR program challenges students to think with diverse world views and intense study of current global events. The program equips students for future careers in foreign service, nonprofit work, international business, and global governance. It also offers training in foreign language skills, analytic empirical analysis skills, and international field experience either through an internship or a study-abroad program.

Admissions Requirements

Any matriculated student in good academic standing may declare this program.

General Education	n Requirements	
33 credit hours		33
International Rela	tions Major Requirements (39 credit hours)	
Required Courses	(21 credit hours)	
PSC 101	INTRODUCTION TO GOVERNMENT AND POLITICS	3
PSC 104	INTERNATIONAL RELATIONS	3
PSC 203	POLITICAL ANALYSIS	3

PSC 204	POLITICAL STATISTICS	3
PSC 352	HISTORY OF POLITICAL THOUGHT II	3
PSC 399	RESEARCH SKILLS	3
PSC 470	SENIOR SEMINAR	3
or PSC 488	INTERNSHIP	
Area Studies Electives (3 cr	edit hours)	
Select one from the follow	ing:	3
PSC 240	EUROPEAN POLITICAL SYSTEMS	
PSC 333	AFRICAN INTERNATIONAL RELATIONS	
PSC 335	INTERNATIONAL RELATIONS OF THE MIDDLE EAST	
PSC 340	POLITICS OF DEVELOPING COUNTRIES	
PSC 341	GOVERNMENT, POLITICS, AND POLICIES OF THE EUROPEAN UNION	
PSC 345	POLITICS AND HISTORY OF THE MIDDLE EAST	
GEG 300	WORLD REGIONAL GEOGRAPHY	
GEG 360	GEOGRAPHY OF ASIA	
Major Electives (12 credit I	nours)	12
Select four from the follow	ring:	
PSC 210	THE AMERICAN PRESIDENCY	
PSC 302	INTERNATIONAL CONFLICT AND PEACEFUL RESOLUTION	
PSC 305	ENVIRONMENTAL POLICY	
PSC 308	INTERNATIONAL ORGANIZATIONS AND INTERNATIONAL LAW	
PSC 309	INTERNATIONAL POLITICAL ECONOMY	
PSC 309 PSC 330	INTERNATIONAL POLITICAL ECONOMY AMERICAN FOREIGN POLICY	
PSC 330	AMERICAN FOREIGN POLICY	
PSC 330 PSC 337	AMERICAN FOREIGN POLICY POLITICS OF GLOBALIZATION	
PSC 330 PSC 337 PSC 344	AMERICAN FOREIGN POLICY POLITICS OF GLOBALIZATION COMPARATIVE DEMOCRACY UN AND GLOBAL AFFAIRS	3
PSC 330 PSC 337 PSC 344 PSC 430 Foreign Language or Election	AMERICAN FOREIGN POLICY POLITICS OF GLOBALIZATION COMPARATIVE DEMOCRACY UN AND GLOBAL AFFAIRS	3

Students who receive foreign language exemption should take an additional course chosen with their advisor from those courses listed above or the electives below

PSC 495	SPECIAL PROJECT (1-3)	
PSC 497	WASHINGTON SEMESTER (1-16)	
PSC 499	INDEPENDENT STUDY (3-12)	
All College Electives		
48 credit hours		48
Total Credit Hours		120

Students will:

- 1. Appraise the existing literature in a given topic area of international relations and how the major historical schools of thought explain that topic.
- 2. Implement skills to generate scientific hypotheses in a given topic area of international relations.
- 3. Implement appropriate statistical techniques for research design in a given topic area of international relations.
- 4. Defend valid conclusions concerning international relations topic area based on analysis of literature, theory development, hypothesis generation, statistical analysis of data, and discussion of study outcomes.
- 5. Demonstrate an understanding of the civic dispositions and skills conducive to democratic involvement and global awareness.

Journalism (B.A.)

Bachelor of Arts Program Program Code: BA-AS Major Code: JBS

Communication Department Buckham Hall B120 (716) 878-6008 communication.buffalostate.edu/

Accrediting Council on Education in Journalism and Mass Communications (Accredited)

This major allows students interested in news, sports, and entertainment the flexibility to tailor a journalism program toward the presentation of factual information in writing, video, audio, or digital formats for print, broadcast, online and social media. It meets the needs of students preparing for a career in which research and interviewing abilities, accurate and objective reporting, legal and ethical insight, and competence in editing are central to professional practice. Compare this major with communication studies, media production, and public relations and advertising.

Buffalo State was the first SUNY school to become affiliated with the Accrediting Council on Education in Journalism and Mass Communications. and has one of the largest program in the system. Only a handful of undergraduate programs in New York State are accredited.

Career Opportunities

Students prepare for careers as reporters, anchors, commentators, and news directors for radio, television, and internet-based media, and as reporters, editors, and columnists on newspapers, magazines, blogs, and other digital media.

The profile of a successful journalism graduate is a person with a strong writing proficiency and a compelling use of language, good speaking and listening skills, keen ethical insight and legal awareness, and competence in presentation of information in written, visual, and digital formats.

Academic Standards

Only grades of C or higher may be applied toward requirements for any communication degree; courses with lower grades must be repeated. Consistent with standards of the Accrediting Council for Education in Journalism and Mass Communications, the number

of communication courses that students may take is capped, encouraging a broad-based liberal arts education. The department encourages students to take minors or second majors.

Admission Requirements

Incoming freshmen and transfer students can declare the major.

COM Experiential Course (3 credit hours)

See the <u>Communication department</u> for application forms and additional information, including a list of equivalent core courses at community colleges. Transfer students from two-year schools may apply only core courses toward this major for a maximum of 12 credits. Students generally require four semesters of study after completing communication core courses.

Program Requirements General Education 23 Requirements 33 credit hours 33 Journalism Major Requirements (45 credit hours) Communication Core (12 credit hours) **COM 100** MEDIA LITERACY 3 3 COM 210 INTRODUCTION TO MEDIA WRITING 3 COM 215 INTRODUCTION TO VISUAL COMMUNICATION or COM 212 INTRODUCTION TO DIGITAL STORYTELLING SPC 205 INTRODUCTION TO ORAL COMMUNICATION 3 Major Requirements (24 credit hours) 3 WRITING FOR PRINT AND ONLINE JOURNALISM COM 303 COM 312 **BASIC MEDIA PRODUCTION** 3 COM 334 **BROADCAST JOUNALISM OPERATION** 3 COM 338 DIGITAL AND BROADCAST REPORTING 3 COM 347 DIGITAL AND BROADCAST PRODUCING 3 3 **COM 400** COMMUNICATION LAW 3 COM 405 FIELD REPORTING Senior Seminar (3 credit hours) COM 450 **COMMUNICATION AND SOCIETY** 3 Communication Electives (6 credit hours) 6 Select any two 300 or 400 level COM or SPC courses

Select one of the following:		
COM 403	Digital Sports Journalism	
COM 488	Internship	
COM 495	Special Project	
COM 499	Independent Study	,
All College Electives		
36-48 credit hours		36-48
Total Credit Hours		120

- 1. understand and apply First Amendment principles and the law appropriate to professional practice relevant to the major
- 2. demonstrate an understanding of the history and role of professionals and institutions in shaping communication relevant to the major
- 3. demonstrate an understanding of gender and gender identity, race, ethnicity, class, sexual orientation, and, as appropriate, other forms of diversity, equity, and inclusion in domestic and global societies and their significance in the major
- 4. understand concepts and apply theories in the use and presentation of images and information relevant to the major
- 5. demonstrate an understanding of professional ethical principles and work ethically in pursuit of truth, accuracy, fairness and diversity
- 6. think critically, creatively and independently
- 7. conduct research and evaluate information by methods appropriate to the communication professions in which they work
- 8. write correctly and clearly in forms and styles appropriate for the communication professions, audiences and purposes they serve
- 9. critically evaluate their own work and that of others for accuracy, fairness, clarity, creativity, effective storytelling and/or professional style as appropriate to the major
- 10. apply basic numerical and statistical concepts appropriate to the major
- 11. apply tools and technologies appropriate to the major
- 12. demonstrate competence in professional speaking and presentational skills appropriate to the major

Mathematics (B.A.)

Bachelor of Arts Program Program Code: BA-AS Major Code: MAT

Mathematics Department SAMC 159 (716) 878-5621 mathematics.buffalostate.edu/

This program is for students passionate about mathematics. Students develop the ability to think abstractly and explore multiple facets of mathematics through courses in calculus, linear algebra, probability, statistics, abstract algebra, and real analysis. This program provides the theoretical foundation, analytical skills, and problem-solving abilities for a range of careers.

Admission Requirements

The department strongly recommends first time freshmen and current and transfer students applying for the mathematics major with less than 30 credits to have completed three years of Regents high school mathematics plus a high school course in pre-calculus or AP Statistics.

Transfer students and current students applying for the mathematics major with at least 30 credits are required to have completed a minimum of one semester of calculus with a minimum grade of C and have a cumulative gpa of 2.0.

General Education 2	3 Requirements		
33 credit hours		33	
Mathematics Major	Requirements (42 credit hours)		
Required Courses (33	3 credit hours)		
MAT 161	CALCULUS I	4	
MAT 162	CALCULUS II	4	
MAT 202	INTRODUCTION TO LINEAR ALGEBRA	3	
MAT 263	CALCULUS III	4	
MAT 300	TECHNIQUES OF PROOF	3	
MAT 301	INTRODUCTION TO GROUP THEORY	3	
MAT 325	PROBABILITY AND STATISTICS	3	
MAT 417	INTRODUCTION TO REAL ANALYSIS I	3	
MAT 491	CAPSTONE RESEARCH IN MATHEMATICS	3	
CIS 151	COMPUTER PROGRAMMING I		3
or MAT 241	COMPUTATIONAL TOOLS FOR APPLIED MATHEMATICIANS I		
Elective major course	es (9 credit hours)		
Select three from the	e following:	9	
MAT 302	ABSTRACT ALGEBRA II		
MAT 309	COMBINATORICS		
MAT 315	DIFFERENTIAL EQUATIONS		
MAT 316	INTERMEDIATE DIFFERENTIAL EQUATIONS		
MAT 319	MATHEMATICAL BIOLOGY		
MAT 322	MODERN GEOMETRY		
MAT 351	ELEMENTARY THEORY OF NUMBERS		

MAT 370	APPLIED NETWORKS	
MAT 383	APPLIED STATISTICS I	
MAT 404	APPLICATIONS OF LINEAR ALGEBRA	
MAT 411	COMPLEX VARIABLES	
MAT 461	NUMERICAL ANALYSIS	
MAT 490	SEMINAR (1-3)	
MAT 495	SPECIAL PROJECT (1-3)	
MAT 499	INDEPENDENT STUDY (3-12)	
All College Electives		
48 credit hours		48
Total Credit Hours		120

- 1. Mathematics majors (MAT) will master a rich and diverse set of mathematical ideas and techniques from across the core areas of single and multivariable calculus, discrete mathematics, linear algebra, probability, modern algebra, and real analysis and complex variables.
- 2. Mathematics majors (MAT) will understand the nature of proof and construct well-structured and valid mathematical arguments.
- 3. Mathematics majors (MAT) will choose appropriate mathematical approaches for analyzing new situations and solving multi-step and open-ended problems, including the use of appropriate technology.
- 4. Mathematics majors (MAT) will communicate mathematical ideas and results, both orally and in writing, with clarity and precision.

Mathematics Education (7–12, B.S.)

Bachelor of Science Program Program Code: BS-AS Major Code: MTS

Mathematics Department SAMC 159 (716) 878-5621 mathematics.buffalostate.edu/

Accredited: Council for the Accreditation of Educator Preparation (CAEP) (formerly NCATE)

Enrollment in all teacher education programs follows the guidelines for "Admission to Teacher Education Programs" found in this catalog. Applicants who do not yet meet all admissions criteria should consult with the department.

Professional Licensure: This program leads to a recommendation for NYS certification; please check for <u>certification requirements in all other states</u>

The B.S. in mathematics with adolescent certification is directed to a career goal of teaching. This program includes the course requirements leading to New York State certification to teach mathematics in grades 7–12.

Candidates should consult the Teacher Certification website for current seminars and

workshops. https://teachercertification.buffalostate.edu/seminars-and-workshops

Admission Requirements

SUNY has a standard admissions requirement of a 3.0 GPA for entry into an educator preparation program at the undergraduate or graduate level or a rank in the top 30th percentile of the high school class for entry into an undergraduate educator preparation program as a first-year student.

For first-year students, four years of college preparatory mathematics is recommended; top 30th percentile or an 85% high school average; submission of ACT or SAT score.

Transfer students with a 3.0 GPA from either their last college or the combined average of all previous colleges, whichever is higher, will be admitted directly into Mathematics Education (BS-AS MTS).

Transfer students and current students applying for a mathematics major with at least 30 credits are required to have completed a minimum of one semester of calculus with a minimum grade of C and have a cumulative GPA of 3.0.

Students who do not meet admissions requirements will be admitted into the Mathematics (BA-AS MAT) major.

General Education 23 Requirements		
33 credit hours		33
Mathematics Major Rec	uirements (39 credit hours)	
Required Courses (33 cr	edit hours)	
MAT 161	CALCULUS I 1	4
MAT 162	CALCULUS II	4
MAT 202	INTRODUCTION TO LINEAR ALGEBRA	3
MAT 263	CALCULUS III	4
MAT 300	TECHNIQUES OF PROOF	3
MAT 301	INTRODUCTION TO GROUP THEORY	3
MAT 322	MODERN GEOMETRY	3
MAT 325	PROBABILITY AND STATISTICS	3
MAT 351	ELEMENTARY THEORY OF NUMBERS	3
MAT 417	INTRODUCTION TO REAL ANALYSIS I	3
Electives (6 credit hours)	
Select two from the foll	owing:	6
MAT 302	ABSTRACT ALGEBRA II	
MAT 309	COMBINATORICS	
MAT 315	DIFFERENTIAL EQUATIONS	
MAT 316	INTERMEDIATE DIFFERENTIAL EQUATIONS	
MAT 319	MATHEMATICAL BIOLOGY	
MAT 366	COMPUTATIONAL TOOLS FOR APPLIED MATHEMATICIANS II	

MAT 370	APPLIED NETWORKS	
MAT 383	APPLIED STATISTICS I	
MAT 404	APPLICATIONS OF LINEAR ALGEBRA	
MAT 411	COMPLEX VARIABLES	
MAT 461	NUMERICAL ANALYSIS	
MAT 490	SEMINAR (1-3)	
MAT 495	SPECIAL PROJECT (1-3)	
MAT 499	INDEPENDENT STUDY (3-12)	
Professional Education R	Requirements (30 credit hours)	
SPF 303	EDUCATIONAL PSYCHOLOGY: MIDDLE AND SECONDARY EDUCATION	3
SPF 403	HISTORICAL AND PHILOSOPHICAL FORCES INFLUENCING SECONDARY EDUCATION	3
EDU 416	TEACHING LITERACY IN MIDDLE AND SECONDARY SCHOOLS	3
EDU 417	ADOLESCENT LITERACY	3
EXE 100	NATURE AND NEEDS OF INDIVIDUALS WITH SPECIAL NEEDS ¹	3
MED 200	FOUNDATIONS OF TEACHING MATHEMATICS 7-12 AND FIELD EXPERIENCE	3
MED 300	FIELD EXPERIENCE: METHODS IN THE TEACHING OF SECONDARY SCHOOL MATHEMATICS	3
MED 307	USES OF TECHNOLOGY IN THE TEACHING OF MATHEMATICS ¹	3
MED 308	METHODS IN THE TEACHING OF SECONDARY SCHOOL MATHEMATICS	3
MED 383	LEARNING AND TEACHING PROBLEM SOLVING	3
Student Teaching Requirements (12 credit hours)		
MED 407	STUDENT TEACHING OF MATHEMATICS IN JUNIOR HIGH/MIDDLE SCHOOL ¹	6
MED 408	STUDENT TEACHING OF MATHEMATICS IN HIGH SCHOOL ¹	6
All College Electives		
6 credit hours		6
Total Credit Hours		120

¹ Fulfill General Education 23 requirement.

- 1. demonstrate content knowledge in secondary mathematics.
- 2. demonstrate ability to plan instruction.
- 3. Demonstrate effect on student learning.

Mathematics Education (7–12, 5–6 Extension, B.S.)

Bachelor of Science Program Program Code: BS-AS Major Code: MTX

Mathematics Department SAMC 159 (716) 878-5621 mathematics.buffalostate.edu/

Accredited: Council for the Accreditation of Educator Preparation (CAEP) (formerly NCATE)

Enrollment in all teacher education programs follows the guidelines for "Admission to Teacher Education Programs" found in this catalog. Applicants who do not yet meet all admissions criteria should consult with the department.

The B.S. program in mathematics with adolescent certification (5–6 extension) is directed to a career goal of teaching. This program includes the course requirements leading to New York State initial certification to teach mathematics in grades 5–12.

Candidates should consult the Teacher Certification website for current seminars and

workshops. https://teachercertification.buffalostate.edu/seminars-and-workshops

Admission Requirements

SUNY has a standard admissions requirement of a 3.0 GPA for entry into an educator preparation program at the undergraduate or graduate level or a rank in the top 30th percentile of the high school class for entry into an undergraduate educator preparation program as a first-year student.

For first-year students, four years of college preparatory mathematics is recommended; top 30th percentile or an 85% high school average; submission of ACT or SAT score.

Transfer students with a 3.0 GPA from either their last college or the combined average of all previous colleges, whichever is higher, will be admitted directly into Mathematics Education (BS-AS-MTS).

Transfer students and current students applying for a mathematics major with at least 30 credits are required to have completed a minimum of one semester of calculus with a minimum grade of C and have a cumulative GPA of 3.0.

Students who do not meet these admissions requirements will be admitted into the Mathematics (BA-AS MAT) major.

General Education 23 Requirements		
33 credit hours		33
Mathematics Major I	Requirements (39 credit hours)	
Required Courses (33	3 credit hours)	
MAT 161	CALCULUS I 1	4
MAT 162	CALCULUS II	4
MAT 202	INTRODUCTION TO LINEAR ALGEBRA	3
MAT 263	CALCULUS III	4
MAT 300	TECHNIQUES OF PROOF	3

MAT 301	INTRODUCTION TO GROUP THEORY	3
MAT 322	MODERN GEOMETRY	3
MAT 325	PROBABILITY AND STATISTICS	3
MAT 351	ELEMENTARY THEORY OF NUMBERS	3
MAT 417	INTRODUCTION TO REAL ANALYSIS I	3
Electives (6 credit hours)		
Select two courses from	the following:	6
MAT 302	ABSTRACT ALGEBRA II	
MAT 309	COMBINATORICS	
MAT 315	DIFFERENTIAL EQUATIONS	
MAT 316	INTERMEDIATE DIFFERENTIAL EQUATIONS	
MAT 319	MATHEMATICAL BIOLOGY	
MAT 366	COMPUTATIONAL TOOLS FOR APPLIED MATHEMATICIANS II	
MAT 370	APPLIED NETWORKS	
MAT 382	TOPICS IN MATHEMATICAL STATISTICS	
MAT 383	APPLIED STATISTICS I	
MAT 404	APPLICATIONS OF LINEAR ALGEBRA	
MAT 411	COMPLEX VARIABLES	
MAT 461	NUMERICAL ANALYSIS	
MAT 490	SEMINAR (1-3)	
MAT 495	SPECIAL PROJECT (1-3)	
MAT 499	INDEPENDENT STUDY (3-12)	
Professional Education R	equirements (36 credit hours)	
SPF 303	EDUCATIONAL PSYCHOLOGY: MIDDLE AND SECONDARY EDUCATION	3
SPF 353	HUMAN DEVELOPMENT DURING EARLY ADOLESCENCE AND ADOLESCENCE	3
SPF 403	HISTORICAL AND PHILOSOPHICAL FORCES INFLUENCING SECONDARY EDUCATION	3
EDU 416	TEACHING LITERACY IN MIDDLE AND SECONDARY SCHOOLS	3

EDU 417	ADOLESCENT LITERACY	3
EXE 100	NATURE AND NEEDS OF INDIVIDUALS WITH SPECIAL NEEDS ¹	3
MED 200	FOUNDATIONS OF TEACHING MATHEMATICS 7-12 AND FIELD EXPERIENCE	3
MED 300	FIELD EXPERIENCE: METHODS IN THE TEACHING OF SECONDARY SCHOOL MATHEMATICS	3
MED 307	USES OF TECHNOLOGY IN THE TEACHING OF MATHEMATICS ¹	3
MED 308	METHODS IN THE TEACHING OF SECONDARY SCHOOL MATHEMATICS	3
MED 309	TEACHING MATHEMATICS IN THE MIDDLE SCHOOL	3
MED 383	LEARNING AND TEACHING PROBLEM SOLVING	3
Student Teaching Requir	ements (12 credit hours)	
MED 407	STUDENT TEACHING OF MATHEMATICS IN JUNIOR HIGH/MIDDLE SCHOOL	6
MED 408	STUDENT TEACHING OF MATHEMATICS IN HIGH SCHOOL	6
Total Credit Hours		120

¹ Fulfills General Education 23 requirement.

- 1. Develop a rich and diverse set of mathematical ideas and techniques from across the core courses of single and multivariable calculus, discrete mathematics, linear algebra, geometry, probability and statistics, modern algebra, and real analysis.
- 2. Validate sound problem solving and reasoning knowledge in an environment emphasizing the connected nature of mathematics and the ability to effectively communicate these ideas orally and in writing.
- 3. Use their knowledge of student diversity to affirm and support full participation and continued study of mathematics by all students. This diversity includes gender, culture, ethnicity, socioeconomic background, language, special needs, and mathematical learning styles (i.e., Mastery Learning, Understanding Learning, Interpersonal Learning and Self-Expressive Learning).
- 4. Experiment with appropriate technology to support the learning of mathematics. This technology includes, but is not limited to, computers and hand-held devices, calculators, online apps, smart boards, and a variety of relevant multimedia.
- 5. Measure formative and summative assessment methods to monitor student learning, to determine students' understanding of mathematics, and to monitor their own teaching effectiveness.

Mechanical Engineering Technology (B.S.)

Evening study available.
Bachelor of Science Program
Program Code: BS-SP
Major Code: MET

Engineering Technology Department Technology Building 126 (716) 878-6017 engineeringtechnology.buffalostate.edu The Mechanical Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of <u>ABET</u>, under the commission's General Criteria and Program Criteria for Mechanical Engineering Technology and Similarly Named Programs.

The bachelor's degree in the mechanical engineering technology program is designed to give the student a broad education in the areas of mechanical design, mechanics, stress analysis, thermosciences, and manufacturing. Graduates are in high demand and are employed by manufacturing companies, consulting firms, government agencies, testing laboratories, and other enterprises that require people with strong mechanically oriented backgrounds. Graduates work as mechanical designers developing new products, manufacturing supervisors solving problems of producing these products for performance or quality, as plant engineers improving or maintaining factories, and in technical sales selling these products. The duties of technologists may involve overseeing installation, operation, maintenance, and repair to ensure that machines and equipment are installed and functioning according to specifications; specifying system components; supervising drafters in developing the design of products; testing and evaluating products; and or/developing cost estimates.

General Education 23 Requirements		
33 credit hours		33
Mechanical Engineering T	echnology Major Requirements (51 credit hours)	
ENT 213	COMPUTER METHODS IN ENGINEERING TECHNOLOGY	3
ENT 301	MECHANICS I	3
ENT 302	MECHANICS II	3
ENT 303	KINEMATICS	3
ENT 311	THERMODYNAMICS	3
ENT 312	FLUID MECHANICS	3
ENT 314	SOLID MODELING	3
ENT 331	ELECTRICAL CIRCUITS AND DEVICES	3
ENT 335	INDUSTRIAL ELECTRONICS	3
or ENT 371	ELECTRIC MACHINES	
ENT 401	STRESS ANALYSIS	3
ENT 402	SHOCK AND VIBRATION ANALYSIS	3
ENT 411	HEAT TRANSFER	3
ENT 420	PROFESSIONAL EXPERIENCE IN MECHANICAL ENGINEERING TECHNOLOGY	1
ENT 421	MACHINE DESIGN I	3
ENT 422	MACHINE DESIGN II	3
TEC 101	TECHNICAL DRAWING	3
TEC 201	MATERIALS PROCESSING	3

TEC 311	MATERIALS SCIENCE AND TESTING	3
Electives (0-10 credit hours	5)	
The following accreditation electives:	requirements can be included in the General Education 23 requirements and	0-10
CHE 111 & CHE 113	FUNDAMENTALS OF CHEMISTRY I and LABORATORY FOR FUNDAMENTALS OF CHEMISTRY I (4)	
CIS 151	COMPUTER PROGRAMMING I	
MAT 126	APPLIED CALCULUS I (4)	
or MAT 161	CALCULUS I (4)	
MAT 127	APPLIED CALCULUS II (4)	
or MAT 162	CALCULUS II (4)	
MAT 315	DIFFERENTIAL EQUATIONS	
or ENT 300	MATHEMATICS APPLICATIONS IN ENGINEERING TECHNOLOGY	
PHY 107	GENERAL PHYSICS I (4)	
or PHY 111	UNIVERSITY PHYSICS I (5)	
PHY 108	GENERAL PHYSICS II (4)	
or PHY 112	UNIVERSITY PHYSICS II (5)	
SPC 205	INTRODUCTION TO ORAL COMMUNICATION	
Select one of the following	:	
MAT 202	INTRODUCTION TO LINEAR ALGEBRA	
MAT 241	COMPUTATIONAL TOOLS FOR APPLIED MATHEMATICIANS I	
MAT 270	DISCRETE MATHEMATICS	
MAT 311	INTRODUCTORY PROBABILITY AND STATISTICS (or other math course by advisement)	
All College Electives		
30-36 credit hours		30-36
Total Credit Hours		120

Students will acquire:

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline.

- 2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.
- 3. An ability to apply written, oral, and graphical communication in broadly-defined technical and nontechnical environments; and an ability to identify and use appropriate technical literature.
- 4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes.
- 5. An ability to function effectively as a member or leader on a technical team.

Media Production (B.A.)

Bachelor of Arts Program Program Code: BA-AS Major Code: MDP

Communication Department Buckham Hall B120 (716) 878-3606 communication.buffalostate.edu/

Accrediting Council on Education in Journalism and Mass Communications (Accredited)

The media production major focuses in audio/radio and video/television non-fiction and fiction production and postproduction. Students will develop storytelling, creative abilities, and critical thinking skills as well as organizational and technical proficiency relevant to the media field.

The study of media production integrates many skills: researching, writing, storyboarding, fundraising, and other aspects of organizing video and audio preproduction; working on site with crew, actors and participants to record and film fiction and documentary [non-fiction] audio and video productions; familiarity with both field and studio protocols; mastery of techniques for creative cinematography, expressive lighting and professional sound recording under a variety of field and studio conditions, and development of storytelling abilities in post-production from editing to visual effects. Compare this major with communication studies, journalism, and public relations & advertising.

This is one of a small number of programs in media production or broadcasting at a SUNY school that is affiliated with the Accrediting Council on Education in Journalism and Mass Communications. Among all colleges in New York State, only a handful of other undergraduate programs are accredited by ACEJMC.

Career Opportunities

Students in the media production major prepare to enter a field with diverse opportunities. Our graduates work in fiction and non-fiction film as directors, producers, writers, cinematographers, and editors. They are also photojournalists as well as commercial or newscast directors at television stations and in programming and producing for radio stations. They work in network and cable sports broadcast production roles in radio and television. Others work as producers and directors of advertisements, podcasts, webcasts and social media content; and as owners of production companies or freelancers specializing in music videos, wedding videos and promotional films.

The profile of a successful media production graduate is a person with strong abilities in writing, critical thinking and production management as well as both creative and technical skills handling cameras, audio recording and lighting equipment and postproduction software.

Academic Standards

Only grades of C or higher may be applied toward requirements for any communication degree; courses with lower grades must be repeated. Consistent with standards of the Accrediting Council for Education in Journalism and Mass Communication, the number of communication courses that students may take is capped, encouraging a broad-based liberal arts education. The department encourages students to take minors and participate in service learning and internships to gain professional experiences.

Admission Requirements

Incoming freshmen and transfer students can declare the major.

See <u>communication.buffalostate.edu/</u> for additional information. Transfer students from two-year schools may apply only core courses toward this major for a maximum of 12 credits. Students generally require four semesters of study after completing communication core courses.

General Education 23 Requirements		
33 credit hours		33
Media Production Ma	jor Requirements (42 credit hours)	
Communication Core	(12 credit hours)	
COM 100	MEDIA LITERACY	3
COM 210	INTRODUCTION TO MEDIA WRITING	3
COM 212	INTRODUCTION TO DIGITAL STORYTELLING	3
or COM 215	INTRODUCTION TO VISUAL COMMUNICATION	
SPC 205	INTRODUCTION TO ORAL COMMUNICATION	3
Major Requirements ((30 credit hours)	
Select all five (15 cred	it hours)	
COM 304	WRITING FOR BROADCAST (TV, RADIO, FILM)	3
COM 312	BASIC MEDIA PRODUCTION	3
COM 328	INTERMEDIATE POST PRODUCTION	3
COM 329	INTERMEDIATE VIDEO PRODUCTION	3
COM 450	COMMUNICATION AND SOCIETY	3
Select one Critical Thinking course (3 credit hours):		3
COM 317	MEDIA MANAGEMENT	
SPC 326	FILM ANALYSIS AND EVALUATION	
SPC 422	MEDIA CRITICISM	
SPC 426	DOCUMENTARY FILM ANALYSIS	
Select two Advanced Production Course (6 credit hours) 6		6
COM 428	ADVANCED AUDIO PRODUCTION	
COM 429	ADVANCED MULTI-CAMERA STUDIO PRODUCTION	

COM 431	ADVANCED FIELD PRODUCTION	
COM 432	ADVANCED POST-PRODUCTION	
COM 433	ADVANCED TV DOCUMENTARY PRODUCTION	
COM 434	ADVANCED VIDEO PRODUCTION PRACTICUM	
COM 435	VISUAL EFFECTS	
Communication Electives (6 credit hours)		
Select any two 300 or 400 level COM or SPC courses 6		6
All College Electives		
45 credit hours 45		45
Total Credit Hours 12		120

understand and apply First Amendment principles and the law appropriate to professional practice relevant to the major

- 1. demonstrate an understanding of the history and role of professionals and institutions in shaping communication relevant to the major
- 2. demonstrate an understanding of gender and gender identity, race, ethnicity, class, sexual orientation, and, as appropriate, other forms of diversity, equity, and inclusion in domestic and global societies and their significance in the major
- 3. understand concepts and apply theories in the use and presentation of images and information relevant to the major
- 4. demonstrate an understanding of professional ethical principles and work ethically in pursuit of truth, accuracy, fairness and diversity
- 5. think critically, creatively and independently
- 6. conduct research and evaluate information by methods appropriate to the communication professions in which they work
- 7. write correctly and clearly in forms and styles appropriate for the communication professions, audiences and purposes they
- 8. critically evaluate their own work and that of others for accuracy, fairness, clarity, creativity, effective storytelling and/or professional style as appropriate to the major
- 9. apply basic numerical and statistical concepts appropriate to the major
- 10. apply tools and technologies appropriate to the major
- 11. demonstrate competence in professional speaking and presentational skills appropriate to the major

Music (B.A.)

Bachelor of Arts Program Program Code: BA-AS Major Code: MUS

Music Department Rockwell Hall 203 (716) 878-6401 music.buffalostate.edu

Accredited by National Association of Schools of Music (NASM)

The Bachelor of Arts in Music degree is designed to provide candidates with broad musical knowledge and applied experiences in a liberal arts context, offering opportunities to integrate music into a variety of disciplines. Candidates have the option of choosing a Music Industry, Performance, or General Studies concentration as part of the degree. All Music Department faculty participate in varied instructional aspects of the BA degree, teaching courses in music theory, history, literature, and aural perception, leading instrumental and vocal ensembles, and offering applied studio instruction.

Admission Requirements: In addition to successful matriculation to the University, all music majors must complete a successful music performance audition and an interview with music faculty. Audition information can be found at this link: https://music.buffalostate.edu/audition

General Program and Perfo	rmance Concentration	
General Education 23 Requi	irements	
33 credit hours		33
Required Courses (32 credit	t hours)	
Musicianship (20 credit hou	rs)	
MUS 122	INTRODUCTION TO MUSIC STUDIES AND CAREERS	2
MUS 218	AURAL PERCEPTION I	1
MUS 219	AURAL PERCEPTION II	1
MUS 230	MUSIC THEORY I	3
MUS 231	MUSIC THEORY II	3
MUS 318	AURAL PERCEPTION III	1
MUS 319	AURAL PERCEPTION IV	1
MUS 321	COMPOSITION, IMPROVISATION AND ARRANGING	2
MUS 330	MUSIC THEORY III	3
MUS 331	MUSIC THEORY IV	3
Music History and Literature	e (12 credit hours)	
MUS 206	FOUNDATIONS OF AMERICAN POPULAR MUSIC 1900-1950	3
MUS 302	MUSIC HISTORY: ANTIQUITY THROUGH BAROQUE	3
MUS 303	MUSIC HISTORY: CLASSIC THROUGH MODERN	3
MUS 440	ETHNOMUSICOLOGY	3
Choose either General Prog	ram Requirements or Performance Concentration Requirements Below	
All College Electives		34
Total Credit Hours		120
General Program Requirem	ents	

MUS 171	APPLIED MUSIC I	1
MUS 173	APPLIED MUSIC II	1
MUS 271	APPLIED MUSIC III	1
MUS 273	APPLIED MUSIC IV	1
Music Ensemble/Primary (6 credit hours)		
Selected from the follo	wing:	
MUS 111	ACCOMPANYING FOR PIANISTS (1)	
MUS 313	CHAMBER CHOIR (1)	
MUS 314	WIND ENSEMBLE (1)	
MUS 335	BUFFALO STATE CHORALE (1)	
MUS 390	UNIVERSITY PHILHARMONIA	
Capstone (1 credit hou	r)	
MUS 491	CAPSTONE IN MUSIC	1-3
Music Electives (10 credit hours)		
	·	
MUS courses selected		
	by advisement	
MUS courses selected	by advisement ation Requirements	
MUS courses selected	by advisement ation Requirements	1
MUS courses selected Performance Concentr Applied Music (8 credit	by advisement ation Requirements hours)	1
MUS courses selected Performance Concentre Applied Music (8 credit MUS 171	by advisement ation Requirements hours) APPLIED MUSIC I	
MUS courses selected Performance Concentr Applied Music (8 credit MUS 171 MUS 173	by advisement ation Requirements hours) APPLIED MUSIC I APPLIED MUSIC II	1
MUS courses selected Performance Concentra Applied Music (8 credit MUS 171 MUS 173 MUS 271	by advisement ation Requirements hours) APPLIED MUSIC I APPLIED MUSIC II APPLIED MUSIC III	1
MUS courses selected Performance Concentr Applied Music (8 credit MUS 171 MUS 173 MUS 271 MUS 273	by advisement ation Requirements hours) APPLIED MUSIC I APPLIED MUSIC II APPLIED MUSIC III APPLIED MUSIC IV	1 1 1
MUS courses selected Performance Concentra Applied Music (8 credit MUS 171 MUS 173 MUS 271 MUS 273 MUS 371	by advisement ation Requirements hours) APPLIED MUSIC I APPLIED MUSIC II APPLIED MUSIC III APPLIED MUSIC IV APPLIED MUSIC V	1 1 1 1-2
MUS courses selected Performance Concentra Applied Music (8 credit MUS 171 MUS 173 MUS 271 MUS 273 MUS 371 MUS 373	by advisement ation Requirements hours) APPLIED MUSIC I APPLIED MUSIC III APPLIED MUSIC IVI APPLIED MUSIC IV APPLIED MUSIC V APPLIED MUSIC VI	1 1 1 1-2 1-2
MUS courses selected Performance Concentra Applied Music (8 credit MUS 171 MUS 173 MUS 271 MUS 273 MUS 371 MUS 373 MUS 371	by advisement ation Requirements hours) APPLIED MUSIC I APPLIED MUSIC III APPLIED MUSIC IVI APPLIED MUSIC V APPLIED MUSIC VI APPLIED MUSIC VIII APPLIED MUSIC VIIII	1 1 1 1-2 1-2 1-2
MUS courses selected Performance Concentra Applied Music (8 credit MUS 171 MUS 173 MUS 271 MUS 273 MUS 371 MUS 373 MUS 471 MUS 473	by advisement ation Requirements hours) APPLIED MUSIC I APPLIED MUSIC III APPLIED MUSIC IV APPLIED MUSIC V APPLIED MUSIC VI APPLIED MUSIC VIII APPLIED MUSIC VIII APPLIED MUSIC VIIII APPLIED MUSIC VIIII APPLIED MUSIC VIIII APPLIED MUSIC VIIIIII Try (8 credit hours)	1 1 1 1-2 1-2 1-2

MUS 290	PHILHARMONIA ORCHESTRA (1)		
MUS 313	CHAMBER CHOIR (1)		
MUS 314	WIND ENSEMBLE (1)		
MUS 335	BUFFALO STATE CHORALE (1)		
Music Ensemble/Sec	condary (2 credit hours)		
MUS courses selecte	ed by advisement		
Junior Recital (1 cred	dit hour)		
MUS 495	SPECIAL PROJECT	1-3	
Capstone (1 credit h	nour)		
MUS 491	CAPSTONE IN MUSIC	1-3	
Music Elective (1 cre	edit hour)		
MUS course selected	d by advisement		
Music Industry Conc	centration		
General Education 2	23 Requirements		
33 credit hours			33
Required Courses (54 Credit Hours)			
Musicianship (18 Cre	edit Hours)		
MUS 112	APPLIED MUSIC		1
MUS 218	AURAL PERCEPTION I		1
MUS 219	AURAL PERCEPTION II		1
MUS 230	MUSIC THEORY I		3
MUS 231	MUSIC THEORY II		3
MUS 318	AURAL PERCEPTION III		1
MUS 319	AURAL PERCEPTION IV		1
MUS 330	MUSIC THEORY III		3
MUS 331	MUSIC THEORY IV		3
Music History and Literature (12 Credit Hours)			
DMP 340	HISTORY OF ELECTRONIC MUSIC		3

MUS 201	SURVEY OF WESTERN MUSIC HISTORY	3	
MUS 208	SURVEY OF WORLD MUSIC CULTURES	3	
DMP 350	ELECTRONIC MUSIC COMPOSITION I	3	
Applied Music (4 Credit	Hours)		
MUS 171	APPLIED MUSIC I	1	
MUS 173	APPLIED MUSIC II	1	
MUS 271	APPLIED MUSIC III	1	
MUS 273	APPLIED MUSIC IV	1	
Music Ensemble/Prima	ry (4 Credit Hours)		
Selected from the follow	wing:		
MUS 290	PHILHARMONIA ORCHESTRA	1	
MUS 313	CHAMBER CHOIR	1	
MUS 314	WIND ENSEMBLE	1	
MUS 335	BUFFALO STATE CHORALE	1	
*Through advisement, students pursuing a Music Industry concentration will be encouraged to take music industry- related courses in fields including but not limited to Business and Communications, as part of their fulfillment of All College Electives.			
Music Ensemble/Second	Music Ensemble/Secondary (2 Credit Hours)		
MUS courses selected b	py advisement		
Music Industry (6 Credi	t Hours)		
DMP 221	INTRODUCTION TO SOUND RECORDING AND REINFORCEMENT	3	
DMP 222	MUSIC BUSINESS	3	
Special Project (1 Credit Hour)			
DMP 495	SPECIAL PROJECT	1	
Capstone (1 Credit Hour)			
MUS 491	CAPSTONE IN MUSIC	1-3	
Music Industry Electives (6 Credit Hours)			
Selected from the following:			
DMP 250	FUNDAMENTALS OF MUSIC PRODUCTION	3	

DMP 321	RECORDING TECHNIQUES	3
DMP 430	GAME AUDIO	3
All College Electives		33
Total Credit Hours		120

Students will demonstrate:

- 1. the ability to hear, identify, and work conceptually with the elements of music rhythm, melody, harmony, structure, timbre, texture
- 2. an understanding of and the ability to read and realize musical notation
- 3. an understanding of compositional processes, aesthetic properties of style, and the ways these shape and are shaped by artistic and cultural forces
- 4. an acquaintance with a wide selection of musical literature, the principal eras, genres, and cultural sources
- 5. the ability to develop and defend musical judgments
- 6. ability in performing areas at levels consistent with the goals and objectives of the specific liberal arts degree option being followed
- 7. understanding of procedures for realizing a variety of musical styles
- 8. knowledge and/or skills in one or more areas of music beyond basic musicianship appropriate to the individual's needs and interests, and consistent with the purposes of the specific liberal arts degree option being followed
- 9. the ability to read at sight with fluency demonstrating both general musicianship and, in the major performance area, a level of skill relevant to professional standards appropriate for the particular music concentration
- 10. a rudimentary capacity to create derivative or original music both extemporaneously and in written form

Music Education (Pre-K-12, B.Mus.)

Bachelor of Music Program Program Code: MUSB-AS Major Code: MUE

Music Department Rockwell Hall 203 (716) 878-6401 music.buffalostate.edu

Accredited by National Association of Schools of Music (NASM)

Enrollment in all teacher education programs follows the guidelines for "Admission to Teacher Education Programs" found in this catalog. Applicants who do not yet meet all admissions criteria should consult with the department.

Professional Licensure: This program leads to a recommendation for NYS certification; please check for <u>certification requirements in all other states</u>

The Music Education program leads to a New York State Initial Certificate for teaching general, vocal, and instrumental music in New York State schools at the pre-kindergarten through grade 12 levels. The program requires intensive study in music performance, music history, music theory, and methodology of teaching, with an emphasis on world music and urban culture. Admission Requirements: In addition to successful matriculation to the University, all music majors must complete a successful music performance audition and an interview with music faculty. Audition information can be found at this link: https://music.buffalostate.edu/audition

Candidates should consult the Teacher Certification website for current seminars and workshops. https://teachercertification.buffalostate.edu

Program Requirements General Education 23 Requirements 33 credit hours 1 Basic Musicianship and Performance Major Requirements (70 credit hours) **Applied Instruction** 7 Select 7 semesters; 7 credit hours from the following: MUS 171 APPLIED MUSIC I (1) MUS 173 APPLIED MUSIC II (1) MUS 271 APPLIED MUSIC III (1) **MUS 273** APPLIED MUSIC IV (1) MUS 371 APPLIED MUSIC V (1-2) MUS 373 APPLIED MUSIC VI (1-2) MUS 471 APPLIED MUSIC VII (1-2) Ensemble Requirement 7 Select 7 semesters; 7 credit hours from the following: MUS 113 **BRASS TECHNIQUES (1) MUS 114** PERCUSSION TECHNIQUES (1) **MUS 115** STRING TECHNIQUES (1) **MUS 116 WOODWIND TECHNIQUES (1) MUS 119 VOCAL PEDAGOGY (1) MUS 122** INTRODUCTION TO MUSIC STUDIES AND CAREERS (2) **MUS 206** FOUNDATIONS OF AMERICAN POPULAR MUSIC 1900-1950 MUS 218 AURAL PERCEPTION I (1) MUS 219 **AURAL PERCEPTION II (1) MUS 220** TECHNOLOGY APPLICATIONS FOR MUSIC EDUCATION (2) **MUS 230** MUSIC THEORY I MUSIC THEORY II MUS 231 MUS 302 MUSIC HISTORY: ANTIQUITY THROUGH BAROQUE MUSIC HISTORY: CLASSIC THROUGH MODERN MUS 303

MUS 313	CHAMBER CHOIR (1)		
MUS 314	WIND ENSEMBLE (1)		
MUS 318	AURAL PERCEPTION III (1)		
MUS 319	AURAL PERCEPTION IV (1)		
MUS 321	COMPOSITION, IMPROVISATION AND ARRANGING (2)		
MUS 322	INSTRUMENTAL CONDUCTING (2)		
MUS 330	MUSIC THEORY III		
MUS 331	MUSIC THEORY IV		
MUS 333	CHORAL CONDUCTING (2)		
MUS 335	BUFFALO STATE CHORALE (1)		
MUS 345	ELEMENTARY MUSIC METHODS		
MUS 346	FIELD EXPERIENCE IN ELEMENTARY MUSIC (1)		
MUS 353	FIELD EXPERIENCE IN MUSIC FOR EXCEPTIONAL LEARNERS (1)		
MUS 360	SECONDARY INSTRUMENTAL MUSIC METHODS		
MUS 361	FIELD EXPERIENCE IN SECONDARY INSTRUMENTAL MUSIC (1)		
MUS 362	SECONDARY CHORAL METHODS		
MUS 363	FIELD EXPERIENCE IN SECONDARY CHORAL MUSIC (1)		
MUS 364	FIELD EXPERIENCE IN COMMUNITY MUSIC (1)		
MUS 390	UNIVERSITY PHILHARMONIA		
MUS 440	ETHNOMUSICOLOGY		
Professional Education Req	Professional Education Requirements (27 credit hours)		
SPF 203	SCHOOL AND SOCIETY		
SPF 303	EDUCATIONAL PSYCHOLOGY: MIDDLE AND SECONDARY EDUCATION		
Choose one:			
EDU 211	INTRODUCTION TO LITERACY		
or EDU 416	TEACHING LITERACY IN MIDDLE AND SECONDARY SCHOOLS		
EXE 100	NATURE AND NEEDS OF INDIVIDUALS WITH SPECIAL NEEDS		
MUS 457	STUDENT TEACHING IN ELEMENTARY MUSIC (5)		
MUS 458	STUDENT TEACHING IN SECONDARY MUSIC (5)		

MUS 460	STUDENT TEACHING SEMINAR (2)
In addition to the course requirements for music education majors, the class piano sequence is strongly recommended in the freshman and sophomore years of study:	
MUS 161	CLASS PIANO I (1)
MUS 162	CLASS PIANO II (1)
MUS 261	CLASS PIANO III (1)
MUS 262	CLASS PIANO IV (1)

Total Credit Hours 130-134

Program Learning Outcomes

Students will demonstrate:

- 1. Technical skills requisite for artistic self-expression in at least one major performance area at a level appropriate for the particular music concentration.
- 2. An overview understanding of the repertory in the student's major performance area and the ability to perform from a cross-section of that repertory.
- 3. The ability to read at sight with fluency demonstrating both general musicianship and, in the major performing area, a level of skill relevant to professional standards appropriate for the particular concentration.
- 4. Knowledge and skills sufficient to work as a leader and in collaboration on matters of musical interpretation, including rehearsal and conducting skills as appropriate to the particular music concentration."
- 5. Keyboard competency
- 6. Growth in artistry, technical skills, collaborative competence and knowledge of repertory through regular ensemble experiences that are varied both in size and nature.
- 7. Rudimentary capacity to create derivative or original music both extemporaneously and in written form.
- 8. A basic knowledge of music history through the present time, including study and experience of musical language and achievement in addition to that of the primary culture encompassing the area of specialization.
- 9. An acquaintance with repertories beyond the area of specialization through exposure to a large and varied body of music by attending and studying recitals, concerts, opera and musical theatre productions, and other performances
- 10. The ability to use technologies current to their area of specialization
- 11. Demonstrate achievement of professional, entry-level competence in the major area, including significant technical mastery, capability to produce work and solve professional problems independently, and a coherent set of artistic/intellectual goals that are evident in their work
- 12. The competency to form and defend value judgments about music, including the ability to communicate musical ideas, concepts, and requirements to professionals and lay persons.
- 13. Understand importance of health and safety within the contexts of practice, performance, teaching, and listening.
- 14. Personal commitment to the art of music, to teaching music as an element of civilization, and to encouraging the artistic and intellectual development of students, plus the ability to fulfill these commitments as an independent professional
- 15. The ability to lead students to an understanding of music as an art form, as a means of communication, and as a part of their intellectual and cultural heritage.
- 16. The capability to inspire others and to excite the imagination of students, engendering a respect for music and a desire for musical knowledge and experiences.
- 17. The ability to articulate logical rationales for music as a basic component of general education, and to present the goals and objectives of a music program effectively to parents, professional colleagues, and administrators.
- 18. The ability to work productively within specific education systems, promote scheduling patterns that optimize music instruction, maintain positive relationships with individuals of various social and ethnic groups, and be empathetic with students and colleagues of differing backgrounds.
- 19. The ability to evaluate ideas, methods, and policies in the arts, the humanities, and in arts education for their impact on the musical and cultural development of students.

¹ Up to 2 general education courses (Arts, Diversity, World History and Global Awareness) may overlap with required courses in the major which could significantly reduce the total number to 124-128 credit hours required. Advisement is strongly encouraged.

- 20. The ability and desire to remain current with developments in the art of music and in teaching, to make independent, indepth evaluations of their relevance, and to use the results to improve musicianship and teaching skills
- 21. Being a competent conductor, able to create accurate and musically expressive performances with various types of performing groups and in general classroom situations through knowledge of score reading and the integration of analysis, style, performance practices, instrumentation, and baton techniques
- 22. Competency to arrange and adapt music from a variety of sources to meet the needs and ability levels of school performing groups and classroom situations.
- 23. Functional performance abilities in keyboard, the voice, and instruments appropriate to the student's teaching specialization.
- 24. The ability to apply analytical and historical knowledge to curriculum development, lesson planning, and daily classroom and performance activities.
- 25. The ability to relate their understanding of music with respect to styles, literature, multiple cultural sources, and historical development to their students
- 26. The ability to successfully experience solo vocal, and small and large choral ensemble performance.
- 27. Performance ability sufficient to use at least one instrument as a teaching tool and to provide, transpose, and improvise accompaniments.
- 28. The ability to successfully teach general music classes and beginning vocal techniques individually, in small groups and in larger classes.
- 29. Knowledge of content, methodologies, philosophies, materials, technologies, and curriculum development for general music and vocal/choral music
- 30. The ability to successfully teach beginning instrumental students individually, in small groups and in larger classes.
- 31. Ability to teach music at various levels to different age groups and in a variety of classroom and ensemble settings in ways that develop knowledge of how music works syntactically as a communication medium and developmentally as an agent of civilization, including demonstration of skill in effective classroom and rehearsal management.
- 32. An understanding of child growth and development and an understanding of principles of learning as they relate to music.
- 33. The ability to assess aptitudes, experiential backgrounds, orientations of individuals and groups of students, and the nature of subject matter, and to plan educational programs to meet assessed needs.
- 34. Knowledge of current methods, materials, and repertories available in various fields and levels of music education appropriate to the teaching specialization.
- 35. The ability to accept, amend, or reject methods and materials based on personal assessment of specific teaching situations.
- 36. An understanding of evaluative techniques and ability to apply them in assessing both the musical progress of students and the objectives and procedures of the curriculum.

Nutrition and Dietetics (B.S.)

Bachelor of Science Program Program Code: BS-EP Major Code: NAD

Health, Nutrition and Dietetics Department Caudell Hall 334 (716) 878-5913 hnd.buffalostate.edu/

Accreditation Council for Education in Nutrition and Dietetics 120 South Riverside Plaza, Suite 2190 Chicago, IL 60606-6995 (800) 877-1600, ext. 5400 https://www.eatrightpro.org/acend

The program provides students with the academic requirements established by ACEND for entry-level dietitians/nutritionists. Graduates of the program receive a verification statement signed by the NAD program director. Graduates are then eligible to take the credentialing exam to become a dietetics technician registered or apply for an ACEND-accredited graduate program that are available throughout the country. After completing the ACEND requirements, individuals may take the registration examination administered by the Commission on Dietetic Registration. Passing the registration examination earns the credentials of Registered Dietitian/Nutritionist (RDN). Career opportunities are available to dietitians in health facilities, food service organizations, government agencies, and consulting work. Some individuals use this program to prepare for graduate study in nutrition-related areas.

Effective January 1, 2024, the Commission on Dietetic Registration (CDR) requires a minimum of a master's degree to be eligible to take the credentialing exam to become a registered dietitian nutritionist (RDN). In addition, CDR requires that individuals complete coursework and experiential learning in program(s) accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND). In most states, graduates also must obtain licensure or certification to practice. Graduates who successfully complete the ACEND-accredited Didactic Program in Nutrition and Dietetics at Buffalo State are eligible to apply to an ACEND-accredited graduate program/apply to take the CDR credentialing exam to become an RDN.

General Education 23 Requirements		
33 credit hours		33
Nutrition and Food Ser	vice Major Requirements (46 credit hours)	
NFS 100	INTRODUCTION TO FOOD PREPARATION	3
NFS 102	INTRODUCTORY NUTRITION	3
NFS 200	APPLIED FOOD CHEMISTRY	1
NFS 211	APPLIED MANAGEMENT IN DIETETICS I	3
NFS 230	INTRODUCTION TO DIETETICS	2
NFS 302	ADVANCED NUTRITION	3
NFS 311	APPLIED MANAGEMENT IN DIETETICS II	3
NFS 315	LIFE CYCLE AND COMMUNITY NUTRITION I	3
NFS 316	LIFE CYCLE AND COMMUNITY NUTRITION II	3
NFS 330	INTEGRATIVE AND FUNCTIONAL NUTRITION	1
NFS 401	MEDICAL NUTRITIONAL THERAPY I	4
NFS 402	MEDICAL NUTRITIONAL THERAPY II	3
NFS 403	MEDICAL NUTRITIONAL THERAPY III	3
NFS 405	PRINCIPLES OF NUTRITION EDUCATION	2
NFS 430	INTRODUCTION TO NUTRITION RESEARCH	3
NFS 420	DIETETIC EXPERIENCE	3
NFS 495	SPECIAL PROJECT	2
Requirements Outside the Department (37 credit hours) ¹		
BIO 100	PRINCIPLES OF BIOLOGY	3
BIO 308	SURVEY OF HUMAN ANATOMY AND PHYSIOLOGY	3
BIO 309	LABORATORY SURVEY OF HUMAN ANATOMY AND PHYSIOLOGY	1

BIO 355	SURVEY OF MICROBIOLOGY	3
CHE 111 & CHE 113	FUNDAMENTALS OF CHEMISTRY I and LABORATORY FOR FUNDAMENTALS OF CHEMISTRY I	4
CHE 112 & CHE 114	FUNDAMENTALS OF CHEMISTRY II and LABORATORY FOR FUNDAMENTALS OF CHEMISTRY II	4
CHE 201	ORGANIC CHEMISTRY I	3
CHE 203	ORGANIC CHEMISTRY I LAB	1
CHE 322	BIOLOGICAL CHEMISTRY	4
CIS 101	COMPUTER FUNDAMENTALS ²	3
LIB 100	INTRODUCTION TO LIBRARY RESEARCH METHODS ²	1
MAT 311	INTRODUCTORY PROBABILITY AND STATISTICS (or equivalent)	3
PSY 101	INTRODUCTION TO PSYCHOLOGY	3
Total Credit Hours		114

¹ Some of these courses meet the GE23 requirement.

Physics (B.A.)

Bachelor of Arts Program Program Code: BA-AS Major Code: PHY

Physics Department SAMC 162 (716) 878-6726 physics.buffalostate.edu/

The physics B.A. program provides a good concentration in physics courses and a broad distribution in the liberal arts. It prepares students for technical or technically related graduate school studies or employment.

Admission Requirements

Mathematics preparation through precalculus is required.

Program Requirements		
General Education 2	23 Requirements	
33 credit hours		33
Physics Major Requ	irements (32-34 credit hours)	
Required Core Cours	ses (20-22 credit hours)	
PHY 111	UNIVERSITY PHYSICS I	4-5
or PHY 107	GENERAL PHYSICS I	

² This course is recommended but not required.

PHY 112	UNIVERSITY PHYSICS II	4-5
or PHY 108	GENERAL PHYSICS II	
PHY 213	UNIVERSITY PHYSICS III	3
PHY 214	OPTICS AND HEAT LABORATORY	1
PHY 305	MODERN PHYSICS I	3
PHY 306	MODERN PHYSICS II	3
PHY 307	MODERN PHYSICS LABORATORY	2
Electives in Physics (12 credit hours)	
Select four from the	following:	12
PHY 308	OPTICS	
PHY 310	COMPUTATIONAL PHYSICS LABORATORY	
PHY 315	HEAT AND THERMODYNAMICS	
PHY 320	INTRODUCTION TO THEORETICAL PHYSICS	
PHY 323	STATICS	
PHY 324	ELECTRIC CIRCUIT ANALYSIS	
PHY 340	NONLINEAR DYNAMICS AND CHAOS	
PHY 410	ADVANCED PHYSICS LABORATORY	
PHY 425	CLASSICAL MECHANICS	
PHY 435	INTRODUCTION TO QUANTUM MECHANICS	
PHY 440	ELECTRICITY AND MAGNETISM I	
PHY 495	SPECIAL PROJECT (1-3)	
Required Credit Hou	rs Outside the Major (16 credit hours)	
CHE 111	FUNDAMENTALS OF CHEMISTRY I	3
CHE 112	FUNDAMENTALS OF CHEMISTRY II	3
CHE 113	LABORATORY FOR FUNDAMENTALS OF CHEMISTRY I	1
CHE 114	LABORATORY FOR FUNDAMENTALS OF CHEMISTRY II	1
MAT 161	CALCULUS I	4
or MAT 126	APPLIED CALCULUS I	
MAT 162	CALCULUS II	4

or MAT 127	APPLIED CALCULUS II	
All College Electives		
37-39 credit hours		37-39
Total Credit Hours		120

Students will demonstrate:

- 1. ability to communicate clearly using the vocabulary and concepts of physics.
- 2. ability to solve conceptual and quantitative problems in physics at an undergraduate level.
- 3. understanding of laboratory skills used in physics laboratory exercises.
- 4. ability to write algorithms in a computational language using common software.
- 5. an understanding of keeping an accurate and legible laboratory notebook.
- 6. to analyze and evaluate experimental data.
- 7. mastery of the subject matter in Classical Mechanics, Electricity & Magnetism, and Quantum Mechanics.
- 8. adequate technical report writing skills.
- 9. adequate oral presentation skills.

Physics (B.S.)

Bachelor of Science Program Program Code: BS-AS Major Code: PHY

Physics Department SAMC 162 (716) 878-6726 physics.buffalostate.edu/

The physics B.S. program gives a broad background in the fundamental concepts and applications of physics. This background is appropriate for further study in graduate school, or for scientific employment in physics or physics-related fields. Students in this program may pursue a four-year physics degree or they may choose the "three-two" option. Transfer students must take a minimum of 8 credit hours of upper-division courses, including PHY 410, in the Buffalo State Physics Department.

"Three-Two" Physics Engineering Option

This program offers an ideal combination of basic and applied science. Students in the Cooperative ("Three-Two") Physics-Engineering program attend Buffalo State for three years pursuing a liberal arts curriculum in physics. After three years, students in good standing transfer to the engineering school of their choice and complete the requirements for an engineering degree in two more years. Engineering schools to which students in the program have transferred in the last two years include Binghamton University and the University at Buffalo (both SUNY universities), and Clarkson University.

Admission Requirements

Mathematics preparation through precalculus is required.

Program Requirements

Program Requirements		
General Education 23 Requirements		
33 credit hours	33	
Physics Major Requirements (44-45 credit hours)		
Required Core Courses (26 credit hours)		

PHY 111 UNIVERSITY PHYSICS I

PHY 112	UNIVERSITY PHYSICS II	5
PHY 213	UNIVERSITY PHYSICS III	3
PHY 214	OPTICS AND HEAT LABORATORY	1
PHY 305	MODERN PHYSICS I	3
PHY 306	MODERN PHYSICS II	3
PHY 310	COMPUTATIONAL PHYSICS LABORATORY	3
PHY 320	INTRODUCTION TO THEORETICAL PHYSICS	3
Additional Required Cou	rses for the "Three-Two" Option (9 credit hours)	
PHY 324	ELECTRIC CIRCUIT ANALYSIS	3
PHY 410	ADVANCED PHYSICS LABORATORY	3
PHY 440	ELECTRICITY AND MAGNETISM I	3
Plus 10 credit hours of e	engineering courses, transferred from engineering school	10
Additional Required Cou	rses for Four-Year Physics B.SOnly Degree (18 credit hours)	
PHY 324	ELECTRIC CIRCUIT ANALYSIS	3
PHY 410	ADVANCED PHYSICS LABORATORY	3
PHY 425	CLASSICAL MECHANICS	3
PHY 435	INTRODUCTION TO QUANTUM MECHANICS	3
PHY 440	ELECTRICITY AND MAGNETISM I	3
PHY 441	ELECTRICITY AND MAGNETISM II	3
Required Credit Hours C	Outside the Major (23 credit hours)	
CHE 111	FUNDAMENTALS OF CHEMISTRY I	3
CHE 112	FUNDAMENTALS OF CHEMISTRY II	3
CHE 113	LABORATORY FOR FUNDAMENTALS OF CHEMISTRY I	1
CHE 114	LABORATORY FOR FUNDAMENTALS OF CHEMISTRY II	1
MAT 161	CALCULUS I	4
MAT 162	CALCULUS II	4
MAT 263	CALCULUS III	4
MAT 315	DIFFERENTIAL EQUATIONS	3

All College Electives	
19-20 credit hours	19-20
Total Credit Hours	120

Students will demonstrate:

- 1. ability to communicate clearly using the vocabulary and concepts of physics.
- 2. ability to solve conceptual and quantitative problems in physics at an undergraduate level.
- 3. understanding of laboratory skills used in physics laboratory exercises.
- 4. ability to write algorithms in a computational language using common software.
- 5. an understanding of keeping an accurate and legible laboratory notebook.
- 6. ability to analyze and evaluate experimental data.
- 7. mastery of the subject matter in Classical Mechanics, Electricity & Magnetism, and Quantum Mechanics.
- 8. adequate technical report writing skills.
- 9. adequate oral presentation skills.

Political Science (B.A.)

Bachelor of Arts Program Program Code: BA-AS Major Code: PSC

Government, Planning, and Philosophy Department Cassety Hall 202 (716) 878-6116 https://gpp.buffalostate.edu/

Political science is the study of government and politics. The major is divided into five areas: American government and politics, international politics, comparative government and politics, political theory, and public law.

Students gain an understanding of government and politics through classes distributed among the five areas and a combination of directed research and experiential learning, e.g. participation in scholarly conferences and/or internships at the national, state or local level. Students are thus prepared for an array of career options in both the public and private sectors.

The Bachelor of Arts program in Political Science enables students to concentrate their studies in Public Legal Studies or commit to a broader program of study under the General Political Science concentration.

Admissions Requirements

Any matriculated student in good academic standing may declare this program.

Program Requirements

Required Core Courses (18 Credits)

33
39

PSC 102	INTRODUCTION TO AMERICAN GOVERNMENT AND POLITICS
PSC 203	POLITICAL ANALYSIS
PSC 204	POLITICAL STATISTICS
PSC 399	RESEARCH SKILLS
PSC 470	SENIOR SEMINAR
or PSC 488	INTERNSHIP
Political Science Distribution - Select one course from four of the five distribution areas (12 Credits)	

Folitical Science Distribution - Select one course from jour of the five distribution dreas (12 Credits)		
American Government and Politics		
PSC 210	THE AMERICAN PRESIDENCY	
PSC 218	AFRICAN AMERICAN POLITICAL CULTURE	
PSC 225	WOMEN IN AMERICAN POLITICS	
PSC 310	AMERICAN POLITICAL PARTIES	
PSC 312	LEGISLATIVE PROCESS	
PSC 315	STATE AND LOCAL GOVERNMENT AND POLITICS	
PSC 323	NEW YORK STATE GOVERNMENT AND BUDGET	
PSC 410	POLITICAL BEHAVIOR AND PUBLIC OPINION	
International Relat	ions	
PSC 104	INTERNATIONAL RELATIONS	
PSC 302	INTERNATIONAL CONFLICT AND PEACEFUL RESOLUTION	
PSC 305	ENVIRONMENTAL POLICY	
PSC 308	INTERNATIONAL ORGANIZATIONS AND INTERNATIONAL LAW	
PSC 309	INTERNATIONAL POLITICAL ECONOMY	
PSC 330	AMERICAN FOREIGN POLICY	
PSC 333	AFRICAN INTERNATIONAL RELATIONS	
PSC 335	INTERNATIONAL RELATIONS OF THE MIDDLE EAST	
PSC 337	POLITICS OF GLOBALIZATION	
PSC 338	POLITICS AND HISTORY OF MODERN TERRORISM I	
PSC 339	POLITICS AND HISTORY OF MODERN TERRORISM II	
PSC 430	UN AND GLOBAL AFFAIRS	

Comparative Government and Politics		
PSC 240	EUROPEAN POLITICAL SYSTEMS	
PSC 340	POLITICS OF DEVELOPING COUNTRIES	
PSC 341	GOVERNMENT, POLITICS, AND POLICIES OF THE EUROPEAN UNION	
PSC 344	COMPARATIVE DEMOCRACY	
PSC 345/HIS 313	POLITICS AND HISTORY OF THE MIDDLE EAST	
Political Theory		
PSC 351	HISTORY OF POLITICAL THOUGHT I	
PSC 352	HISTORY OF POLITICAL THOUGHT II	
PSC 355	AMERICAN POLITICAL THOUGHT	
PSC 375	RACE, SEX, AND POLITICS OF MYTH AND STORY	
PSC 450	CONTEMPORARY POLITICAL THOUGHT	
Public Law		
PSC 221	JUDICAL PROCESS AND POLITICS	
PSC 223	SOCIAL JUSTICE THROUGH THE LAW	
PSC 250	INTRODUCTION TO LAW	
PSC 317	U.S. CONSTITUTIONAL LAW	
PSC 320	U.S. CIVIL LIBERTIES	
PSC 321	CIVIL PROCEDURE	
PSC 368	COMPARATIVE PUBLIC ADMINISTRATION	
PSC 420	CONTEMPORARY CONSTITUTIONAL ISSUES	
PSC 421	DISCRIMINATION AND THE U.S. CONSTITUTION	
PSC 485	MOCK TRIAL (1-3)	
General Electives in Political Science - Courses NOT used to fulfill Political Distribution Requirements may also be used as Political Science electives (9 credit hours)		
PSC 215	URBAN GOVERNMENT	
PSC 319	GAY, LESBIAN, BISEXUAL, TRANSGENDER, QUESTIONING POLITICS	
PSC 327	PRACTICAL POLITICS	
PSC 360	PUBLIC ADMINISTRATION	

PSC 364	AMERICAN PUBLIC POLICY
PSC 368	COMPARATIVE PUBLIC ADMINISTRATION
PSC 389	TOPICS IN POLITICAL SCIENCE
PSC 390	THE ITALIAN-AMERICAN EXPERIENCE: POLITICS, SOCIETY, & IDENTITY
PSC 415	URBAN PUBLIC POLICY
PSC 495	SPECIAL PROJECT
PSC 497	WASHINGTON SEMESTER (1-16)
PSC 499	INDEPENDENT STUDY (3-12)
Public Legal Studies Co	oncentration
Required Core Courses	(30 Credits)
PSC 101	INTRODUCTION TO GOVERNMENT AND POLITICS
PSC 102	INTRODUCTION TO AMERICAN GOVERNMENT AND POLITICS
PHI 103	INTRODUCTION TO LOGIC
or PHI 107	INTRODUCTION TO MATHEMATICAL LOGIC
PHI 112	PROFESSIONAL ETHICS
PSC 203	POLITICAL ANALYSIS
PSC 204	POLITICAL STATISTICS
PSC 221	JUDICAL PROCESS AND POLITICS
or PSC 250	INTRODUCTION TO LAW
PSC 317	U.S. CONSTITUTIONAL LAW
or PSC 320	U.S. CIVIL LIBERTIES
PSC 399	RESEARCH SKILLS
PSC 470	SENIOR SEMINAR
or PSC 488	INTERNSHIP
Political Science Distrib	oution - Select one course from each of the following distribution areas (9 Credit Hours)
American Governmen	t and Politics
PSC 312	LEGISLATIVE PROCESS

PSC 321

PSC 420

CIVIL PROCEDURE

CONTEMPORARY CONSTITUTIONAL ISSUES

PSC 421	DISCRIMINATION AND THE U.S. CONSTITUTION		
PSC 485	MOCK TRIAL (1-3)		
International Relations/Co	International Relations/Comparative Gov't & Pol		
PSC 302	INTERNATIONAL CONFLICT AND PEACEFUL RESOLUTION		
PSC 308	INTERNATIONAL ORGANIZATIONS AND INTERNATIONAL LAW		
PSC 344	COMPARATIVE DEMOCRACY		
Political Theory & Philosop	phy		
PHI 301	JUSTICE: LIBERTY VS. EQUALITY		
PHI 304	PHILOSOPHY OF LAW		
PHI 314	RIGHTS AND RESPECT		
PSC 351	HISTORY OF POLITICAL THOUGHT I		
PSC 355	AMERICAN POLITICAL THOUGHT		
PSC 450	CONTEMPORARY POLITICAL THOUGHT		
All College Electives			
48-51 credit hours		48-51	
Total Credit Hours		120	

- 1. Appraise the existing literature in a given topic area of political science and how the major historical schools of thought explain that topic
- 2. Implement skills to generate scientific hypothesis in a given topic area of political science
- 3. Implement appropriate statistical techniques for research design in a given topic area of political science
- 4. Defend valid conclusions concerning political science topic area based on analysis of literature, theory development, hypothesis generation, statistical analysis of data, and discussion of study outcomes
- 5. Demonstrate an understanding of the civic dispositions and skills conducive to democratic involvement and global awareness

Psychological Science (B.S.)

Bachelor of Science Program Program Code: BS-AS Major Code: PYC

Psychology Department Buckham Hall A238 (716) 878-6215 psychology.buffalostate.edu/

The B.S. degree in Psychological Science is designed for students interested in a more traditional path in psychology that is geared towards research-focused graduate studies and careers that would emphasize more advanced research training.

Psychological Science majors are not permitted to take courses with a PSY prefix pass/fail.

B.S. Honors in Psychology

Departmental honors are for students who are performing exceptionally well in their courses. The honors designation is an adjunct to the Psychological Science B.S. degree with an added emphasis on independent work, and requires that students conduct a comprehensive original research project under the supervision of a faculty mentor. To be considered, students must have at least 24 credit hours in psychology from Buffalo State with a minimum GPA of 3.5, and a minimum GPA of 3.25 in all courses taken at Buffalo State. In addition to the required courses in the B.S. degree program, honors designation requires students to complete PSY 496 and PSY 498 (Honors Thesis I and II respectively). A 45-credit-hour sequence of psychology courses is required for a B.S. honors degree. Students should see their adviser no later than their junior year for more information about the honors option.

Admission Requirements

The student must complete PSY 350 Statistics in Psychological Research with a grade of B- or higher.

General Education	n 23 Requirements	
33 credit hours		33
Psychology Major Requirements (42 credit hours)		
Required Courses	(18 credit hours)	
PSY 101	INTRODUCTION TO PSYCHOLOGY	3
PSY 350	STATISTICS IN PSYCHOLOGICAL RESEARCH ¹	3
PSY 450	RESEARCH METHODS IN PSYCHOLOGY I: INTRODUCTION TO RESEARCH METHODS $^{\!2}$	3
PSY 471	HISTORY AND SYSTEMS OF PSYCHOLOGY	3
PSY 472	SEMINAR ON PSYCHOLOGY	3
Select one from the following:		3
PSY 458	ADVANCED RESEARCH METHODS IN PSYCHOLOGY	
PSY 488	INTERNSHIP (3-15)	
PSY 495	SPECIAL PROJECT (1-3)	
PSY 499	INDEPENDENT STUDY (3-12)	
The prerequisite for noted.	or all 300-level courses is PSY 101 with a grade of C or better unless otherwise	
Students must sel	ect one course from each of the following groups.	
Biological/Cognitiv	ve Psychology	
Select one of the following by advisement:		3
PSY 304	LEARNING: THEORY AND RESEARCH	
PSY 308	SENSATION AND PERCEPTION	
PSY 321	COMPARATIVE ANIMAL BEHAVIOR	

PSY 330	THE PSYCHOLOGICAL POWER OF LANGUAGE	
PSY 333	BRAIN AND BEHAVIOR	
PSY 340	COGNITIVE PSYCHOLOGY	
Clinical Psychology		
Select one of the follow	ving by advisement:	3
PSY 392	ABNORMAL PSYCHOLOGY ³	
PSY 393	ABNORMAL CHILD PSYCHOLOGY ³	
Applied Psychology and	d Diversity	
Select one of the follow	ving by advisement:	3
PSY 310	BEHAVIOR MODIFICATION	
PSY 365	PSYCHOLOGY IN THE WORKPLACE	
PSY 367	ORGANIZATIONAL BEHAVIOR	
PSY 370	ENVIRONMENTAL PSYCHOLOGY I	
PSY 375	FORENSIC PSYCHOLOGY	
PSY 376	HEALTH PSYCHOLOGY	
PSY 379	PSYCHOLOGY OF MONEY	
PSY 381	PSYCHOLOGY OF CULTURE	
PSY 383	THE PSYCHOLOGY OF HUMAN SEXUAL BEHAVIOR	
PSY 387	PSYCHOLOGY OF GENDER	
PSY 388	PSYCHOLOGY OF DEATH AND DYING	
Social/Personality Psyc	hology	
Select one of the follow	ving by advisement:	3
PSY 311	PERSONALITY: THEORY AND RESEARCH	
PSY 325	SOCIAL BEHAVIOR	
Developmental Psychology		
Select one of the following by advisement: 3		3
PSY 301	PERSPECTIVES ON CHILD ABUSE AND ADVOCACY	

PSY 355	LIFESPAN DEVELOPMENTAL PSYCHOLOGY	
PSY 356	CHILD DEVELOPMENT	
PSY 357	ADOLESCENT AND YOUNG ADULT DEVELOPMENT	
Advanced Electives		
Select three additional	courses by advisement. At least two of these must be at the 400-level.	9
All College Electives		
45 credit hours		45
Total Credit Hours		120

¹ Prerequisite: At least sophomore status; Completion of the Mathematics and Quantitative Reasoning General Education requirement – only a MAT course at MAT 114 or higher.

- 1. be able to select and critically evaluate existing empirical literature in a given topic area of psychology.
- 2. demonstrate mastery of APA technical report writing.
- 3. demonstrate the ability to generate a scientific hypothesis in a given area of psychology.
- 4. be able to apply appropriate statistical techniques used for psychology research designs.
- 5. demonstrate the skills to design and implement research to test scientific hypotheses.
- 6. demonstrate the ability to apply valid conclusions based on topic area, hypothesis, review of literature, and study outcomes
- 7. demonstrate an understanding of the major historical schools of thought and approaches in psychology
- 8. be prepared for research-focused graduate studies or careers related to psychology

Psychological Science, B.S. and Applied Behavior Analysis, M.S. Combined Pathway

Bachelor of Arts Program Program Code: BA-AS Major Code: PYA

Psychology Department Buckham Hall A238 (716) 878-6215 psychology.buffalostate.edu/

Master of Science Program Code: MSED-ED Major Code: ABA

Exceptional Education Department Ketchum Hall 204 (716) 878-3038 exceptionaleducation.buffalostate.edu/

Enrollment in this combined pathway allows highly qualified, currently-enrolled SUNY Buffalo State students to begin work on a M.S. degree in Applied Behavior Analysis (ABA) while completing a B.S. degree in Psychological Science. Twelve (12) credits of designated master's courses would be incorporated into the B.S. program and count toward both the bachelor's degree and the master's degree.

Students in this combined pathway are not permitted to take courses with a PSY prefix pass/fail.

² Prerequisite: PSY 350 with a grade of B- or higher.

³ Prerequisite: PSY 101 Grade of C and 3 additional hours of psychology.

Admission Requirements

Admission into the combined pathway is highly selective. Matriculated undergraduate students may apply to the BS/MS pathway in their junior year and will complete all of the application requirements for the program. The admission application process includes a minimum GPA of 3.0 overall and in Psychology, a statement of intent, and names of 3 references.

General Education 23 Requirements			
33 credit hours		33	
Psychology M	Psychology Major Requirements (42 credit hours)		
Required Cou	rses (18 credit hours)		
PSY 101	INTRODUCTION TO PSYCHOLOGY	3	
PSY 350	STATISTICS IN PSYCHOLOGICAL RESEARCH ¹	3	
PSY 450	RESEARCH METHODS IN PSYCHOLOGY I: INTRODUCTION TO RESEARCH METHODS ²	3	
PSY 471	HISTORY AND SYSTEMS OF PSYCHOLOGY	3	
PSY 472	SEMINAR ON PSYCHOLOGY	3	
Select one fro	m the following:	3	
PSY 458	ADVANCED RESEARCH METHODS IN PSYCHOLOGY		
PSY 488	INTERNSHIP (3-15)		
PSY 495	SPECIAL PROJECT (1-3)		
PSY 499	INDEPENDENT STUDY (3-12)		
The prerequis	ite for all 300-level courses is PSY 101 with a grade of C or better unless otherwise		
Students mus	t select one course from each of the following groups.		
Biological/Cog	gnitive Psychology		
Select one of	the following by advisement:	3	
PSY 304	LEARNING: THEORY AND RESEARCH		
PSY 308	SENSATION AND PERCEPTION		
PSY 321	COMPARATIVE ANIMAL BEHAVIOR		
PSY 330	THE PSYCHOLOGICAL POWER OF LANGUAGE		
PSY 333	BRAIN AND BEHAVIOR		
PSY 340	COGNITIVE PSYCHOLOGY		

Clinical Psychology		
Select one of	Select one of the following by advisement:	
PSY 392	ABNORMAL PSYCHOLOGY ³	
Applied Psych	ology and Diversity	
Select one of	Select one of the following by advisement:	
PSY 365	PSYCHOLOGY IN THE WORKPLACE	
PSY 367	ORGANIZATIONAL BEHAVIOR	
PSY 370	ENVIRONMENTAL PSYCHOLOGY I	
PSY 375	FORENSIC PSYCHOLOGY	
PSY 376	HEALTH PSYCHOLOGY	
PSY 379	PSYCHOLOGY OF MONEY	
PSY 381	PSYCHOLOGY OF CULTURE	
PSY 383	THE PSYCHOLOGY OF HUMAN SEXUAL BEHAVIOR	
PSY 387	PSYCHOLOGY OF GENDER	
PSY 388	PSYCHOLOGY OF DEATH AND DYING	
Social/Person	ality Psychology	
Select one of	the following by advisement:	3
PSY 311	PERSONALITY: THEORY AND RESEARCH	
PSY 325	SOCIAL BEHAVIOR	
Developmento	al Psychology	
Select one of	the following by advisement:	3
PSY 301	PERSPECTIVES ON CHILD ABUSE AND ADVOCACY	
PSY 355	LIFESPAN DEVELOPMENTAL PSYCHOLOGY	
PSY 356	CHILD DEVELOPMENT	
PSY 357	ADOLESCENT AND YOUNG ADULT DEVELOPMENT	
Advanced Electives		
PSY 310	BEHAVIOR MODIFICATION	3
TWO 400 LEV	EL PSY ELECTIVES @ 3 CREDITS EACH	6

Combined Pathway Applied Behavior Analysis (ABA) Graduate Courses		
Students mu Science BS	st complete each of the following EXE courses during senior year of Psychological	
EXE 522	BEHAVIORAL ASSESSMENT, INSTRUCTION AND INTERVENTION	
EXE 544	BEHAVIORAL INTERVENTIONS FOR STUDENTS WITH CHALLENGING BEHAVIORS	
EXE 634	APPLIED BEHAVIOR ANALYSIS ⁴	
EXE 681	CLINICAL RECORDS AND ETHICAL PRACTICES FOR BEHAVIORAL ANALYSIS	
All College El	ectives	33
Total Credit I	Hours	120
Applied Bel	havior Analysis MS Requirements (33 credit Hours)	
Prerequisite:	Graduate standing is required for each of the following	
EXE 522	BEHAVIORAL ASSESSMENT, INSTRUCTION AND INTERVENTION	3
EXE 544	BEHAVIORAL INTERVENTIONS FOR STUDENTS WITH CHALLENGING BEHAVIORS	3
EXE 634	APPLIED BEHAVIOR ANALYSIS ⁴	3
EXE 681	CLINICAL RECORDS AND ETHICAL PRACTICES FOR BEHAVIORAL ANALYSIS	3
EXE 644	ADVANCED APPLIED BEHAVIOR ANALYSIS ⁵	3
EXE 645	EFFECTIVE PRACTICES FOR SUPPORTING INDIVIDUALS WITH AUTISM SPECTRUM DISORDER	3
EXE 646	CULTURE, DIVERSITY, DISABILITY, AND EDUCATION	3
EXE 673	PERSONNEL SUPERVISION AND MANAGEMENT ⁶	3
EXE 683	SUPERVISED PRACTICUM: PERSONNEL SUPERVISION AND MANAGEMENT ⁷	3
EXE 684	PRACTICE-BASED RESEARCH IN EXCEPTIONAL EDUCATION ⁸	3
EXE 690	MASTER'S PROJECT IN EXCEPTIONAL EDUCATION	3

¹ Prerequisite: At least sophomore status; Completion of the Mathematics and Quantitative Reasoning General Education requirement – only a MAT course at MAT 114 or higher.

33

Total Combined Graduate Credit Hours

² Prerequisite: PSY 350 with a grade of B- or higher.

³ Prerequisite: PSY 101 Grade of C and 3 additional hours of psychology.

⁴ Prerequisite: EXE 500 or EXE 100 or instructor permission

⁵ Prerequisite: EXE 634.

⁶ Prerequisite: EXE 644.

⁷ Prerequisite: EXE 673.

⁸ Prerequisite: Completion of all core courses except the research requirement and a minimum of 9 hours of coursework from the specialized program.

- 1. Critically evaluate existing literature in a given topic area of psychology.
- 2. Generate a scientific hypothesis in a given area of psychology.
- 3. Demonstrate understanding of basic research designs used in psychology and related mental health fields,
- 4. Utilize appropriate statistical techniques for a given research design.
- 5. Apply valid conclusions based on topic area, hypothesis, review of literature, and study outcomes.

Public Relations and Advertising (B.A.)

Bachelor of Arts Program Program Code: BA-AS Major Code: PRA

Communication Department
Buckham Hall B117
(716) 878-6008
communication.buffalostate.edu/

Accrediting Council on Education in Journalism and Mass Communications (Accredited)

This major allows students flexibility to tailor a program based on strategic communication through the disciplines of public relations, advertising, social media, and related fields. It meets the needs of students preparing for a career in which research, strategic planning, implementation of creative communication tactics, and evaluation are central, whether to advance an organization, promote a product, or advocate a cause. Compare this major with communication studies, journalism, and media production. See <u>communication.buffalostate.edu</u>.

This is the only bachelor's degree program in public relations and advertising at any SUNY institution that is accredited by the Accrediting Council on Education in Journalism and Mass Communications. Only a handful of other undergraduate programs in New York State are accredited.

Career Opportunities

Students in public relations and advertising prepare for careers in public relations, social media, and advertising, as well as fundraising, organizational communication, research, lobbying, marketing communication, and other fields that require a liberal arts education enhanced with communication expertise.

The profile of a successful public relations and advertising graduate is a person with strong writing and speaking proficiency, keen ethical insight, competence in research and planning, and skill in working effectively both independently and in teams.

Academic Standards

Only grades of C or higher may be applied toward requirements for any communication degree; courses with lower grades must be repeated. Consistent with standards of the Accrediting Council on Education in Journalism and Mass Communications, the number of communication courses that students may take is capped, encouraging a broad-based liberal arts education. The department encourages students to take minors or second majors and requires evidence of an academic concentration or area of expertise outside the Communication Department.

Admission Requirements

Incoming freshmen and transfer students can declare the major.

See <u>communication.buffalostate.edu</u> for application forms and additional information, including a list of equivalent core courses at community colleges. Transfer students from two-year schools may apply only core courses toward this major for a maximum of 12 credits. Students generally require four semesters of study after completing communication core courses.

Program Requirements

General Education 23 Requirements

33 credit hours 33

Public Relations & A	dvertising Major Requirements (42 credit hours)	
Communication Core (12 credit hours)		
COM 100	MEDIA LITERACY	3
COM 210	INTRODUCTION TO MEDIA WRITING	3
COM 215	INTRODUCTION TO VISUAL COMMUNICATION	3
or COM 212	INTRODUCTION TO DIGITAL STORYTELLING	
SPC 205	INTRODUCTION TO ORAL COMMUNICATION	3
Major Requirements	s (21 credit hours)	
COM 301	PRINCIPLES OF PUBLIC RELATIONS AND ADVERTISING	3
SPC 307	GROUP COMMUNICATON	3
COM 308	PUBLIC RELATIONS WRITING	3
COM 322	COMMUNICATION GRAPHICS	3
COM 336	WEB AND SOCIAL MEDIA PRODUCTION	3
COM 401	APPLIED COMMUNICATION RESEARCH	3
COM 418	CAMPAIGNS IN PUBLIC RELATIONS AND ADVERTISING	3
Senior Seminar (3 cr	redit hours)	
COM 450	COMMUNICATION AND SOCIETY	3
Communication Electives (6 credit hours)		
Select any two 300 or 400 level COM or SPC electives by advisement		6
All College Electives		
45 credit hours		45
Total Credit Hours		120

- 1. understand and apply First Amendment principles and the law appropriate to professional practice relevant to the major
- 2. demonstrate an understanding of the history and role of professionals and institutions in shaping communication relevant to the major
- 3. demonstrate an understanding of gender and gender identity, race, ethnicity, class, sexual orientation, and, as appropriate, other forms of diversity, equity, and inclusion in domestic and global societies and their significance in the major
- 4. understand concepts and apply theories in the use and presentation of images and information relevant to the major
- 5. demonstrate an understanding of professional ethical principles and work ethically in pursuit of truth, accuracy, fairness and diversity
- 6. think critically, creatively and independently
- 7. conduct research and evaluate information by methods appropriate to the communication professions in which they work
- 8. write correctly and clearly in forms and styles appropriate for the communication professions, audiences and purposes they serve

- 9. critically evaluate their own work and that of others for accuracy, fairness, clarity, creativity, effective storytelling and/or professional style as appropriate to the major
- 10. apply basic numerical and statistical concepts appropriate to the major
- 11. apply tools and technologies appropriate to the major
- 12. demonstrate competence in professional speaking and presentational skills appropriate to the major

Social Studies Education (7–12, B.S.)

Bachelor of Science Program Program Code: BS-AS Major Code: SSS

History and Social Studies Education Department Cassety Hall 302 (716) 878-5412 <u>history.buffalostate.edu/</u>

Accredited: Council for the Accreditation of Educator Preparation (CAEP) (formerly NCATE)

Enrollment in all teacher education programs follows the guidelines for "Admission to Teacher Education Programs" found in this catalog. Applicants who do not yet meet all admissions criteria should consult with the department.

Professional Licensure: This program leads to a recommendation for NYS certification; please check for <u>certification requirements in all other states</u>

The social studies B.S. degree program in secondary education prepares students to meet the educational requirements leading to New York State Initial Certification in Adolescence Education required to teach social studies in grades 7–12. The program supplies a knowledge base that provides the background knowledge necessary for teachers to implement the NYS Social Studies Framework for students in grades 7–12.

Prerequisites for Student Teaching See prerequisites for SSE 409 and SSE 410.

A departmental honors program is also available. Students should contact the department for additional information.

The social studies content core constitutes a 42-credit major in social studies that consists of study in economics, government, and a minimum of 30 credit hours of study in the history and geography of the United States and the world (see total required credit hours in social studies, below). All program majors are required to complete a minimum of 100 clock hours of field experience related to coursework prior to student teaching. These field experiences consist of observations, individual tutoring, and the teaching of small groups of students under the supervision of certified teachers. These experiences are an integral component of the pedagogical core courses specified in the previous section, with learning outcomes specified and their achievement evaluated by course instructors. Students complete a minimum of 30–35 clock hours of field experience in each of three courses: SSE 200, SSE 303, and SSE 309. Another course, SSE 488/HIS 488, is available and will be used by transfer students and others who may have a deficiency in field experience. The department has established relationships with several "high-need" urban and suburban school districts where field experiences are held. All majors will have study and experiences that together provide a solid foundation for teaching in high-need schools.

To student teach, students are required to have a minimum cumulative GPA of 2.75 and a minimum GPA of 2.75 in the social studies major, as well as obtain a minimum grade of C in SSE 303 and SSE 309. All majors meeting these requirements must enroll in two practicum courses following completion of all other coursework and satisfaction of English and math competency requirements. Placements for these practica include urban and suburban settings. The urban placements may be in high-need districts that provide opportunities for student teachers to work with students from diverse backgrounds, including socio-economically disadvantaged students, students with disabilities, and students who are English-language learners. Experiences include individual and group instruction, daily and long-view planning, unit teaching, classroom management and routine procedures, use of audiovisual aids, community resources, record-keeping, evaluation procedures, and participation in the total school program.

Candidates should consult the Teacher Certification website for current seminars and workshops. https://teachercertification.buffalostate.edu/seminars-and-workshops

Admission Requirements

Applicants must have a minimum cumulative GPA of 3.0.

General Education 23 Requirements			
33 credit hours ¹		33	
Social Sciences Major Requirements (42 credit hours)			
History of the Western	History of the Western Hemisphere (12 credit hours)		
Basic U.S. History			
HIS 106	HISTORY OF AMERICAN LIFE I	3	
HIS 107	HISTORY OF AMERICAN LIFE II	3	
HIS 415	HISTORY AND GOVERNMENT OF NEW YORK STATE	3	
Upper-division elective	e (any U.S., Canadian, or Latin American history course)	3	
History of the Eastern I	Hemisphere (12 credit hours)		
HIS 230	WORLD CIVILIZATIONS I	3	
One World History elec	ctive (any Asian, African, or Middle Eastern would history course)	3	
Select two from the following:		6	
HIS 115	FOUNDATIONS OF WESTERN CIVILIZATION		
HIS 116	EUROPE SINCE 1500		
HIS 117	TWENTIETH-CENTURY EUROPE		
Geography (6 credit ho	purs)		
GEG 300	WORLD REGIONAL GEOGRAPHY	3	
Select one from the fol	llowing:	3	
GEG 102	HUMAN GEOGRAPHY		
GEG 206	GEOGRAPHY OF NEW YORK STATE		
GEG 309	URBAN GEOGRAPHY		
GEG 360	GEOGRAPHY OF ASIA		
GEG 362	GEOGRAPHY OF THE UNITED STATES AND CANADA		
Political Science (3 credit hours)			
Select one from the fol	llowing:	3	
DCC 103	INTRODUCTION TO AMERICAN CONTRAINATAIT AND POLITICS		

PSC 320	U.S. CIVIL LIBERTIES	
Economics (3 credit hou	urs)	
Select one from the fol	lowing:	3
ECO 101	THE ECONOMIC SYSTEM	
ECO 201	PRINCIPLES OF MACROECONOMICS	
ECO 202	PRINCIPLES OF MICROECONOMICS	
Upper-Division Social S	cience Elective	
3 credit hours		3
Seminar (3 credit hours	;)	
HIS 300	RESEARCH AND WRITING SEMINAR	3
Professional Education	Requirements (30 credit hours)	
SPF 303	EDUCATIONAL PSYCHOLOGY: MIDDLE AND SECONDARY EDUCATION	3
EDU 416	TEACHING LITERACY IN MIDDLE AND SECONDARY SCHOOLS	3
ENG 309	TEACHING AND EVALUATING WRITING	3
or EDU 417	ADOLESCENT LITERACY	
EXE 100	NATURE AND NEEDS OF INDIVIDUALS WITH SPECIAL NEEDS	3
or EXE 372	FOUNDATIONS OF TEACHING ADOLESCENTS WITH DISABILITIES	
PSY 357	ADOLESCENT AND YOUNG ADULT DEVELOPMENT	3
SSE 200	INTRODUCTION TO SECONDARY TEACHING	3
SSE 303	METHODS AND MATERIALS IN TEACHING MIDDLE SCHOOL SOCIAL STUDIES	3
SSE 309	METHODS AND MATERIALS IN TEACHING HIGH SCHOOL SOCIAL STUDIES	3
SSE 370	COMPUTER TECHNOLOGY IN THE SOCIAL STUDIES CLASSROOM	3
SSE 402	HISTORICAL AND PHILOSOPHICAL FOUNDATIONS OF SOCIAL EDUCATION	3
or SSE/HIS 407	THE TEACHING OF HISTORY	
Student Teaching Requirements (12 credit hours)		
SSE 409	STUDENT TEACHING OF SOCIAL STUDIES IN THE MIDDLE SCHOOL	6
SSE 410	STUDENT TEACHING OF SOCIAL STUDIES IN SENIOR HIGH SCHOOL	6
One Year (or Equivalen	t) of a Foreign Language (0-3 credit hours)	

All College Electives (3 credit hours)	3
Total Credit Hours	120

¹ Program majors should enroll in an introductory psychology course, such as PSY 101, to satisfy their General Education requirements. It is recommended that majors take history courses to meet their US History & Civic Engagement and World History & Global Awareness requirements (Note: No more than two courses from the primary major can count in the General Education program).

- 1. The Learner and Learning Candidates will use understanding of adolescent development, individual differences and diverse cultures to ensure inclusive, student-centered learning environments that enable each learner to meet high standards.
- 2. The Content Candidates will demonstrate understanding of central concepts, tools of inquiry, and structures of disciplines to be taught and be able to connect concepts to engage learners in critical thinking, creativity and collaborative problem solving related to authentic issues.
- 3. The Teacher and Teaching Candidates will use multiple methods of assessment, plan instruction that supports every student in meeting rigorous learning goals and use varied an innovative instructional strategy to encourage learners to develop deep understanding of content.
- 4. The Profession and Professional Dispositions Candidates will engage in ongoing professional learning, use evidence to reflect on their own practice, seek appropriate leadership roles and collaborate with families, colleagues, and the community to advance the profession.

Social Work (B.S.)

Evening courses are available. The Social Work program courses are sequenced and the year-long Field Practicum begins in the Fall semester through the end of the Spring semester. Evening and weekend field practicum is available on a limited basis.

Bachelor of Science Program

Program Code: BS-SP Major Code: SWK

Social Work Department Caudell Hall 354 (716) 878-5705 socialwork.buffalostate.edu/

Council on Social Work Education Accredited

The social work program prepares students for generalist social work practice at the first professional level. Social Work program is a competency-based program with a liberal arts base, rooted in the profession's core values, with a social justice foundation. Social work courses integrate micro, mezzo, and macro levels of social work practice into each core course. The program provides students with applied learning opportunities throughout the curriculum, including a year-long field practicum.

General Education 23 Requirements		
33 credit hours		33
Social Work Major Red	quirements (51 credit hours)	
SWK 101 or SWK 220	INTRODUCTION TO SOCIAL WORK INTRODUCTION TO SOCIAL WORK	3
SWK 201	PROFESSIONAL SKILLS FOR SOCIAL WORKERS	3
SWK 230	INTERSECTIONALITY OF DIFFERENCE	3
SWK 302	SOCIAL JUSTICE ADVOCACY	3

SWK 330	FOUNDATIONS OF SOCIAL WORK	3
SWK 340	SOCIAL WORK THEORY AND ASSESSMENT	3
SWK 350	SOCIAL WORK IN ACTION	3
SWK 400	EVIDENCE-BASED PRACTICE	3
SWK 493 & SWK 494	FIELD PRACTICUM I and FIELD PRACTICUM II	12
SWK 497	INTEGRATIVE SEMINAR II	3
Electives		·
Choose four courses fr	om the following (12 credit hours):	12
CAS 301	PERSPECTIVES ON CHILD ABUSE AND ADVOCACY	
CAS 302	GLOBAL CHILD ADVOCACY ISSUES	
CAS 401	PROFESSIONAL AND SYSTEMIC APPROACHES TO CHILD ABUSE AND MALTREATMENT	
SWK 301	POVERTY AND PUBLIC POLICY	
SWK 335	MENTAL HEALTH AND SOCIAL WORK	
SWK 424	GROUPS	
SWK 425	SOCIAL WORK WITH FAMILIES	
SWK 429	POLICY PRACTICE	
SWK 485	SENIOR SEMINAR	
SWK 499	INDEPENDENT STUDY (3-9)	
SWK 426	Solution Focused Case Management	
SWK 495	SPECIAL PROJECT	
SWK 310	SEXUALITY IN HUMAN DEVELOPMENT	
SWK 321	THE ELDERLY AND SOCIAL SERVICES	
SWK 345	CHILD WELFARE SERVICES	
SWK 346	CHILD ABUSE AND NEGLECT	
SWK 483	BSC LED STUDY AWAY PROGRAM	
All College Electives		
30-36 credit hours		30-36

Total Credit Hours 120

Sociology (B.A.)

Bachelor of Arts Program Program Code: BA-AS Major Code: SOC

Sociology Department Cassety Hall 146 (716) 878-5411 sociology.buffalostate.edu/

The B.A. degree in sociology presents a general program to prepare students for a wide variety of positions in business, industry, government, health-related services, or social services. It is also designed to prepare undergraduate students for graduate work in the study of sociology, law, public administration, media studies, demography, crime/deviance, or other social science disciplines. The freedom of choice in selection of courses permits students to develop a particular specialty within sociology, either to meet special career interests or to meet graduate program requirements.

General Education 23 Requirements			
33 credit hours		33	
Sociology Major Requ	uirements (42 credit hours)		
Required Courses (21	credit hours)		
SOC 100	INTRODUCTION TO SOCIOLOGY	3	
SOC 204	CLASSICAL SOCIOLOGICAL THEORY	3	
SOC 299	SOCIAL STATISTICS	3	
SOC 300	METHODS IN SOCIAL RESEARCH	3	
or SOC 302	QUALITATIVE METHODS		
SOC 408	CONTEMPORARY SOCIOLOGICAL THEORY	3	
Sociology Inequality I	Electives (6 credit hours)	6	
SOC 212	FEMINIST THEORY		
SOC 310	SOCIOLOGY OF SEX AND GENDER		
SOC 312	WOMEN IN SOCIETY		
SOC 321	THE AFRICAN AMERICAN FAMILY		
SOC 326	BLACK FEMINIST THOUGHT		
SOC 350	POWER, CLASS, AND INEQUALITY		
SOC 351	SOCIOLOGY OF RACE AND ETHNICITY		

Sociology Electives (15 credit hours)	
At least five additional courses in sociology.	15
All College Electives	
51 credit hours	51
Total Credit Hours	120

- 1. understand the language and role of the discipline in contributing to our knowledge of the world
- 2. understand the role of theory in describing and explaining social phenomena
- 3. understand the methods and procedures used to conduct sociological inquiry
- 4. understand the complexity and consequences of social diversity
- 5. demonstrate the ability to conduct independent sociological analysis

Spanish (B.A.)

Bachelor of Arts Program
Program Code: BA-AS
Major Code: SPN
Modern and Classical Languages Department
Buckham Hall A120
(716) 878-5414
languages.buffalostate.edu/

Students develop their ability to communicate in Spanish in both everyday and professional contexts, and are introduced to the civilizations, cultures, and literature of Spain and Latin America. Students are also encouraged to study in Spain or Latin America through an approved study away program.

General Education 23 Requirements		
33 credit hours		33
Spanish Major Requirements (30 c	redit hours)	
Required Courses (21 credit hours)		
SPA 201	INTERMEDIATE SPANISH I	3
SPA 202	INTERMEDIATE SPANISH II	3
or SPA 204	PROFESSIONAL SPANISH II	
SPA 301	INTRODUCTION TO HISPANIC CULTURES	3
SPA 302	INTRODUCTION TO HISPANIC MEDIA	3
SPA 303	INTRODUCTION TO READING HISPANIC LITERATURE	3
SPA 306	CIVILIZATION AND CULTURES OF SPAIN	3
SPA 309	CULTURES AND CIVILIZATION OF LATIN AMERICA	3
Electives (9 credit hours)		9

Total Credit Hours		120
57 credit hours		57
All College Electives		
SPA 202 and SPA 204 may electives.	count as electives if not taken for requirement; limit of two 2XX-level	
SPA 499	INDEPENDENT STUDY	
SPA 399	SPANISH FOR THE LEGAL PROFESSIONS	
SPA 398	SPANISH FOR HEALTH AND SOCIAL SERVICE PROFESSIONS	
SPA 397	LITERACY FOR SPANISH TEACHERS	
MCL 370	INTRODUCTION TO COMMUNITY INTERPRETING AND TRANSLATION	
SPA 317	BUSINESS SPANISH	
SPA 311	SPANISH AMERICAN AUTHORS 1810S-PRESENT	
SPA 310	SPANISH AMERICAN AUTHORS: 1492 TO 1810	
SPA 308	SPANISH AUTHORS 1800-PRESENT	
SPA 307	SPANISH AUTHORS PRE-1800	
SPA 204	PROFESSIONAL SPANISH II	
SPA 203	PROFESSIONAL SPANISH I	
SPA 202	INTERMEDIATE SPANISH II	

Students will be able to:

- participate in a wide variety of professional and everyday conversations in Spanish with only a limited number of misunderstandings, including with native Spanish speakers who are not accustomed to conversing with non-native speakers;
- 2. read and write Spanish texts in a largely clear, precise, and accurate way, including the kinds of texts that are common in professional contexts (e.g., emails, memos, contracts, bills, reports, and minutes);
- 3. explain the influence of history, geography, and institutions on the development of Spanish-speaking countries and regions;
- 4. characterize the values, attitudes, customs, beliefs, and conventions particular to various Spanish-speaking countries and regions;
- 5. discuss the major writers, genres, and periods of Spanish and Latin-American literature; and
- 6. interpret beyond surface meaning and discuss representative works from the major writers, genres, and periods of Spanish and Latin-American literature.

Special Education and Childhood Education (B.S.Ed.)

Bachelor of Science in Education Program

Program Code: BSED-EP

Major Code: SCE

Dual Certification Program: Teachers of Special Education and Childhood Education

Exceptional Education Department Ketchum Hall 204

exceptionaleducation.buffalostate.edu/

Accredited: Council for the Accreditation of Educator Preparation (CAEP) (formerly NCATE)

Enrollment in all teacher education programs follows the guidelines for "Admission to Teacher Education Programs" found in this catalog. Applicants who do not yet meet all admissions criteria should consult with the department.

Professional Licensure: This program leads to a recommendation for NYS certification; please check for <u>certification requirements in</u> <u>all other states</u>

Undergraduate majors in special education and childhood education study within a cross-categorical program focusing on the education of students who have a variety of regular and special instructional needs. Included are students in disability groups traditionally associated with intellectual and developmental disabilities, physical/neurological disabilities, and learning and behavioral difficulties.

Graduates of the program typically obtain positions as teachers in inclusive classrooms, resource rooms, self-contained classrooms, special schools, residential facilities, or as consultant teachers in general education settings. Students who pursue initial certification in both special education and childhood education are particularly well qualified to work with students with special needs in integrated education settings. Students complete coursework in elementary education and special education to be recommended for initial certifications for Students with Disabilities (All Grades) and Childhood Education (grades 1-6).

To obtain New York State teacher certification, all candidates who successfully complete the program will be required to pass all New York State Teacher Certification Examinations for Students with Disabilities (All Grades) and Childhood Education (grades 1-6).

Candidates should consult the Teacher Certification website for current seminars and workshops. https://teachercertification.buffalostate.edu/seminars-and-workshops

Admission Requirements

Enrollment in all teacher education programs follows the guidelines for "Admission to Teacher Education Programs" found in this catalog. Applicants who do not yet meet all admission criteria should consult with the department. Entering first-year students who express an interest in special education and childhood education on their applications to Buffalo State who meet the required admissions criteria for teacher education programs will be accepted into special education and childhood education. Candidates who do not yet meet the minimum criteria may be accepted into the premajor. They may apply for the full major after successfully completing 12 credit hours at Buffalo State, and earning a minimum cumulative GPA of 3.0.

Transfer students from other colleges or Buffalo State students who wish to transfer from another major, will be directly accepted into the special education and childhood education program if they meet all minimum criteria for teacher education programs. Candidates who do not meet all of the minimum criteria may be accepted as premajors if they have not completed 60 or more credit hours. They may apply for the full major after successfully completing 12 credit hours at Buffalo State; and earning a minimum cumulative GPA of 3.0.

Buffalo State students who are undeclared or wishing to change to an special education and childhood education major from another major will be accepted directly into the program if they meet all of the minimum criteria for teacher education programs. Candidates who do not meet all of the minimum criteria may be accepted as premajors if they have not completed 60 or more credit hours. They may apply for the full major after successfully completing 12 credit hours at Buffalo State; and earning a minimum cumulative GPA of 3.0

. 108.4 1044	
General Education 23 Requirements	
30 credit hours ¹	30
Total Required Credit Hours for Concentration (30 credit hours)	
A concentration can be in one of the following subjects:	

American Studies		
English		
Liberal Arts		
Math		
Science		
Social Studies		
Spanish		
Urban Studies		
Distribution Courses b	peyond GE23	
9 credit hours		9
Special Education and	Childhood Education Major Requirements (63 credit hours)	
EDU 211	INTRODUCTION TO LITERACY	3
EDU 310	TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL	3
EDU 313	TEACHING SCIENCE IN EARLY CHILDHOOD AND CHILDHOOD SETTINGS	3
EDU 322	LITERACY INSTRUCTION IN THE ELEMENTARY SCHOOL	3
EDU 316	TEACHING ELEMENTARY SCHOOL MATHEMATICS	6
EDU 404	PRACTICUM IN ELEMENTARY TEACHING FOR EX ED & MIDDLE SCHOOL EX STUDENTS	6
EXE 100	NATURE AND NEEDS OF INDIVIDUALS WITH SPECIAL NEEDS	3
EXE 221	FOUNDATIONS OF EFFECTIVE ASSESSMENT AND INSTRUCTION IN SPECIAL EDUCATION	3
EXE 311	WRITING IEPS ACROSS THE P-12 GRADE SPAN	3
EXE 321	ADAPTING AND INTENSIFYING LITERACY INSTRUCTION FOR STUDENTS WITH DISABILITIES	3
EXE/EDU 323	FIELD PLACEMENT IN LITERACY METHODS FOR CHILDREN WITH AND WITHOUT DISABILITIES	3
EXE 362	BEHAVIOR AND CLASSROOM MANAGEMENT	3
EXE 364	EDUCATING STUDENTS WITH SEVERE DISABILITIES	3
EXE 390	STRATEGIES AND TECHNOLOGY TO ACCESS AND ADAPT CONTENT AREA INSTRUCTION	3
EXE 420	PRACTICUM IN SPECIAL EDUCATION	6

SPF 202	CHILD DEVELOPMENT AND EDUCATION	3
SPF 203	SCHOOL AND SOCIETY	3
SPF 302	EDUCATIONAL PSYCHOLOGY: ELEMENTARY EDUCATION	3
Total		120-126

¹ Some General Education 23 courses may overlap with required courses in the major, distribution, and concentration which could significantly reduce the total number of credit hours required. Advisement is strongly encouraged.

Speech-Language Pathology (B.S.)

Bachelor of Science Program Program Code: BS-SP Major Code: SLP

Speech-Language Pathology Department Caudell 316 (716) 878-4412 speech.buffalostate.edu/

The undergraduate program in speech-language pathology prepares students with a strong foundation in normal acquisition of speech, language, and hearing, and provides an introduction to the field of communication sciences and disorders. The master's degree is required for the initial teaching certificate, the license to practice speech-language pathology, and the Certificate of Clinical Competence (CCC) awarded by the American Speech-Language Hearing Association, http://www.asha.org. The master's degree program in speech-language pathology is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language Hearing Association (ASHA).

Admission Requirements

Students are eligible to apply for admission to the department as freshmen. If transferring into the SLP program as a sophomore or junior, a minimum GPA of 2.0 or better is required for admission.

General Education 23 Requirements		
33 credit h	nours	33
Speech-La	nguage Pathology Major Requirements (52 credit hours)	
EXE 100	NATURE AND NEEDS OF INDIVIDUALS WITH SPECIAL NEEDS	3
EXE 245	COMMUNITY SERVICE WITH INDIVIDUALS WITH SPECIAL NEEDS	3
SPF 202	CHILD DEVELOPMENT AND EDUCATION	3
SPF 302	EDUCATIONAL PSYCHOLOGY: ELEMENTARY EDUCATION	3
SLP 205	INTRODUCTION TO SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY	3
SLP 206	BUILDING SOCIAL CONNECTIONS: COMMUNICATION, LANGUAGE AND CONVERSATION	3
SLP 302	CLINICAL PHONETICS	3
SLP 303	LANGUAGE ACQUISITION	3
SLP 304	ANATOMY AND PHYSIOLOGY OF SPEECH AND HEARING MECHANISMS	3

SLP 305	COMMUNICATION DISORDERS I	3	
SLP 314	AUDIOLOGY	3	
SLP 328	AUDIOLOGY LAB	1	
SLP 329	LANGUAGE ACQUISITION LAB	1	
SLP 401	AURAL REHABILITATION	3	
SLP 405	COMMUNICATION DISORDERS II	3	
SLP 411	INTRODUCTION TO LANGUAGE DISORDERS IN CHILDREN	3	
SLP 412	SPEECH ACOUSTICS AND PERCEPTION	3	
SLP 424	SPEECH-LANGUAGE PATHOLOGY PROGRAMS IN SCHOOLS	3	
SLP 428	ACOUSTICS LAB	1	
SLP 429	CLINICAL ACTIVITY	1	
All College	e Electives		
35-41 credit hours		35-41	
ASHA Rec	ASHA Requirements.		
These ma	These may also be used to fulfill General Education 23 requirements:		
3 credits in biological sciences			
3 credits i	3 credits in physical sciences (chemistry OR physics for non-majors)		
3 credits i	3 credits in statistics		
Total Cred	lit Hours	120	

- 1. Demonstrate knowledge of the biological sciences, physical sciences, statistics, and social/behavioral sciences
- 2. Understand normal speech, language, hearing, and communication.
- 3. Understand the nature (etiology and characteristics) of communication disorders and its relationship to other disabilities.
- 4. Understand the relevance of cultural diversity and globalism and their impact on communication disorders.
- 5. Critically analyze a selected body of literature in communication sciences and disorders
- 6. Demonstrate good writing skills across the discipline, including but not limited to essays, research papers, literature reviews, labs, and observation reports using APA style.
- 7. Collaborate effectively with others on in-class and out-of-class projects to understand the roles and responsibilities of those involved on a team.
- 8. Describe aspects of language in typically developing school-age children
- 9. Identify a variety of clinical techniques/strategies for improving an individual's communication abilities.

Technology Education (B.S.)

Bachelor of Science Program Program Code: BS-ED Major Code: TED Career, Technical, and Science Education Department Bacon Hall 112 (716) 878-4717 ctse.buffalostate.edu/

Accredited: Council for the Accreditation of Educator Preparation (CAEP) (formerly NCATE)

Enrollment in all teacher education programs follows the guidelines for "Admission to Teacher Education Programs" found in this catalog. Applicants who do not yet meet all admissions criteria should consult with the department.

The technology education program prepares students to teach technology and the technological systems utilized in problem solving. The four systems emphasized are construction, manufacturing, communication, and transportation. The program is laboratory oriented, teaching the important role of engineering a product or service through selecting and systemizing knowledge for the solution of a problem. Graduates are recommended for an initial certificate to teach technology education in grades K–12.

Candidates should consult the Teacher Certification website for current seminars and workshops. https://teachercertification.buffalostate.edu/seminars-and-workshops

General Education 23 Requirements			
33 credit hours		33	
Technology Major	Requirements (30 credit hours)		
TEC 101	TECHNICAL DRAWING	3	
TED 123	PRINCIPLES OF MANUFACTURING	3	
TEC 201	MATERIALS PROCESSING	3	
TED 300	CONSTRUCTION SYSTEMS	3	
TEC 302	CAD/CAM (COMPUTER AIDED DRAFTING/COMPUTER AIDED MANUFACTURING)	3	
TEC 311	MATERIALS SCIENCE AND TESTING	3	
TEC 314	ELECTROMECHANICS	3	
TEC 319	TECHNOLOGY AND VALUES	3	
TED 349	COMMUNICATIONS SYSTEMS	3	
TED 361	TRANSPORTATION SYSTEMS	3	
Professional Seque	ence Requirements (36 credit hours)		
CTE 301	FOUNDATIONS OF CAREER AND TECHNICAL EDUCATION	3	
CTE 302	CURRICULUM AND EVALUATION IN CAREER AND TECHNICAL EDUCATION	3	
CTE 303	INSTRUCTIONAL STRATEGIES IN CAREER AND TECHNICAL EDUCATION	3	
CTE 306	CLASSROOM/LABORATORY MANAGEMENT	3	
CTE 311	CAREER MENTORING	3	

CTE 402	ASSESSMENT IN CAREER AND TECHNICAL EDUCATION	3
CTE 404	METHODS OF TEACHING CAREER AND TECHNICAL SUBJECTS	3
CTE 421	CAREER AND TECHNICAL EDUCATION FOR STUDENTS WITH SPECIAL NEEDS	3
TED 450	STUDENT TEACHING IN TECHNOLOGY EDUCATION	6
TED 451	STUDENT TEACHING IN TECHNOLOGY EDUCATION II	6
Required in Other Field	ds (13 credit hours)	
EDU 416	TEACHING LITERACY IN MIDDLE AND SECONDARY SCHOOLS	3
MAT 124	FUNCTIONS AND MODELING II	3
PHY 107	GENERAL PHYSICS I	4
SPF 303	EDUCATIONAL PSYCHOLOGY: MIDDLE AND SECONDARY EDUCATION	3
All College Electives		
8-15 credit hours		8-15
Total Credit Hours		120

Television and Film Arts (B.A.)

Bachelor of Arts Program Program Code: BA-AS Major Code: TFA

Television and Film Arts Buckham B112 (716) 878-6008 tvfilm.buffalostate.edu/

The Television and Film Arts (TFA) major at Buffalo State—an interdisciplinary program encompassing the Communication, English, and Theater departments—prepares students for a variety of careers in the entertainment industry, including screenwriting, producing, and directing for television, film, and streaming media.

The TFA program recognizes that creative content is essential in today's multimedia landscape and, to that end, encourages its students to tell stories across various mediums. The program is committed to excellence in teaching, scholarship, and cultural enrichment—providing TFA majors with a blend of criticism, theory, practical application, and real-world internship opportunities—passionately designed to help them succeed.

Required TFA Courses

This series of courses provides students with foundational skills needed for success in the TFA major. The lower-division courses emphasize the history of storytelling, screenwriting fundamentals, and basic television and film production. The upper-division courses concentrate on film criticism, collaboration across production roles, working independently as an auteur, and writing, producing, directing, and editing films exhibited in public forums.

In addition to required courses, TFA offers a variety of electives in criticism, producing, directing, and post-production.

Admission Requirements

Admission to the TFA program is highly competitive (approximately 15 students are admitted each year) and based upon a personal statement, letter of recommendation, and submission of creative work (including screenplays, short stories, and/or short films). All

submitted materials are reviewed by the Television and Film Arts Admissions Committee.

Cararatel	22 Damilianus	
	on 23 Requirements	
33 credit hours		33
TFA Major Requ	uirements (42 credit hours)	
Required Course	es (30 credit hours)	
COM 312	BASIC MEDIA PRODUCTION	3
ENG 305	CREATIVE WRITING: NARRATIVE	3
ENG 402	ADVANCED CREATIVE WRITING: NARRATIVE	3
TFA 201	INTRODUCTION TO TELEVISION AND FILM ARTS	3
TFA 301	TV AND FILM CRITICISM	3
TFA 401	PRODUCING SHORT FILMS I	3
TFA 420	PRODUCING SHORT FILMS II	3
TFA 450	SENIOR PROJECT	3
THA 226	ACTING I	3
THA 350	DIRECTING I	3
Elective Courses	s (12 credit hours)	
The elective req	uirement can be satisfied by completing 12 credit hours in any of the courses below.	12
COM 304	WRITING FOR BROADCAST (TV, RADIO, FILM)	
COM 317	MEDIA MANAGEMENT	
COM 329	INTERMEDIATE VIDEO PRODUCTION	
COM 431	ADVANCED FIELD PRODUCTION	
COM 432	ADVANCED POST-PRODUCTION	
ENG 205	HISTORY OF CINEMA I	
ENG 206	HISTORY OF CINEMA II	
ENG 303	LITERATURE IN FILM	
SPC 326	FILM ANALYSIS AND EVALUATION	
TFA 350	CINEMATOGRAPHY	
TFA 460	ADAPTATION	

TFA 470	CAREERS IN TELEVISION	
TFA 480	ADVANCED DIRECTING/PRODUCING I	
TFA 481	ADVANCED DIRECTING/PRODUCING II	
TFA 488	INTERNSHIP (3-6)	
THA 227	ACTING II: SCENE STUDY	
THA 234	INTRODUCTION TO THEATER DESIGN	
THA 400	ADVANCED VOICE TOPICS	
All College Electives		
39-45 credit hours		39-45
Total Credit Hours		120

- 1. demonstrate knowledge of pre-production, production, and post-production—including all roles and responsibilities for single camera productions shot on digital media
- 2. evaluate screenplays, films, and television programs with an understanding of structure, character, dialogue, and theme
- 3. understand and create a classical, three-act structure as it relates to writing for television, film, and streaming media
- 4. understand the business of the entertainment industry, and be able to market themselves and their creative work to launch careers in their chosen field

Theater (B.A.)

Bachelor of Arts Program Program Code: BA-AS Major Code: THA

Theater Department
Donald Savage Theater Building 215
(716) 878-6416
theater.buffalostate.edu/

National Association of Schools of Theater (Accredited)

The Theater Department engages students in a wide variety of hands-on projects and activities, giving them the opportunity to apply what they've learned in the classroom to real-world scenarios. A student's classroom learning and engagement is supported by coordinating professional opportunities with area theaters and dance companies, providing access to mentorships and internships, and ensuring access to hands-on experience on our productions starting in their very first semester.

The department emphasizes artistry, pushing boundaries, and fostering diversity, equity, and compassion. Through advisement, students' training can be general or have an emphasis in acting, directing, dance, playwriting, stage management, design, or technical theater. High standards afford a foundation for careers in professional theater, television, film, dance, and graduate admissions. A 19-credit-hour minor in theater and dance is also available.

Admissions Requirements

Admission to the Theater program is contingent upon a successful interview. Any matriculated student in good academic standing may interview for admission into this program.

General Education 2	3 Requirements	
33 credit hours		33
Theater Major Requirements (42 credit hours)		
Required Courses (26 credit hours)		
THA 200	VOICE AND MOVEMENT	3
THA 218	SCRIPT ANALYSIS I: PLAY READING	3
THA 226	ACTING I	3
THA 230	PRACTICUM I: INTRODUCTION TO THEATER TECHNOLOGY	1
THA 231	THEATER PRACTICUM II	1
THA 234	INTRODUCTION TO THEATER DESIGN	3
THA 316	SCRIPT ANALYSIS II	3
THA 318	THEATER HISTORY: BAROQUE TO MODERN	3
THA 330	THEATER PRACTICUM III	1
THA 331	THEATER PRACTICUM IV	1
THA 350	DIRECTING I	3
THA 416	SEMINAR IN THEATER ARTS	1
Electives by Advisem	ent (10 - 16 credit hours)	
THA 106	INTRODUCTION TO THEATER ARTS	
THA 189	TOPICS COURSE (1-3)	
THA 216	THEATER FUNDAMENTALS	
THA 227	ACTING II: SCENE STUDY	
THA 232	STAGE MANAGEMENT	
THA 235	COSTUME CONSTRUCTION I	
THA 245	STAGE COMBAT I	
THA 300	VOICE AND MOVEMENT II	
THA 317	THEATRE HISTORY: ANCIENT TO BAROQUE	
THA 327	ACTING III: STYLES	
THA 332	PERIOD STYLES AND CULTURE	

THA 333	SCENE PAINTING	
THA 335	COSTUME DESIGN FOR THEATER	
THA 336	LIGHTING TECHNIQUES	
THA 337	SET DESIGN I	
THA 340	PLAYWRITING	
THA 345	STAGE COMBAT II	
THA 348	VOICE ACTING FOR ANIMATION AND VIDEO GAMES	
THA 359	MUSICAL THEATER I	
THA 370	STAGE MAKEUP	
THA 389	TOPIC COURSE	
THA 400	VOICE AND MOVEMENT III	
THA 421	DRAMA FROM THE AFRICAN AMERICAN PERSPECTIVE	
THA 426	ACTING IV: ON CAMERA	
THA 470	ENSEMBLE THEATER (1-3)	
THA 488	INTERNSHIP (1-12)	
THA 495	SPECIAL PROJECT (1-3)	
THA 497	WORKSHOP	
THA 499	INDEPENDENT STUDY (3-12)	
Interdisciplinary Election Theater Major	tives (0-6 credit hours). May be satisfied if student completes 16 credit hours of General Electives	16
DAN 310	DANCE FOR MUSICAL THEATER	
DAN 350	TAP DANCE TECHNIQUE I (1)	
DAN 450	TAP DANCE TECHNIQUE II (1)	
ENG 315	SHAKESPEARE I	
All College Electives		
45 credit hours		45
Total Credit Hours		120

- 1. be involved in the creation and presentation of public performances in the theater
- 2. develop visual and aural perceptions related to theater performances, as well as a structured approach (through linguistics) to the use of language in playwriting and the resultant script

- 3. understand basic production processes such as acting; directing; stage, costume, lighting and sound design; and basic technical operations related to productions
- 4. become familiar with the historical and cultural dimensions of theater, including the works of leading playwrights, actors, directors, and designers both past and present
- 5. understand and evaluate contemporary thinking about theater and related arts
- 6. make informed assessments of quality in works of theater
- 7. become familiar with and develop competence in a number of theater techniques

Urban and Regional Planning (B.S.)

Evening study available.
Bachelor of Science Program
Program Code: BS-AS
Major Code: UPR

Government, Planning, and Philosophy Department Cassety Hall 202 (716) 878-6116 https://gpp.buffalostate.edu/

Urban Planning is a multi-disciplinary professional practice that focuses on the development of the built environment. Operating within a political environment, planners work to develop sustainable and equitable plans, programs, and policies that shape land use, housing, transportation, economic development, and the environment. The program emphasizes technical skill development as practiced in the real world, including courses in geographic information systems.

Admissions Requirements

Any matriculated student in good academic standing may declare this program.

Program Requirements

General Edu	cation 23 Requirements	
33 credit ho	33 credit hours	
Urban and R	egional Planning Major Requirements (39 credit hours)	
PSC 102	INTRODUCTION TO AMERICAN GOVERNMENT AND POLITICS	3
PLN 215	INTRODUCTION TO URBAN AND REGIONAL PLANNING	3
PLN 315	LAND USE PLANNING AND DEVELOPMENT	3
PLN 325	MAPS AND MAPMAKING USING GIS	3
PLN 401	PLANS AND PLAN-MAKING	3
PLN 431	PLANNING PRACTICUM	3
or PLN 488	INTERNSHIP (1-15)	
Planning for Society Electives (9 credit hours) 9		9
Select three from the following:		

PHI 102 INTRODUCTION TO ETHICS

PLN/GEG 309	URBAN GEOGRAPHY	
PLN 341	HOUSING AND EQUITABLE URBANISM	
PLN 350	PLANNING FOR SUSTAINABLE COMMUITIES	
PLN 380	NEIGHBORHOOD PLANNING AND COMMUNITY DEVELOPMENT	
PHI 301	JUSTICE: LIBERTY VS. EQUALITY	
Planning Anal	ysis Electives (6 credit hours)	6
Select two fro	m the following:	
PLN/GEG 405	URBAN ANALYSIS USING GIS	
GEG 418	REMOTE SENSING	
GEG 425	FUNDAMENTALS OF GIS	
GEG 428	ENVIRONMENTAL ASSESSMENT AND PLANNING APPLICATIONS IN GIS	
GEG 485	INTERACTIVE AND WEB-BASED MAPPING	
SOC 240	ANALYZING SOCIAL PROBLEMS	
Public Policy E	Electives (6 credit hours)	6
Select two fro	m the following:	
PSC 215	URBAN GOVERNMENT	
PSC 305	ENVIRONMENTAL POLICY	
PSC 315	STATE AND LOCAL GOVERNMENT AND POLITICS	
PSC 415	URBAN PUBLIC POLICY	
All College Electives		
48 credit hours 48		48
Total Credit H	ours	120

- 1. Appraise basic themes in the planning field and the multidisciplinary aspects of the planning profession.
- 2. Defend ideas and information from prior planning practices and scholarship by their application in planning documents.
- 3. Explain the profession's role in creating socially, environmentally, and economically sustainable and equitable communities.
- 4. Generate planning documents from maps, graphs, and other visual representations that analyze information by seeking patterns, relationships, and social connections.
- 5. Design and deliver clear and convincing written and oral presentations.

Writing (B.A.)

Bachelor of Arts Program Program Code: BA-AS Major Code: WRT

English Department Ketchum Hall 213 (716) 878-5416 english.buffalostate.edu/

The Writing B.A. degree program offers students an opportunity to combine the study and practice of the craft of writing with the study of literature, theater, television and communication arts. The writing degree program allows for the development of skills in creative writing, professional writing, technical writing, journalistic writing, and literary writing. Students can take courses from a variety of disciplines to fulfill their requirements. The program is intended for students interested in the advanced study and practice of writing. All matriculated students who are in good academic standing may enroll in this program, including incoming students.

Admissions Requirements

Any matriculated student in good academic standing may declare this program.

General Education 23 Requirements			
33 credit hou	33 credit hours		
English Majo	r Requirements (42 credit hours)		
24 credits m	ust be upper-division		
Required Cou	urses (12 credit hours)		
ENG 190	INTRODUCTION TO LITERATURE	3	
ENG 201	THE CRAFT OF WRITING (Should be taken soon after completion of freshman composition requirement or within first year of transfer to English Department. Serves a prerequisite for some upper-division writing courses.)	3	
ENG 410	COMPOSITION AND RHETORICAL THEORY	3	
ENG 491	SENIOR SEMINAR FOR WRITING MAJORS	3	
Electives in V	Electives in Writing (15 credit hours)		
ENG 170	INTRODUCTION TO CREATIVE WRITING		
ENG 171	PORTRAIT MAGAZINE EDITING AND PRODUCTION (1)		
ENG 245	WRITING ABOUT THE ARTS		
ENG 247	NATURE WRITING		
ENG 266	WRITING THE PERSONAL ESSAY, MEMOIR, AND AUTOBIOGRAPHY		
ENG 300	WRITING FOR THE PROFESSIONS		

ENG 302	TECHNICAL WRITING	
ENG 305	CREATIVE WRITING: NARRATIVE	
ENG 306	CREATIVE WRITING: POETRY	
ENG 325	CREATIVE NONFICTION	
ENG 327	EDITING AND PUBLISHING ELM LEAVES JOURNAL	
ENG/THA 340	PLAYWRITING	
ENG 402	ADVANCED CREATIVE WRITING: NARRATIVE	
ENG 403	ADVANCED CREATIVE WRITING: POETRY	
ENG 409	WRITING GRANTS AND PROPOSALS	
COM 303	WRITING FOR PRINT AND ONLINE JOURNALISM	
COM 304	WRITING FOR BROADCAST (TV, RADIO, FILM)	
COM 308	PUBLIC RELATIONS WRITING	
COM 325	FEATURE WRITING	
COM 390	SPECIAL TOPICS: JOURNALISTIC WRITING	
THA 470	ENSEMBLE THEATER (1-3)	
Additional Ele	ective Courses (15 credit hours)	
	erature, linguistics, rhetoric, and film courses offered by the Communication, English, Modern and Classical nd Theater Departments; at least two courses must be upper-division. HUM 200 may be used to fulfill this	15
All College El	ectives	
45 credit hoน	ırs	45
Total Credit H	lours	120

- 1. demonstrate the ability to produce effective, final texts in multiple genres
- 2. demonstrate an ability to Interpret advanced theoretical approaches to understanding the principles and practices of writing in genres of their specialization
- 3. demonstrate knowledge of related theoretical movements in rhetoric and literature in original writing
- 4. demonstrate a knowledge of the publishing industry and professional writing world
- 5. will participate in professional writing activities