



DREXEL UNIVERSITY

College of
Nursing and
Health Professions

CATALOG

2022-2023

UNDERGRADUATE



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The College of Nursing and Health Professions

By anticipating and meeting the challenges presented by the nation's healthcare system, Drexel's College of Nursing and Health Professions is doing its part to guarantee a lasting legacy for current and future health professionals.

The College of Nursing and Health Professions offers a wide range of undergraduate programs. Many offer flexible scheduling, making it possible for students to continue their education through part-time, online, night, or weekend study.

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About the College

The College of Nursing and Health Professions has more than a century-long history of educating nurses and health professionals. Since 2002, the College has embraced the practical ingenuity of Drexel through

the refinement and development of more than 25 undergraduate and graduate nursing and health professions programs characterized by the integration of learning and work through cooperative education, a culture of excellence, innovation and technology infusion, research, and deep civic engagement. The College has grown to include almost 5,000 students, 183 full-time and part-time faculty, and 164 staff. The College uniquely prepares clinicians to practice and lead in a rapidly changing healthcare system.

Mission and Approach

Drexel University College of Nursing and Health Professions prepares competent and compassionate health professionals through technology-infused and evidence-based programs. The College is committed to leading the way in improving health and reducing health disparities through innovative education, interdisciplinary research, and community-based practice initiatives.

Cooperative Education - The Integration of Learning and Work - The College offers four undergraduate "co-op" programs. The Bachelor of Science in Nursing integrates either three, six-month periods of full employment in the five-year program or one, six-month period in the four-year program. The Bachelor of Science degrees in Nutrition Sciences, Health Services Administration, Behavioral Health Counseling, and Health Sciences offer one, six-month period of full employment throughout the curriculum in the four-year program. Leading regional healthcare institutions employ the College's undergraduate students in co-op positions related to their fields of study and often offer employment after graduation.

Innovation and Technology Infusion - Every program in the College has integrated into their curricula cutting-edge technology, including the use of high-fidelity manikins and simulation, to build knowledge and skills in both safe and experimental learning situations before practice in actual clinical settings. All courses are web enhanced with learning tools and information that support knowledge mastery. The College has offered fully online undergraduate and graduate programs since 1999.

A Culture of Excellence - Courses are taught by full-time faculty with deep experience in teaching and practice. Fourteen clinical programs eligible for national accreditation have maintained full accreditation status for the past 12 years. Board Certification and Licensing Examination pass rates are well above national means; many at 100% as in the Physician Assistant and the Nurse Anesthesia programs. Further, in 2014, 311 BS in nursing graduates took the NCLEX examination with a first time pass rate of 97.42%, 10 points higher than the national pass rate.

Research - The College's researchers in nutrition and rehabilitation sciences, couple and family therapy, and nursing and creative arts therapy have garnered on average \$4.6 million in external funding annually. Undergraduate and graduate students work with cutting-edge researchers building knowledge in clinical disciplines with the ultimate goal of improving the quality and outcomes of care.

Civic Engagement - Since 1996, the College has operated a nationally recognized, nurse-managed health center in North Philadelphia with an interdisciplinary practice including nurse practitioners, nutritionists, physical therapists, dentists, and mental health specialists. The Stephen and Sandra Sheller 11th Street Family Health Services Center is reinventing healthcare for previously underserved communities through the integration of primary and behavioral healthcare and healthy living programs. The 11th Street Center is reducing health disparities through

more than 32,000 visits per year through which the College's students learn to appreciate the nuances of high quality, community-based care.

Accreditation

The College has 12 nationally accredited or approved clinical programs. Pass rates for professional licensing and board certifications are well above the national mean with nine programs boasting a 100% pass rate and nursing first time pass rates consistently above 95%.

- The baccalaureate degree in Nursing (BSN), the master's degree in Nursing (MSN), and the Doctor of Nursing (DNP) are accredited by CCNE (Commission on Collegiate Nursing Education). These programs and the post-graduate APRN certificates are also approved by the Pennsylvania State Board of Nursing.
- The Couple and Family Therapy MFT degree and post-master's certificate programs are accredited by COAMFTE (Commission on Accreditation of Marriage and Family Therapy Education).
- The Creative Arts Therapies MA degree programs in Art Therapy and Counseling, Dance/Movement Therapy and Counseling, and Music Therapy and Counseling are approved by AATA (American Art Therapy Association), ADTA (American Dance Therapy Association), and AMTA (American Music Therapy Association), respectively.
- The Didactic program in Nutrition is accredited by ACEND (Accreditation Council for Education in Nutrition and Dietetics).
- The Nurse Anesthesia program is accredited by COA (Council on Accreditation of Nurse Anesthesia Educational Programs).
- The Doctor of Physical Therapy (DPT) program is accredited by CAPTE (Commission on Accreditation in Physical Therapy Education).
- The Physician Assistant program is accredited by ARC-PA (Accreditation Review Commission on Education for the Physician Assistant).

Behavioral Health Counseling

Major: Behavioral Health Counseling

Degree Awarded: Bachelor of Science (BS)

Calendar Type: Quarter

Minimum Required Credits: 181.0

Co-op Options: One Co-op (Four years); No Co-op (Four years)

Classification of Instructional Programs (CIP) code: 51.1508

Standard Occupational Classification (SOC) code: 21-1011

About the Program

The Behavioral Health Counseling program offers an innovative approach to undergraduate education offering interactive and experiential courses taught by certified, licensed, and experienced professionals. The program is designed to develop the clinical competencies needed to counsel and support people experiencing mental illnesses, substance use disorders, and children and families. During the freshman and sophomore years, students develop a foundation for clinical practice by studying humanities, social sciences, writing, biological sciences, math, and research methods. Students utilize this foundation to translate evidence-based research into practice. Students also complete ten required courses focusing on interpersonal communication skills, ethical standards, multicultural competence, addictions counseling skills, cognitive behavioral approaches, assessment and treatment planning, and psychiatric rehabilitation practices.

Students apply their knowledge and practice the skills learned during the program via community-based learning and using Drexel University's state of the art Center for Inter-professional Clinical Simulation and Practice (<https://drexel.edu/cnhp/about/CICSP/>). Students then select from a broad variety of electives based on their career interests. Diversity, equity, inclusion, and social justice principles are incorporated across the rigorous curriculum. The major also offers a co-op experience in a clinical setting that greatly enhances the student's preparation for employment after graduation and for graduate study.

Additional Information

For more information about this major, visit the Counseling and Family Therapy Department (<http://drexel.edu/cnhp/academics/departments/Counseling-and-Family-Therapy/>) on the College of Nursing and Health Professions website.

Degree Requirements

General Education Requirements

CIVC 101	Introduction to Civic Engagement	1.0
COOP 101	Career Management and Professional Development	1.0
UNIV NH101	The Drexel Experience	1.0

Computing/Communication Requirement

CS 150 or COM 230	Computer Science Principles Techniques of Speaking	3.0
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English

ENGL 101 or ENGL 111	Composition and Rhetoric I: Inquiry and Exploratory Research English Composition I	3.0
ENGL 102	Composition and Rhetoric II: Advanced Research and Evidence-Based Writing	3.0

4 Behavioral Health Counseling

or ENGL 112	English Composition II	
ENGL 103	Composition and Rhetoric III: Themes and Genres	3.0
or ENGL 113	English Composition III	
Life Science		
BIO 100	Applied Cells, Genetics & Physiology	3.0
or BIO 107	Cells, Genetics & Physiology	
or BIO 161	General Biology I	
or BIO 164	General Biology Laboratory I	
Mathematics		
MATH 107	Probability and Statistics for Liberal Arts	3.0
or MATH 100	Fundamentals of Mathematics	
Humanities and Social Sciences		
ANTH 101	Introduction to Cultural Diversity	3.0
PSY 240 [WI]	Abnormal Psychology	3.0
SOC 101	Introduction to Sociology	3.0
Any HIST course		4.0
Humanities and Social Sciences Electives		24.0
Free Electives		54.0
Behavioral Health Counseling Courses Required		30.0
BACS 100	Life Span Human Development	
or PSY 120	Developmental Psychology	
BACS 200	Foundation of Behavioral Health Care	
BACS 220	Counseling Theory and Practice	
BACS 232	Ethics and Professional Responsibility	
BACS 234	Introduction to Addictive Disorders	
BACS 236 [WI]	Psychiatric Rehabilitation Principles and Practices	
BACS 255	Multicultural Counseling	
BACS 301	Group Counseling I	
BACS 304	Cognitive and Behavioral Counseling I	
BACS 401 [WI]	Assessment and Treatment Planning	
Behavioral Health Counseling Electives		39.0
Select from the following:		
BACS 210	Behavioral Disorders	
BACS 230	Genetics and Mental Health	
BACS 310	Recovery and Relapse Prevention	
BACS 312	Case Management Methods	
BACS 320	Crisis and Brief Intervention	
BACS 325	Psychopharmacology for Counselors	
BACS 345	Careers in Behavioral Health	
BACS 350	Child Psychopathology	
BACS 360	Preventing Substance Abuse	
BACS 367	Advanced Counseling Intervention	
BACS 368	Addictions Counseling with Special Populations	
BACS 370	Problem Gambling Interventions	
BACS 380	Trauma-Informed Care	
BACS 390	Special Topics in Mental Health	
BACS 404	Cognitive and Behavioral Counseling II	
BACS 405	Family-Focused Interventions	
BACS 410	Child and Adolescent Support	
BACS 411	Forensic Behavior Health Service	
BACS 412	Group Counseling II	
BACS 414	Co-Occurring Disorders	
BACS 420	Psychiatric Rehabilitation Competencies	
BACS 430	Behavioral Health and Aging	
BACS 490	Senior Research Project	
Total Credits		181.0

* COOP 101 registration is determined by the co-op cycle assigned and may be scheduled in a different term. Select students may be eligible to take COOP 001 in place of COOP 101.

Students not participating in co-op will not take COOP 101; 1 credit of Free Elective will be added in place of COOP 101.

Writing-Intensive Course Requirements

In order to graduate, all students must pass three writing-intensive courses after their freshman year. Two writing-intensive courses must be in a student's major. The third can be in any discipline. Students are advised to take one writing-intensive class each year, beginning with the sophomore year, and to avoid "clustering" these courses near the end of their matriculation. Transfer students need to meet with an academic advisor to review the number of writing-intensive courses required to graduate.

A "WI" next to a course in this catalog may indicate that this course can fulfill a writing-intensive requirement. For the most up-to-date list of writing-intensive courses being offered, students should check the Writing Intensive Course List (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/writing-intensive-courses/>) at the University Writing Program (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/>). (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/drexel-writing-center/>) Students scheduling their courses can also conduct a search for courses with the attribute "WI" to bring up a list of all writing-intensive courses available that term.

Sample Plans of Study

4 year, no co-op

First Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
ANTH 101	3.0 BACS 220	3.0 BACS 255	3.0 VACATION	
BACS 100	3.0 ENGL 102 or 112	3.0 CIVC 101	1.0	
ENGL 101 or 111	3.0 SOC 101	3.0 ENGL 103 or 113	3.0	
MATH 107 or 100	3.0 Free elective	3.0 PSY 240	3.0	
UNIV NH101	1.0 Humanities/Social Science elective	3.0 Humanities/Social Science electives	6.0	
Humanities/Social Science elective	3.0			
	16	15	16	0

Second Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
BACS 234	3.0 BACS 232	3.0 BACS 200	3.0 VACATION	
BACS 236	3.0 COM 230 or CS 150	3.0 BACS 401	3.0	
BIO 100 or 107	3.0 BACS elective	3.0 BACS elective	3.0	
Free elective	3.0 Free elective	3.0 Free electives*	4.0	
Humanities/Social Science elective	3.0 History elective	4.0 Humanities/Social Science elective	3.0	
	15	16	16	0

Third Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
BACS 301	3.0 BACS electives	6.0 BACS elective	3.0 VACATION	
BACS 304	3.0 Free electives	9.0 Free electives	9.0	
BACS elective	3.0	Humanities/Social Science elective	3.0	
Free elective	3.0			
Humanities/Social Science elective	3.0			
	15	15	15	0

Fourth Year

Fall	Credits Winter	Credits Spring	Credits
BACS electives	9.0 BACS electives	9.0 BACS elective	3.0
Free electives	6.0 Free electives	6.0 Free electives	9.0
	15	15	12

Total Credits 181

* Students not participating in co-op will not take COOP 101; 1 credit of Free Elective will be added in place of COOP 101.

4 year, one co-op

First Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
ANTH 101	3.0 BACS 220	3.0 BACS 255	3.0 VACATION	
BACS 100	3.0 ENGL 102 or 112	3.0 CIVC 101	1.0	
ENGL 101 or 111	3.0 SOC 101	3.0 ENGL 103 or 113	3.0	

MATH 107 or 100	3.0 Free elective	3.0 PSY 240	3.0	
UNIV NH101	1.0 Humanities/Social Science elective	3.0 Humanities/Social Science electives	6.0	
Humanities/Social Science elective	3.0			
	16	15	16	0
Second Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
BACS 234	3.0 BACS 232	3.0 COOP 101*	1.0 BACS 301	3.0
BACS 236	3.0 COM 230 or CS 150	3.0 BACS 200	3.0 BACS 304	3.0
BIO 100 or 107	3.0 BACS elective	3.0 BACS 401	3.0 BACS elective	3.0
Free elective	3.0 Free elective	3.0 BACS elective	3.0 Humanities/Social Science elective	3.0
Humanities/Social Science elective	3.0 History elective	4.0 Free elective	3.0 Free elective	3.0
		Humanities/Social Science elective	3.0	
	15	16	16	15
Third Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
BACS electives	6.0 BACS elective	3.0 COOP EXPERIENCE	COOP EXPERIENCE	
Free electives	9.0 Free electives	9.0		
	Humanities/Social Science elective	3.0		
	15	15	0	0
Fourth Year				
Fall	Credits Winter	Credits Spring	Credits	
BACS electives	9.0 BACS electives	9.0 BACS elective	3.0	
Free electives	6.0 Free electives	6.0 Free electives	9.0	
	15	15	12	
Total Credits 181				

* COOP 101 registration is determined by the co-op cycle assigned and may be scheduled in a different term. Select students may be eligible to take COOP 001 in place of COOP 101.

Co-op/Career Opportunities

Drexel University has long been known for its cooperative education program, through which students mix periods of full-time, career-related employment with their studies. The Behavioral Health Counseling curriculum includes one co-op option that exposes students to the varied work environments of behavioral health professionals. Co-op provides students with an opportunity to assess their personal strengths and interests for a career in behavioral health by observing successful mental health and addictions professionals in action. Co-op students work for six months in paid or unpaid positions consistent with their interests, abilities, and aptitudes.

After Graduation

Graduates of the Behavioral Health Counseling program are widely acknowledged by regional employers as being among their best prepared new employees. This reputation helps graduates easily find preferred employment in a variety of behavioral health care settings. Many graduates elect to continue their education in graduate and doctoral programs at Drexel or leading universities across the nation. Within Drexel, students may select excellent graduate programs preparing them for licensure as behavioral health clinicians and/or administrative, research, and behavioral health policy-making positions.

Career Opportunities

Behavioral health counseling professionals are employed in a wide range of venues. Counselors are needed in social service agencies, schools, health care facilities, and inpatient and residential treatment settings. Counselors work with children, adolescents, adults, and elderly individuals who experience disability due to mental illnesses or substance use disorders. Graduates who choose to enter the behavioral health workforce find immediate employment in areas such as psychiatric rehabilitation; family and child support services; addictions counseling; case management and services coordination; forensic mental health services; individual and group counseling; and crisis intervention.

The behavioral health care field is tremendously diverse and encompasses far more career opportunities than are listed here. There are career choices to be made at all levels of service — from direct care to administration and policy making. In this regard, students will find tremendous benefit both in the listings and outreach offered by Drexel's Steinbright Career Development Center and in the diverse professional career experience our faculty bring to our students.

Visit the Drexel Steinbright Career Development Center (<https://drexel.edu/scdc/>) webpage for more detailed information on post-graduate opportunities.

Facilities

The College of Nursing and Health Professions is located at Drexel University's Health Sciences Campus in Center City. A Clinical Learning Resource Center (<https://drexel.edu/cnhp/about/CELR/>) offers a simulation lab where students practice skills needed in their chosen behavioral health career. Sessions are video captured to allow students the opportunity to observe and critique their performance.

Behavioral Health Counseling Faculty

Veronica Carey, PhD (*Capella University*) *Assistant Dean of Diversity and Student Affairs*. Associate Clinical Professor. National and international speaker on psychiatric rehabilitation evidence-based best practices and diversity, equity, and inclusion. Adheres to social justice as an essential curriculum content orientation.

Culinary Arts and Science

Major: Culinary Arts & Science

Degree Awarded: Bachelor of Science (BS)

Calendar Type: Quarter

Minimum Required Credits: 185.0 (Food and Beverage Management Concentration); 185.0 (Culinary Science Concentration)

Co-op Options: No Co-op (Four years); One Co-op (Four years)

Classification of Instructional Program (CIP) code: 12.0509

Standard Occupational Classification (SOC) code: 35-2014

About the Program

The major in Culinary Arts and Science allows students to deeply explore cuisine—the practical techniques of cooking, but also its science, history, culture, politics, and economics. Students receive a broad overview of cooking and cuisine and specialize in food and beverage management, which prepares students for leadership positions in the restaurant and food industry.

Students majoring in Culinary Arts and Science are prepared for careers in the food industry such as pastry chef, chef, research chef, or product developer.

This baccalaureate degree in Culinary Arts and Science is among the first of its kind in the United States. This program comprises approximately equal parts liberal arts, business, hospitality management, food science, and culinary arts. The aim of the program is to prepare students as independent thinkers who can work collaboratively in the food industry.

Program Delivery Options

Drexel's BS degrees include courses in the liberal arts, the humanities, sciences, hospitality management, and culinary arts. Three business minors are also offered. The BS degree can be completed on a full-time or part-time basis:

Traditional four-year option, with one co-op experience:

This option includes one six-month period of full-time employment in the junior year.

Four plus one option BS/MBA combined degree, with co-op experience:

This option combines the four-year BS degree followed by the one-year Professional MBA to qualify freshmen applicants. Incoming freshmen will generally have a minimum of 1300 on the SAT, a GPA of 3.5 or higher, and be in the top 10% of their high school graduating class. For MBA requirements visit the LeBow College Professional MBA (<http://www.lebow.drexel.edu/academics/graduate/drexel-lebow-mba/>) website.

Part-time option without co-op experience:

Students work closely with academic advisors to develop a customized plan of study toward degree completion.

London option:

(Available for Hospitality Management and Culinary Arts and Science students.) Students are invited to spend a term in their sophomore, junior, or senior year in the Study Abroad Program (<http://www.drexel.edu/studyabroad/>), Drexel in London, while earning up to 18.0 credits. The program's emphasis is on the global implications of and opportunities within the hospitality industry.

Degree Requirements

Food & Beverage Management Concentration

General Education Requirements

CHEM 201

Why Things Work: Everyday Chemistry

3.0

or CHEM 101	General Chemistry I	
CIVC 101	Introduction to Civic Engagement	1.0
COM 230	Techniques of Speaking	3.0
ENGL 101	Composition and Rhetoric I: Inquiry and Exploratory Research	3.0
or ENGL 111	English Composition I	
ENGL 102	Composition and Rhetoric II: Advanced Research and Evidence-Based Writing	3.0
or ENGL 112	English Composition II	
ENGL 103	Composition and Rhetoric III: Themes and Genres	3.0
or ENGL 113	English Composition III	
MATH 101	Introduction to Analysis I	4.0
NFS 100 & NFS 101	Nutrition, Foods, and Health and Introduction to Nutrition & Food	3.0
COOP 101	Career Management and Professional Development	1.0
UNIV SH101	The Drexel Experience	1.0
Arts & Humanities		9.0
Social Science		6.0
Food Science Courses		
FDSC 100	ServSafe	1.0
FDSC 120	Food and the Senses	3.0
FDSC 154	Science of Food and Cooking	4.0
FDSC 270	Microbial Food Safety and Sanitation	4.0
FDSC 350	Experimental Foods: Product Development	3.0
FDSC 401	Modernist Cuisine	3.0
Culinary Arts Courses		
CULA 115	Culinary Fundamentals	3.0
CULA 120	Techniques and Traditions I	3.0
CULA 121	Techniques and Traditions II	3.0
CULA 125	Foundations of Professional Baking	3.0
CULA 216	A la Carte	3.0
CULA 220	Patisserie I	3.0
CULA 291	Culinary Arts Practicum II	6.0
CULA 303	Global Cuisine Studio (Course taken twice for 6.0 credits total)	6.0
CULA 316	Butchery Laboratory	2.0
CULA 320	Advanced Culinary Studio	3.0
CULA 325	Garde Manger Laboratory	3.0
CULA 400	Directed Studies with a Master Chef	3.0
CULA 405 [WI]	Culture and Gastronomy I	3.0
CULA 421	Senior Design Project I	2.0
CULA 422	Senior Design Project II	2.0
Hospitality Management Courses		
HRM 120	Principles of Food-Service Management	3.0
HRM 150	Food & Beverage Customer Service	3.0
HRM 160	Laws of the Hospitality Industry	3.0
HRM 215	Commercial Food Production	4.0
HRM 220	Purchasing and Cost Controls for the Hospitality Industry	3.0
HRM 330	Hospitality Marketing and Branding	3.0
HRM 335	Beverage Management	3.0
HRM 435	Wine Regions of the World	3.0
CULA or HRM Electives		18.0
Free Electives		12.0
Business/Minor Requirements		24.0
Total Credits		185.0
Culinary Science Concentration		
General Education Requirements		
CIVC 101	Introduction to Civic Engagement	1.0
COM 230	Techniques of Speaking	3.0
ENGL 101	Composition and Rhetoric I: Inquiry and Exploratory Research	3.0
or ENGL 111	English Composition I	
ENGL 102	Composition and Rhetoric II: Advanced Research and Evidence-Based Writing	3.0
or ENGL 112	English Composition II	
ENGL 103	Composition and Rhetoric III: Themes and Genres	3.0

or ENGL 113	English Composition III	
COOP 101	Career Management and Professional Development	1.0
UNIV SH101	The Drexel Experience	1.0
Arts & Humanities Electives		9.0
Social Science Electives		6.0
Math/Science		
BIO 107 & BIO 108	Cells, Genetics & Physiology and Cells, Genetics and Physiology Laboratory	4.0
CHEM 101	General Chemistry I	3.5
CHEM 102	General Chemistry II	4.5
CHEM 103	General Chemistry III	4.5
CHEM 241	Organic Chemistry I	4.0
CHEM 242	Organic Chemistry II	4.0
MATH 101	Introduction to Analysis I	4.0
MATH 102	Introduction to Analysis II	4.0
NFS 100 & NFS 101	Nutrition, Foods, and Health and Introduction to Nutrition & Food	3.0
NFS 215	Nutritional Chemistry	3.0
NFS 217	Nutrient Quality & Composition	1.0
PHYS 170	Electricity and Motion	3.0
PHYS 172	Experimental Lab for Electricity and Motion	1.0
PHYS 175	Light and Sound	3.0
PHYS 177	Experimental Lab for Light and Sound	1.0
HSCI 345	Statistics for Health Sciences	4.5
Food Science Courses		
FDSC 100	ServSafe	1.0
FDSC 120	Food and the Senses	3.0
FDSC 154	Science of Food and Cooking	4.0
FDSC 270	Microbial Food Safety and Sanitation	4.0
FDSC 350	Experimental Foods: Product Development	3.0
FDSC 401	Modernist Cuisine	3.0
FDSC 450	Food Microbiology	3.0
FDSC 451	Food Microbiology Laboratory	2.0
FDSC 456	Food Preservation Processes	3.0
FDSC 460	Food Chemistry	3.0
FDSC 461	Food Analysis	3.0
FDSC 468	Functional Foods	3.0
FDSC 487	Food Engineering	3.0
FDSC 490	Seminar in Food Science	1.0
Culinary Arts Courses		
CULA 115	Culinary Fundamentals	3.0
CULA 120	Techniques and Traditions I	3.0
CULA 121	Techniques and Traditions II	3.0
CULA 125	Foundations of Professional Baking	3.0
CULA 291	Culinary Arts Practicum II	6.0
CULA 303	Global Cuisine Studio (Course taken twice for 6.0 credits total)	6.0
CULA 405 [WI]	Culture and Gastronomy I	3.0
CULA 421	Senior Design Project I	2.0
CULA 422	Senior Design Project II	2.0
Culinary Arts Electives		9.0
Free electives (or Business Minor)		24.0
Total Credits		185.0

Writing-Intensive Course Requirements

In order to graduate, all students must pass three writing-intensive courses after their freshman year. Two writing-intensive courses must be in a student's major. The third can be in any discipline. Students are advised to take one writing-intensive class each year, beginning with the sophomore year, and to avoid "clustering" these courses near the end of their matriculation. Transfer students need to meet with an academic advisor to review the number of writing-intensive courses required to graduate.

A "WI" next to a course in this catalog may indicate that this course can fulfill a writing-intensive requirement. For the most up-to-date list of writing-intensive courses being offered, students should check the Writing Intensive Course List (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/writing-intensive-courses/>) at the University Writing Program (

centers/english-philosophy/university-writing-program/). (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/drexel-writing-center/>) Students scheduling their courses can also conduct a search for courses with the attribute "WI" to bring up a list of all writing-intensive courses available that term.

Sample Plan of Study

Food and Beverage Concentration Plan of Study- 4 year, one co-op

First Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
CHEM 201	3.0 CIVC 101	1.0 CULA 121	3.0 VACATION	
CULA 115	3.0 CULA 120	3.0 ENGL 103 or 113	3.0	
ENGL 101 or 111	3.0 CULA 125	3.0 FDSC 120	3.0	
FDSC 100	1.0 ENGL 102 or 112	3.0 FDSC 154	4.0	
MATH 101	4.0 NFS 100 & NFS 101	3.0 Program elective *	3.0	
UNIV SH101	1.0			
	15	13	16	0

Second Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
CULA 316	2.0 COM 230	3.0 CULA 303	3.0 COOP 101	1.0
FDSC 270	4.0 HRM 160	3.0 Free elective	3.0 CULA 291	6.0
HRM 120	3.0 HRM 215	4.0 Minor elective **	4.0 Minor elective **	4.0
HRM 150	3.0 Minor elective **	4.0 Program elective *	3.0 Program elective *	3.0
Arts & Humanities elective ***	3.0	Social Science elective +	3.0 Social Science elective +	3.0
	15	14	16	17

Third Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
CULA 325	3.0 CULA 220	3.0 COOP EXPERIENCE [±]	COOP EXPERIENCE [±]	
CULA 405	3.0 HRM 330	3.0		
FDSC 350	3.0 HRM 335	3.0		
HRM 220	3.0 Minor elective **	4.0		
Free elective	3.0 Program elective *	3.0		
Program elective *	3.0			
	18	16	0	0

Fourth Year

Fall	Credits Winter	Credits Spring	Credits
CULA 303	3.0 CULA 400	3.0 CULA 216	3.0
CULA 421	2.0 CULA 422	2.0 CULA 320	3.0
FDSC 401	3.0 HRM 435	3.0 Arts & Humanities elective	3.0
Free elective	3.0 Arts & Humanities elective ***	3.0 Free elective	3.0
Minor elective **	4.0 Program elective *	3.0 Minor elective	4.0
	15	14	16

Total Credits 185

Culinary Science Concentration Plan of Study- 4 year, 1 co-op

First Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
CHEM 101	3.5 CHEM 102	4.5 CHEM 103	4.5 VACATION	
CULA 115	3.0 CIVC 101	1.0 CULA 121	3.0	
ENGL 101 or 111	3.0 CULA 120	3.0 ENGL 103 or 113	3.0	
FDSC 100	1.0 ENGL 102 or 112	3.0 FDSC 120	3.0	
MATH 101	4.0 MATH 102	4.0 FDSC 154	4.0	
UNIV SH101	1.0			
	15.5	15.5	17.5	0

Second Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
FDSC 270	4.0 CHEM 241	4.0 BIO 107	3.0 COM 230	3.0
NFS 100	2.0 CULA 125	3.0 BIO 108	1.0 COOP 101	1.0

NFS 101	1.0 NFS 215	3.0 CHEM 242	4.0 CULA 291	6.0
PHYS 170	3.0 NFS 217	1.0 CULA 303	3.0 Free elective	3.0
PHYS 172	1.0 PHYS 175	3.0 Arts & Humanities elective***	3.0 Social Science elective [†]	3.0
Free elective	3.0 PHYS 177	1.0 Free elective	3.0	
	14	15	17	16
Third Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
FDSC 350	3.0 FDSC 456	3.0 COOP EXPERIENCE [±]	COOP EXPERIENCE [±]	
FDSC 450	3.0 HSCI 345	4.5		
FDSC 451	2.0 Social Science elective [†]	3.0		
Arts & Humanities elective***	3.0 Program elective [*]	3.0		
Free elective	3.0 Free elective	3.0		
	14	16.5	0	0
Fourth Year				
Fall	Credits Winter	Credits Spring	Credits	
CULA 405	3.0 CULA 422	2.0 CULA 303	3.0	
CULA 421	2.0 FDSC 461	3.0 Arts & Humanities elective***	3.0	
FDSC 401	3.0 FDSC 468	3.0 Free elective	3.0	
FDSC 460	3.0 FDSC 487	3.0 Program elective [*]	3.0	
FDSC 490	1.0 Free elective	3.0		
Free Elective	3.0 Program elective [*]	3.0		
	15	17	12	
Total Credits 185				

± Students may be registered in a later term based on their co-op program (4-year or 5-year) and cycle. Select students may be eligible to replace COOP 101 with COOP 001.

* Program electives include any CULA, FDS, or HRM courses.

** Minor electives to be determined according to student's chosen minor under direction of advisor and program director as needed.

*** Arts & Humanities elective include courses from Westphal College, arts-related courses from Arts & Science and others as determined by advisor, examples include: AFAS, ARBC, CHIN, CW, ENGL, ESL, FREN, GER, HIST, HNRS, ITAL, JAPN, KOR, LING, WRIT, and others determined by advisor in conjunction with faculty.

† Social sciences electives include ANTH, CCM, CHP, CJS, COM, ENSS, EOH, GST, HMP, HNRS, JWST, PBHL PHIL, PLCY, PPE, PSCI, PSY, SCTS, SOC, WGST, and others determined by advisor in conjunction with faculty.

Bakery and Pastry Specialization

The Baking and Pastry Specialization provides students interested in pursuing a career in the bakeshop with the skills necessary to move up the ranks of the professional bakery. High-quality, from-scratch baked goods and pastries continue to find prominent places on menus in fine-dining restaurants, coffee shops, cafes, and dedicated bakery retail shops. For those restaurants and shops that have the facility space, many hire skilled bakers to run internal pastry departments. The need to feature fresh-baked goods has led to the opening of more wholesale and commissary bakeries throughout the Northeast and across the country. Graduates who are highly skilled in baking and patisserie are in demand to serve in restaurant pastry programs and to run these high-volume commercial bakeries.

Program Requirements

Required Courses

CULA 125	Foundations of Professional Baking	3.0
CULA 220	Patisserie I	3.0
CULA 225	Patisserie II	3.0
CULA 227	Wheat and Grains: Artisan Breads	3.0
CULA 228	Design, Presentation, and Decorating in Pastry	3.0
CULA 229	Confectionery	3.0
CULA 328	Brasserie Applied Baking	3.0

Total Credits

21.0

Co-op/Career Opportunities

The hospitality industry employs 15 million people nationwide. According to the National Restaurant Association statistics, employment is growing at the rate of 11% each year, making this industry one of the fastest growing in the country. Our Culinary Arts & Science program enjoys close relationships with outstanding and internationally acclaimed chefs in the finest restaurants, hotels, and tourism partners in the greater Philadelphia area. We also

have relationships with professional organizations that represent the industry on a regional, national, and international level such as Research Chefs Association, Institute of Food Technologists and International Association of Culinary Professionals. These relationships result in over \$80,000 a year in scholarship funding for our students.

Typical career paths for graduates include the following:

- Restaurants and private clubs, which employ over 9 million people in the US
- Hotels and resorts with almost 2.5 million employees
- Convention, special events, meeting planning, and tourism agencies
- Food service and beverage brokers, distributors, and suppliers to the industry
- Food waste and sustainability practices and solutions
- Food product development
- Quality assurance
- Food sensory analysis
- Food technologist

Co-Op Opportunities

Drexel University has long been known for its cooperative education/internship programs, which allow students to mix periods of full-time, career-related employment with their studies. Culinary Arts & Science students pursue the six-month co-op employment. This six-month experience during the junior year is tailored to fit the interests of each student. The following hotels, facilities, restaurants, and clubs have recently offered co-op positions to Drexel's Culinary Arts & Science students. Although many of these examples are located in the Philadelphia area, co-op jobs are not limited to any region.

- Vernick Restaurant
- High Street Hospitality Group
- Jose Garces - Garces Group
- Marc Vetri - Vetri Family of Restaurants
- Philadelphia Convention and Visitors Bureau
- America's Test Kitchen
- Philadelphia Chamber of Commerce
- Walt Disney World Co
- Saxbys
- Campbell Soup Company
- International flavors and fragrances
- Barry Callebaut
- Blommer Chocolate
- Yards Brewery
- Colorcon
- Mafco International
- Nestle

Visit the Drexel Steinbright Career Development Center (<http://www.drexel.edu/scdc/>) page for more detailed information on co-op and post-graduate opportunities.

Facilities

The major facility of the Culinary Arts & Science program is located on the sixth floor of the Academic Building. It is a 6,500-square-foot space that includes three state-of-the-art commercial kitchens, bakery, and laboratories, as well as the Academic Bistro (<https://drexel.edu/cnhp/academics/departments/food-hospitality-management/academic-bistro/>), the student-run restaurant, bar, and lounge. The facility also includes a sensory analysis lab, hospitality and gaming lab, and conference room. As part of the curriculum, students in this major are required to take food safety and sanitation courses which include lab work at Papadakis Integrated Science Building.

Philadelphia Location

A unique feature of the Culinary Arts & Science program at Drexel is our location in Philadelphia with proximity to New York City, Boston, Baltimore, and Washington DC, as well as the resort centers on the Atlantic seacoast and in the Pocono Mountains. These regions include hundreds of hotels, restaurants, and resorts that are used for field trips and campus visits by hospitality resource professionals. Students also gain hands-on experience through faculty-directed field trips throughout the region.

Culinary Arts & Science Faculty

Jonathan Deutsch, PhD (*New York University*). Professor. Social and cultural aspects of food, culinary education, culinary improvisation, recipe and product development; food sustainability.

Richard Pepino Executive Chef. Culinary fundamentals, Advanced culinary techniques

Jasreen Sekhon, PhD (*Oklahoma State*). Associate Clinical Professor. utilization of industrial food waste, with specialization in value added processing, co-product utilization, process development, food chemistry and studying the effect of processing on the quality of food products

Michael Traud, EdD (*Villanova University*) *Program Director, Hospitality and Tourism Management*. Associate Clinical Professor. Implementation of Korean Cuisine in the United States; hospitality law; Italian cuisine.

Rosemary Trout, DHSc (*Drexel University*) *Program Director, Culinary Arts and Food Science*. Assistant Clinical Professor. Food safety and sanitation in food service and food manufacturing; sensory evaluation, ingredient functionality and food chemistry, food media.

Michael Tunick, PhD (*Temple University*). Assistant Clinical Professor. Dairy and Cheese science, rheology, Sensory science, Food chemistry and engineering

Charles Ziccardi, MS (*Drexel University*). Assistant Teaching Professor. Classic Italian cuisine, Italian culture, gardening for the kitchen, food sustainability, and professional hospitality management.

Emeritus Faculty

A. Philip Handel, PhD (*University of Massachusetts*). Professor Emeritus. Food science, especially lipid chemistry; food composition and functionality; evaluation and analysis of frying fats and fried foods.

Exercise Science

Major: Exercise Science

Degree Awarded: Bachelor of Science (BS)

Calendar Type: Quarter

Minimum Required Credits: 183.0

Co-op Options: One Co-op (Four years)

Classification of Instructional Programs (CIP) code: 31.0505

Standard Occupational Classification (SOC) code: 29-1128

About the Program

The Bachelor of Science (BS) program in Exercise Science at Drexel University integrates a foundation of developmental health and wellness with rigorous training in exercise science and sports medicine concepts to provide the knowledge, skills and abilities required as an advocate for the promotion of health, well-being, and physical performance.

The curriculum is designed to apply these scientific concepts to physical activity and the design of safe and effective fitness practices for diverse populations. Practices are emphasized that are essential for creating a culture of diversity, equity, inclusiveness and interprofessional practice, education, and research. Drexel University Exercise Science students will be well-positioned to sit for group exercise and health/fitness certifications with organizations such as the American College of Sports Medicine and other professional and accredited agencies/bodies.

Admission Requirements

- Three years of mathematics (algebra I and II, geometry)
- Two years of laboratory science (biology, chemistry, or physics)

Degree Requirements

Core Exercise Science Courses

ESCI 101	Foundations of Exercise Science	4.0
ESCI 201	Introduction to Exercise Science	4.0
ESCI 210	Health and Wellness Throughout the Lifespan	3.0
ESCI 315	Concepts & Practices in Inclusive Physical Activity	3.0
ESCI 320	Technological Advancements and Integrations in Exercise Science	3.0
ESCI 330	Physical Growth and Motor Behavior	3.0
ESCI 340	Exercise Physiology II	4.0
ESCI 410	Aging and Exercise	4.0
ESCI 415	Pharmacology & Ergogenic Aids in Exercise Science	3.0

ESCI 420	Wellness and Fitness Program Management	3.0
ESCI 435	Exercise is Medicine: A Campus Experience	4.0
HSCI 325	Exercise Physiology	4.0
HSCI 326	Applied Anatomy and Kinesiology	5.0
HSCI 380	Strength and Conditioning	4.0
HSCI 381	Exercise for Clinical Populations	4.0
HSCI 410	Psychology of Physical Activity	4.0
HSCI 425	Exercise Testing and Prescription	4.0
SCL 210	Prevention and Care of Athletic Injuries	3.0
SMT 285	Sport, Industry, and Society	4.0
General Requirements		
CIVC 101	Introduction to Civic Engagement	1.0
COOP 101	Career Management and Professional Development	1.0
UNIV NH101	The Drexel Experience	1.0
Biology Sequence		
BIO 131 & BIO 134	Cells and Biomolecules and Cells and Biomolecules Lab	5.0
BIO 132 & BIO 135	Genetics and Evolution and Genetics and Evolution Lab	5.0
BIO 133 & BIO 136	Physiology and Ecology and Anatomy and Ecology Lab	5.0
Chemistry Sequence		
CHEM 101	General Chemistry I	3.5
CHEM 102	General Chemistry II	4.5
CHEM 103	General Chemistry III	4.5
English Sequence		
ENGL 101 or ENGL 111	Composition and Rhetoric I: Inquiry and Exploratory Research English Composition I	3.0
ENGL 102 or ENGL 112	Composition and Rhetoric II: Advanced Research and Evidence-Based Writing English Composition II	3.0
ENGL 103 or ENGL 113	Composition and Rhetoric III: Themes and Genres English Composition III	3.0
Mathematics Sequence		
MATH 101	Introduction to Analysis I	4.0
MATH 102	Introduction to Analysis II	4.0
Psychology		
PSY 101	General Psychology I	3.0
Nutrition		
NFS 100 & NFS 101	Nutrition, Foods, and Health and Introduction to Nutrition & Food	3.0
Public Health		
PBHL 101	Public Health 101	3.0
Sociology		
SOC 101	Introduction to Sociology	3.0
Anatomy and Physiology Courses		
HSCI 101	Anatomy and Physiology I	5.0
HSCI 102	Anatomy and Physiology II	5.0
HSCI 103	Anatomy and Physiology III	5.0
Research		
HSCI 310	Introduction to Research Methods	4.0
HSCI 315	Current Issues in Health Sciences	4.0
Physics		
PHYS 152	Introductory Physics I	4.0
Statistics and Assessment		
HSCI 345	Statistics for Health Sciences	4.5
HSCI 201	Health Assessment through the Lifespan	4.0
Free electives		6.0-8.0
Exercise Science Electives (Minimum of 9 credits) *		9.0
Business Electives **		3.0-4.0
Total Credits		183.0-186.0

* Students may complete any of the following courses: ESCI 370, HSCI 415, HSCI 420, HSCI 435, NFS 310, NFS 325, PBHL 301, PHYS 153, PHYS 154, PSY 355, SMT 220.

** Students may complete any of the following: ACCT 110, ACCT 120, FIN 150, BUSN 105, SMT 110.

Sample Plan of Study

First Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
BIO 131 & BIO 134	5.0 BIO 132 & BIO 135	5.0 BIO 133 & BIO 136	5.0 VACATION	
CHEM 101	3.5 CHEM 102	4.5 CHEM 103	4.5	
ENGL 101 or 111	3.0 CIVC 101	1.0 ENGL 103 or 113	3.0	
ESCI 101	4.0 ENGL 102 or 112	3.0 MATH 102	4.0	
UNIV NH101	1.0 MATH 101	4.0		
	16.5	17.5	16.5	0
Second Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
ESCI 210	3.0 COOP 101	1.0 HSCI 103	5.0 HSCI 201	4.0
HSCI 101	5.0 ESCI 201	4.0 HSCI 345	4.5 SOC 101	3.0
NFS 100 & NFS 101	3.0 HSCI 102	5.0 PBHL 101	3.0 Business elective	3.0-4.0
PSY 101	3.0 HSCI 310	4.0 PHYS 152	4.0 Free elective	3.0-4.0
	14	14	16.5	13-15
Third Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
COOP EXPERIENCE	COOP EXPERIENCE	ESCI 315	3.0 ESCI 320	3.0
		HSCI 325	4.0 ESCI 340	4.0
		SCL 210	3.0 HSCI 381	4.0
		SMT 285	4.0 Free elective	3.0-4.0
		Exercise Science Elective	3.0	
	0	0	17	14-15
Fourth Year				
Fall	Credits Winter	Credits Spring	Credits	
HSCI 315	4.0 ESCI 410	4.0 ESCI 330	3.0	
HSCI 326	5.0 ESCI 415	3.0 ESCI 435	4.0	
HSCI 425	4.0 ESCI 420	3.0 HSCI 410	4.0	
Exercise Science Elective	3.0 HSCI 380	4.0 Exercise Science Elective	3.0	
	16	14	14	

Total Credits 183-186

Health Sciences

Major: Health Sciences

Degree Awarded: Bachelor of Science (BS)

Calendar Type: Quarter

Minimum Required Credits: 183.0

Co-op Options: One Co-op (Four years)

Classification of Instructional Programs (CIP) code: 51.1199

Standard Occupational Classification (SOC) code: 11-9111

About the Program

The bachelor's degree program in Health Sciences at Drexel University exposes students to a wide variety of careers in health care and related professions. Our emphasis on interdisciplinary study, coupled with expert faculty, gives students the opportunity to explore different facets of health-related professions before matriculating to specialized graduate programs or entering the workplace. Whether you are on the fast track to a career in health professions or still finding your path, our Health Sciences Program offers a multitude of options for completing your degree.

What You Will Learn

The Health Sciences Program offers a rigorous four-year curriculum for students interested in pursuing careers in health-related professions. Courses in health and clinical sciences, research methods, statistics, and healthcare ethics are combined with a core curriculum of mathematics, humanities, and social sciences to provide a fully integrated and comprehensive curriculum.

Career Opportunities

Health care professions are one of the fastest growing job sectors in the United States. There is tremendous demand for trained health care providers at all levels. In the Health Sciences Program, our multidisciplinary approach, flexible curriculum, and co-op experience provide students with a highly competitive edge in the market place and in the pursuit of graduate program admission. Some of the fields Health Sciences graduates can expect to pursue post-graduation include:

- Rehabilitation Professions
 - Physical therapy
 - Occupational therapy
 - Speech and language pathology
 - Cardiac rehabilitation
- Physician Assistant Studies
- Medicine and Dentistry
- Optometry
- Audiology
- Clinical Research
- Public Health and Health Advocacy
- Nursing
- Exercise Physiology
- Nutrition Sciences
- Bioethics
- Health Psychology

Co-op Experience

Drexel University has long been known for its cooperative education programs. As part of the Health Sciences curriculum, students incorporate a six-month co-op experience into their plan of study. This allows students to learn from healthcare leaders at renowned facilities nationwide. By building career-related employment into undergraduate study, students gain work experience, network with healthcare professionals, and hone their clinical and research skills. Some local co-op employers of Health Sciences students include Children's Hospital of Philadelphia, Magee Rehabilitation Hospital, Bryn Mawr Rehabilitation Hospital, Hahnemann University Hospital, Good Shepherd Penn Partners, NovaCare, and many other health care facilities in the region.

Bridge Program Options

The Health Sciences program offers accelerated Bridge Program options for high achieving students to pursue degrees in the Physician Assistant Studies (p. 53) program and the Doctor of Physical Therapy (p. 49) program within the College of Nursing and Health Professions.

Articulation Agreement Options

- Drexel's Health Sciences Department and Salus University's Occupational Therapy Department have partnered to offer a BS/MSOT sequential degree program. In the BS/MSOT option, students first complete a Bachelor of Science (BS) degree in Health Sciences at Drexel University, then enroll into the 2-year Master of Science in Occupational Therapy (MSOT) program at Salus University.
- Drexel's Health Sciences Department and Thomas Jefferson University's Athletic Training Department have partnered to offer a BS/Master of Science in Athletic Training sequential degree program. In the BS/MSAT option, students first complete a Bachelor of Science (BS) degree in Health Sciences at Drexel University, then enroll into the 2-year Master of Science in Athletic Training (MSAT) program at Thomas Jefferson University.
- Drexel's Health Sciences Department and Philadelphia's University of the Sciences PharmD Department have partnered to offer a BS/PharmD sequential degree program. In the BS/PharmD option, students first complete a Bachelor of Science (BS) degree in Health Sciences at Drexel University, then enroll into the 4-year PharmD program at University of the Sciences.

Optional Concentration in Exercise Science

The concentration in Exercise Science helps prepare Health Sciences majors for graduate studies in Exercise Physiology. In addition, the concentration provides foundational knowledge and skills for a variety of fitness certifications from the American College of Sports Medicine, National Strength and Conditioning Association, and others. These certifications are often required of graduates interested in seeking employment in the fitness industry.

Drexel Graduate Options in Biomedical Sciences

Graduates of the Health Sciences program may also continue their education in the Graduate School of Biomedical Sciences and Professional Studies which offers over 40 doctoral, master's and professional development programs. These academic programs emphasize real-world experience and help guide students to make career decisions that best fit their abilities and evolving needs.

Additional Information

For more information, visit the Health Sciences Program (<http://www.drexel.edu/cnhp/academics/departments/Health-Sciences/>) page at the College of Nursing and Health Professions website.

Degree Requirements

General Requirements

CIVC 101	Introduction to Civic Engagement	1.0
COOP 101	Career Management and Professional Development *	1.0
UNIV NH101	The Drexel Experience	1.0

English Sequence

ENGL 101 or ENGL 111	Composition and Rhetoric I: Inquiry and Exploratory Research English Composition I	3.0
ENGL 102 or ENGL 112	Composition and Rhetoric II: Advanced Research and Evidence-Based Writing English Composition II	3.0
ENGL 103 or ENGL 113	Composition and Rhetoric III: Themes and Genres English Composition III	3.0

Biology Sequence

BIO 131 & BIO 134	Cells and Biomolecules and Cells and Biomolecules Lab	5.0
BIO 132 & BIO 135	Genetics and Evolution and Genetics and Evolution Lab	5.0
BIO 133 & BIO 136	Physiology and Ecology and Anatomy and Ecology Lab	5.0
BIO 226	Microbiology for Health Professionals	5.0

Chemistry Sequence

CHEM 101	General Chemistry I	3.5
CHEM 102	General Chemistry II	4.5
CHEM 103	General Chemistry III	4.5

Mathematics Sequence

MATH 101	Introduction to Analysis I	4.0
MATH 102	Introduction to Analysis II	4.0

Communications

COM 320 [WI]	Science Writing	3.0
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Health Systems

ECON 240	Economics of Health Care Systems	4.0
HSAD 210	Health-Care Ethics I	3.0

Complete one of the following courses:

HSAD 309	Advanced Health-Care Ethics	3.0
HSAD 310	Introduction to Health-Systems Administration	3.0
HSAD 345	Ethics in Health Care Management	3.0

Psychology

PSY 101	General Psychology I	3.0
Two Psychology (PSY 100-499) and/or Behavioral Health Counseling (BACS 100-499) courses (minimum 6.0 credits)		6.0

Sociology

SOC 101	Introduction to Sociology	3.0
Two Sociology (SOC 100-499) courses (minimum 8.0 credits)		8.0

Humanities **

Public Health		
PBHL 101	Public Health 101	3.0
One Public Health (PBHL 300-499) course (minimum 3.0 credits)		3.0

Anatomy & Physiology Courses

HSCI 101	Anatomy and Physiology I	5.0
HSCI 102	Anatomy and Physiology II	5.0
HSCI 103	Anatomy and Physiology III	5.0

Research Courses

HSCI 310	Introduction to Research Methods	4.0
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HSCI 315	Current Issues in Health Sciences	4.0
Statistics and Assessment		
HSCI 201	Health Assessment through the Lifespan	4.0
HSCI 345	Statistics for Health Sciences	4.5
Health Sciences Electives ***		32.0
Free electives		19.0
Total Credits		183.0

* Co-op cycles may vary. Students are assigned a co-op cycle (fall/winter, spring/summer, summer-only) based on their co-op program (4-year, 5-year) and major.

COOP 101 registration is determined by the co-op cycle assigned and may be scheduled in a different term. Select students may be eligible to take COOP 101 in place of COOP 101.

** Three Humanities (courses at the 100-499 level in ANTH, HIST, HUM, PHIL) or language electives (courses at the 100-499 level in ARBC, CHIN, FREN, GERM, HBRW, ITAL, JAPN, KOR, SPAN) for a minimum of 9.0 credits.

*** Health Sciences electives include HSCI or NFS courses at the 100-499 level. Up to two science courses (BIO 200-499, CHEM 200-499, PHYS 100-499) may be used as Health Sciences electives with advisor permission. All 100-Level freshman course requirements in BIO, CHEM, ENGL, and MATH must be completed by the time a student reaches 135.0 credits.

Optional Concentration in Exercise Science

The concentration in Exercise Science helps prepare students for graduate studies in Exercise Physiology. In addition, the concentration provides foundational knowledge and skills for a variety of fitness certifications from the American College of Sports Medicine, National Strength and Conditioning Association, and others. These certifications are often required of graduates interested in seeking employment in the fitness industry.

Students wishing to complete the concentration in Exercise Science must complete the courses listed below as 17.0 of their elective credits.

Required course:

HSCI 325	Exercise Physiology	4.0
Complete 13.0 credits from the following list:		13.0
HSCI 326	Applied Anatomy and Kinesiology	
HSCI 380	Strength and Conditioning	
HSCI 381	Exercise for Clinical Populations	
HSCI 415	Musculoskeletal Pathophysiology	
HSCI 490	Senior Research Project	
HSCI T480	Special Topics in Health Sciences	
NFS 100 & NFS 101	Nutrition, Foods, and Health and Introduction to Nutrition & Food	
NFS 325	Nutrition & Exercise Physiology	
HSCI 425	Exercise Testing and Prescription	
HSCI 410	Psychology of Physical Activity	
Total Credits		17.0

Writing-Intensive Course Requirements

In order to graduate, all students must pass three writing-intensive courses after their freshman year. Two writing-intensive courses must be in a student's major. The third can be in any discipline. Students are advised to take one writing-intensive class each year, beginning with the sophomore year, and to avoid "clustering" these courses near the end of their matriculation. Transfer students need to meet with an academic advisor to review the number of writing-intensive courses required to graduate.

A "WI" next to a course in this catalog may indicate that this course can fulfill a writing-intensive requirement. For the most up-to-date list of writing-intensive courses being offered, students should check the Writing Intensive Course List (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/writing-intensive-courses/>) at the University Writing Program (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/>). (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/drexel-writing-center/>) Students scheduling their courses can also conduct a search for courses with the attribute "WI" to bring up a list of all writing-intensive courses available that term.

Sample Plan of Study

4 year, one co-op (Fall/Winter)

First Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
BIO 131 & BIO 134	5.0 BIO 132 & BIO 135	5.0 BIO 133 & BIO 136	5.0 VACATION	

CHEM 101	3.5 CHEM 102	4.5 CHEM 103	4.5	
ENGL 101 or 111	3.0 CIVC 101	1.0 ENGL 103 or 113	3.0	
UNIV NH101	1.0 ENGL 102 or 112	3.0 MATH 102	4.0	
Free Elective	3.0 MATH 101	4.0		
	15.5	17.5	16.5	0
Second Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
BIO 226	5.0 COOP 101**	1.0 COM 320	3.0 SOC 101	3.0
HSCI 101	5.0 HSCI 102	5.0 HSAD 210	3.0 Free Elective	3.0
HSCI 345	4.5 PSY 101	3.0 HSCI 103	5.0 Health Sciences Elective*	3.0
Free Elective	3.0 Free Elective	3.0 HSCI 310	4.0 PSY Elective	3.0
	Health Sciences Elective*	4.0		
	17.5	16	15	12
Third Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
COOP EXPERIENCE**	COOP EXPERIENCE**	PBHL 101	3.0 HSCI 201	4.0
		HSCI 315	4.0 Free Elective	3.0
		Health Sciences Elective*	3.0 Health Sciences Electives*	4.0
		One of the following:	3.0 Sociology Elective	4.0
		HSAD 309		
		HSAD 310		
		HSAD 345		
	0	0	13	15
Fourth Year				
Fall	Credits Winter	Credits Spring	Credits	
ECON 240	4.0 Free Elective	3.0 Health Sciences Electives*	6.0	
Free Elective	3.0 Health Sciences Elective*	3.0 Humanities/Social Science Electives	3.0	
Health Sciences Electives*	7.0 Humanities/Social Science Electives	6.0 PBHL Elective	3.0	
	Sociology Elective	4.0 PSY Elective	3.0	
	14	16	15	

Total Credits 183

* See degree requirements (p. 17).

** COOP 101 registration is determined by the co-op cycle assigned and may be scheduled in a different term. Select student may be eligible to take COOP 001 in place of COOP 101.

Co-op cycles may vary. Students are assigned a co-op cycle (fall/winter, spring/summer, summer-only) based on their co-op program (4-year, 5-year) and major.

4 year, one co-op (Spring/Summer)

First Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
BIO 131 & BIO 134	5.0 BIO 132 & BIO 135	5.0 BIO 133 & BIO 136	5.0 VACATION	
CHEM 101	3.5 CHEM 102	4.5 CHEM 103	4.5	
ENGL 101 or 111	3.0 CIVC 101	1.0 ENGL 103 or 113	3.0	
UNIV NH101	1.0 ENGL 102 or 112	3.0 MATH 102	4.0	
Free Elective	3.0 MATH 101	4.0		
	15.5	17.5	16.5	0
Second Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
BIO 226	5.0 COOP 101**	1.0 COM 320	3.0 SOC 101	3.0
HSCI 101	5.0 HSCI 102	5.0 HSAD 210	3.0 Free Elective	2.0
HSCI 345	4.5 PSY 101	3.0 HSCI 103	5.0 Health Sciences Elective*	4.0
Free Elective	3.0 Free Elective	3.0 HSCI 310	4.0 PSY Elective	3.0

	Health Sciences Elective*	4.0		
	17.5	16	15	12
Third Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
HSCI 315	4.0 HSCI 201	4.0 COOP EXPERIENCE**	COOP EXPERIENCE**	
PBHL 101	3.0 Free Elective	3.0		
Health Sciences Elective*	3.0 Health Sciences Elective*	4.0		
One of the following:	3.0 Sociology Elective	4.0		
HSAD 210				
HSAD 309				
HSAD 345				
	13	15	0	0
Fourth Year				
Fall	Credits Winter	Credits Spring	Credits	
ECON 240	4.0 Free Elective	3.0 Health Sciences Electives*	6.0	
Free Elective	3.0 Health Sciences Elective*	3.0 Humanities/Social Electives	3.0	
Health Sciences Electives*	7.0 Humanities/Social Science Electives	6.0 PBHL Elective	3.0	
	Sociology Elective	4.0 PSY Elective	3.0	
	14	16	15	

Total Credits 183

* See degree requirements.

** COOP 101 registration is determined by the co-op cycle assigned and may be scheduled in a different term. Select students may be eligible to replace COOP 101 with COOP 001.
Co-op cycles may vary. Students are assigned a co-op cycle (fall/winter, spring/summer, summer-only) based on their co-op program (4-year, 5-year) and major.

Facilities

The College of Nursing and Health Professions is located on Drexel University's Center City Campus. Students have access to the *Center for Interdisciplinary Clinical Simulation and Practice (CICSP)*, which utilizes patient actors and automated simulation manikins to mimic real-life human physiology. The CICSP provides undergraduate Health Sciences students the opportunity to learn assessment and communication skills in a controlled setting. The College of Nursing and Health Professions also maintains the *Stephen and Sandra Sheller 11th Street Family Health Services of Drexel University*, a comprehensive, community-based health center where students have unique opportunities to observe and participate in health care delivery.

Health Sciences Faculty

Michael Bruneau, Jr., PhD ACSM EP-C (*Springfield College, University of Connecticut*) *Director of Undergraduate Research*. Associate Teaching Professor. Clinical exercise physiology; lifestyle therapies for prevention, treatment, and management of preclinical and clinical populations.

William D'Andrea, MS, BS Pharm, CCP (*MCP Hahnemann University*). Assistant Teaching Professor. Pharmacology, anatomy & physiology.

Mary Elizabeth Flynn, PhD (*Temple University*). Assistant Teaching Professor. Anatomy and physiology, developmental anatomy, genetics, and emerging tech in health care.

Jodie Haak, PhD (*University of Iowa*). Associate Teaching Professor. Physiology and applied physiology, Aging and STEM pedagogy.

Michael L. Kirifides, PhD (*Hahnemann University*). Assistant Teaching Professor. Identifying, designing, and implementing preparation approach to improve standardized testing outcomes for students in the undergraduate healthcare programs. Human anatomy and physiology, toxicology, pharmacology, and neuroscience.

Micah Meltzer, MD (*SUNY Downstate Medical School*). Assistant Teaching Professor. Musculoskeletal physiology, evolutionary medicine, health assessment, regional anatomy, and advanced anatomy.

Anne Nixon Dower, PhD (*Penn State College of Medicine*). Assistant Teaching Professor. Investigating the role of iron regulation and metabolism in health and disease. Anatomy and physiology, pathophysiology, regional anatomy, and advanced anatomy.

Stephen Samendinger, PhD (*Michigan State University*). Associate Teaching Professor. Psychosocial aspects of physical activity and healthy lifestyles, motivation: group dynamics, identity, physical activity determinants and responses.

Steven Vitti, PHD, ACSM-EP (*Springfield College*). Assistant Teaching Professor. Dietary supplements, sports nutrition, human performance, skeletal muscle damage, peripheral fatigue.

Health Services Administration

Major: Health Services Administration

Degree Awarded: Bachelor of Science (BS)

Calendar Type: Quarter

Minimum Required Credits: 180.0

Co-op Options: One Co-op (Four years); No Co-op (Four years); Three Co-op (Five years)

Classification of Instructional Programs (CIP) code: 51.0701

Standard Occupational Classification (SOC) code: 11-9111

About the Program

The Bachelor of Science in Health Services Administration (HSA) is a pre-professional degree that prepares students to address the leadership and management challenges of a complex healthcare industry. In addition, the curriculum can prepare students wishing to pursue graduate studies in a variety of areas such as health services administration, business administration, public health, law, and health communication.

The curriculum is designed to provide a foundation in the general management and economic principles that underpin the healthcare system. The program includes courses in such areas as leadership, health care policy, law, finance, management, marketing, bioethics, and information systems. Additionally, the curriculum incorporates interdisciplinary courses that address psychosocial, political, and historical perspectives regarding health care practice and the populations in need of health services.

Full-time students (180.0 quarter credits) are eligible to participate in Drexel University's renowned co-operative education program.* The Health Services Administration Department offers the option of a four-year/one co-op or a five-year/three co-op. A full-time non-coop option is also available. Transfer students are eligible for the full-time curriculum with or without co-op depending on the number of approved transfer credits.

The program also provides a minor in HSA for Drexel University bachelor's-degree-seeking students and an online certificate in Medical Billing and Coding (p. 74) for non-degree-seeking students.

Courses are available online (<http://online.drexel.edu/online-degrees/healthcare-degrees/bs-hsa/>). At least 60.0 approved transfer semester credits (90.0 approved quarter credits) including courses in:

- English composition and/or literature
- Natural sciences with a lab
- Computing course
- Mathematics and statistics
- Humanities/social sciences
- Up to 75.0 approved transfer semester credits (105.0 approved quarter credits) for students with a strong academic background in health services administration

* *Each cooperative experience is comprised of two consecutive quarter terms during the first half or the second half of the junior year.*

Additional Information

The contact for this program is:

Susan Feinstein, BS
 Program Coordinator, Health Services Administration
 1601 Cherry Street, 7th floor, Room 652
 Philadelphia PA, 19102
 267-359-5543
 slf52@drexel.edu

For more information, visit the Health Services Administration (<https://drexel.edu/cnhp/academics/undergraduate/BS-Health-Services-Administration/>) page on the College's website.

Degree Requirements

English Sequence

or ENGL 111	English Composition I	
ENGL 102	Composition and Rhetoric II: Advanced Research and Evidence-Based Writing	3.0
or ENGL 112	English Composition II	
ENGL 103	Composition and Rhetoric III: Themes and Genres	3.0
or ENGL 113	English Composition III	
Natural Sciences *		8.0-10.0
Mathematics		
MATH 101	Introduction to Analysis I	3.0-4.0
or MATH 171	Introduction to Analysis A	
MATH 102	Introduction to Analysis II	3.0-4.0
or MATH 172	Introduction to Analysis B	
Computing Course		
CS 150	Computer Science Principles	3.0
Drexel Experience		
CIVC 101	Introduction to Civic Engagement	1.0
COOP 101	Career Management and Professional Development **	1.0
UNIV NH101	The Drexel Experience	1.0
Health Services Administration Core Requirements		
HSAD 210	Health-Care Ethics I	3.0
HSAD 310	Introduction to Health-Systems Administration	3.0
HSAD 321	Health-Care Human Resources	3.0
HSAD 322	Health-Care Law	3.0
HSAD 330	Financial Management in Health Care	3.0
HSAD 331 [WI]	Non-profits and Health Care	3.0
HSAD 332 [WI]	Health-Care Marketing	3.0
HSAD 334	Management of Health Services	3.0
HSAD 335 [WI]	Health-Care Policy	3.0
HSAD 340	Leadership in Health Services Administration	3.0
HSAD 345	Ethics in Health Care Management	3.0
Business Courses		
ACCT 110	Accounting for Professionals	4.0
ECON 201	Principles of Microeconomics	4.0
or ECON 202	Principles of Macroeconomics	
or ECON 240	Economics of Health Care Systems	
HSCI 345	Statistics for Health Sciences	4.0-4.5
or STAT 201	Introduction to Business Statistics	
ORGB 300 [WI]	Organizational Behavior	4.0
Humanities and Social Sciences		
PSCI 110	American Government	4.0
SOC 101	Introduction to Sociology	3.0
Health Services Administration (HSAD) Electives		
		27.0
Humanities and Social Sciences Electives		
		29.0
Free Electives ***		
		39.0
Total Credits		180.0-184.5

* Students may select from Biology (BIO 100-499), Chemistry (CHEM 100-499) or HSCI 101, HSCI 102, or HSCI 103 courses. However, any course selected must include a laboratory component. Additional natural science subject options may be considered with the approval of the student's advisor.

** Students in COOP programs will take COOP 101 as directed by your program advisor.

*** NCOP students will take 40.0 free elective credits.

Writing-Intensive Course Requirements

In order to graduate, all students must pass three writing-intensive courses after their freshman year. Two writing-intensive courses must be in a student's major. The third can be in any discipline. Students are advised to take one writing-intensive class each year, beginning with the sophomore year, and to avoid "clustering" these courses near the end of their matriculation. Transfer students need to meet with an academic advisor to review the number of writing-intensive courses required to graduate.

A "WI" next to a course in this catalog may indicate that this course can fulfill a writing-intensive requirement. For the most up-to-date list of writing-intensive courses being offered, students should check the Writing Intensive Course List (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/writing-intensive-courses/>) at the University Writing Program (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/>). (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/>).

program/drexel-writing-center/) Students scheduling their courses can also conduct a search for courses with the attribute "WI" to bring up a list of all writing-intensive courses available that term.

Sample Plan of Study

Plans of Study are based on available course scheduling information. Course scheduling is subject to change; therefore, Plans of Study are subject to change.

4 year, no co-op

First Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
ACCT 110	4.0 ENGL 102 or 112	3.0 CIVC 101	1.0 VACATION	
ENGL 101 or 111	3.0 MATH 101 or 171	3.0-4.0 ENGL 103 or 113	3.0	
SOC 101	3.0 PSCI 110	4.0 HSAD 210	3.0	
UNIV NH101	1.0 Natural Science course with Laboratory*	4.0-5.0 HSAD 310	3.0	
Natural Science course with Laboratory*	4.0-5.0	MATH 102 or 172	3.0-4.0	
	15-16	14-16	13-14	0
Second Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
CS 150**	3.0 ECON 201, 202, or 240	4.0 HSAD 335***	3.0 VACATION	
HSAD 322	3.0 HSAD 321	3.0 HSAD 340	3.0	
HSAD 334	3.0 HSAD 330	3.0 HSAD 345	3.0	
Free Electives	6.0 HSAD Elective Humanities/Social Science Elective	3.0 Free Electives	6.0	
	15	16	15	0
Third Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
Free elective	4.0 ORGB 300***	4.0 HSAD 332***	3.0 VACATION	
HSAD Electives	6.0 HSAD Elective	3.0 HSAD Elective	3.0	
Humanities/Social Science Electives	6.0 Humanities/Social Science Electives	6.0 Free Electives	9.0	
	Free Elective	3.0		
	16	16	15	0
Fourth Year				
Fall	Credits Winter	Credits Spring	Credits	Credits
HSAD 331***	3.0 Free Elective	3.0 Free Electives	6.0	
HSCI 345 or STAT 201	4.0-4.5 HSAD Electives	6.0 HSAD Elective	3.0	
Free Elective	3.0 Humanities/Social Science Electives	7.0 Humanities/Social Science Elective	4.0	
HSAD Elective	3.0			
Humanities/Social Science Elective	3.0			
	16-16.5	16	13	

Total Credits 180-184.5

* Students may select from Biology (BIO 100-499), Chemistry (CHEM 100-499) or HSCI 101, HSCI 102, or HSCI 103 courses. However, any course selected must include a laboratory component. Additional natural science subject options may be considered with the approval of the student's advisor.

** COM 230 may be used as a substitution for CS 150

*** HSAD 331 [WI] , HSAD 332 [WI] , HSAD 335 [WI] and ORGB 300 [WI] are Writing Intensive courses that fulfill the Writing Intensive Course requirement. Students should avoid combining these courses in one term.

4 year, 1 co-op

First Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
ACCT 110	4.0 ENGL 102 or 112	3.0 CIVC 101	1.0 VACATION	
ENGL 101 or 111	3.0 MATH 101 or 171	3.0-4.0 ENGL 103 or 113	3.0	
SOC 101	3.0 PSCI 110	4.0 HSAD 210	3.0	

UNIV NH101	1.0 Natural Science course with Laboratory*	4.0-5.0 HSAD 310	3.0	
Natural Science course with Laboratory*	4.0-5.0	MATH 102 or 172	3.0-4.0	
	15-16	14-16	13-14	0
Second Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
CS 150	3.0 ECON 201, 202, or 240	4.0 HSAD 335	3.0 COOP 101**	1.0
HSAD 322	3.0 HSAD 321	3.0 HSAD 340	3.0 Free Elective	3.0
HSAD 334	3.0 HSAD 330	3.0 HSAD 345	3.0 HSAD Elective	6.0
Free Electives	6.0 HSAD Elective	3.0 Free Electives	6.0 Humanities/Social Science Electives	6.0
	Humanities/Social Science Elective	3.0		
	15	16	15	16
Third Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
ORGB 300	4.0 HSAD 332	3.0 COOP EXPERIENCE**	COOP EXPERIENCE**	
HSAD Elective	3.0 HSAD Elective	3.0		
Humanities/Social Science Electives	6.0 Free Electives	9.0		
Free Elective	3.0			
	16	15	0	0
Fourth Year				
Fall	Credits Winter	Credits Spring	Credits	
HSAD 331	3.0 Free Elective	3.0 Free Electives	6.0	
HSCI 345 or STAT 201	4.0-4.5 HSAD Electives	6.0 HSAD Elective	3.0	
Free Elective	3.0 Humanities/Social Science Electives	7.0 Humanities/Social Science Elective	4.0	
HSAD Elective	3.0			
Humanities/Social Science Elective	3.0			
	16-16.5	16	13	

Total Credits 180-184.5

* Students may select from Biology (BIO 100-499), Chemistry (CHEM 100-499) or HSCI 101, HSCI 102, or HSCI 103 courses. However, any course selected must include a laboratory component. Additional natural science subject options may be considered with the approval of the student's advisor.

** Co-op cycles may vary. Students are assigned a co-op cycle (fall/winter, spring/summer, summer-only) based on their co-op program (4-year, 5-year) and major.

COOP 101 registration is determined by the co-op cycle assigned and may be scheduled in a different term. Select students may be eligible to take COOP 001 in place of COOP 101.

5 year, 3 co-op

First Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
ACCT 110	4.0 ENGL 102	3.0 CIVC 101	1.0 VACATION	
ENGL 101	3.0 MATH 101 or 171	3.0-4.0 COOP 101**	1.0	
SOC 101	3.0 PSCI 110	4.0 ENGL 103	3.0	
UNIV NH101	1.0 Natural Science course with laboratory*	4.0-5.0 HSAD 210	3.0	
Natural Science course with Laboratory*	4.0-5.0	HSAD 310	3.0	
		MATH 102 or 172	3.0-4.0	
	15-16	14-16	14-15	0
Second Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
CS 150†	3.0 ECON 201, 202, or 240	4.0 COOP EXPERIENCE**	COOP EXPERIENCE**	
HSAD 322	3.0 HSAD 321	3.0		
HSAD 334	3.0 HSAD 330	3.0		
Free Elective	3.0 HSAD Elective	3.0		

HSAD Elective	3.0 Humanities/Social Science Elective	3.0		
	15	16	0	0
Third Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
HSAD 340***	3.0 HSAD 332	3.0 COOP EXPERIENCE**	COOP EXPERIENCE**	
ORGB 300	4.0 Free Electives	6.0		
HSAD Elective	3.0 HSAD Elective	3.0		
Free Elective	3.0 Humanities/Social Science Elective	3.0		
Humanities/Social Science Elective	3.0			
	16	15	0	0
Fourth Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
HSAD 331	3.0 HSAD 345***	3.0 COOP EXPERIENCE**	COOP EXPERIENCE**	
Free Electives	6.0 Free Elective	3.0		
HSAD Elective	3.0 HSAD Elective	3.0		
Humanities/Social Science Elective	3.0 Humanities/Social Science Electives	7.0		
	15	16	0	0
Fifth Year				
Fall	Credits Winter	Credits Spring	Credits	
HSAD 335***	3.0 Free Electives	6.0 Free Electives	9.0	
HSCI 345 or STAT 201	4.0-4.5 HSAD Electives	6.0 Humanities/Social Science Elective	3.0	
Free Elective	3.0 Humanities/Social Science Elective	4.0		
HSAD Elective	3.0			
Humanities/Social Science Elective	3.0			
	16-16.5	16	12	

Total Credits 180-184.5

* Students may select from Biology (BIO 100-499), Chemistry (CHEM 100-499) or HSCI 101, HSCI 102, or HSCI 103 courses. However, any course selected must include a laboratory component. Additional natural science subject options may be considered with the approval of the student's advisor.

** Students may be registered in a later term based on their co-op program (4-year or 5-year) and cycle. Select students may be eligible to replace COOP 101 with COOP 001.

*** 5COP HSAD students must take the following HSAD Core Courses in the online (ONL) format - HSAD 345, HSAD 340, and HSAD 335 [WI] due to three consecutive Spring/Summer Coop cycles.

† COM 230 may be used as a substitution for CS 150.

HSAD 331 [WI] , HSAD 332 [WI] , HSAD 335 [WI] and ORGB 300 [WI] are Writing Intensive courses that fulfill the Writing Intensive course requirement. Students should avoid combining these courses in one term.

Part-time

First Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
ACCT 110	4.0 ENGL 102 or 112	3.0 ENGL 103 or 113	3.0 HSAD Electives	3.0
ENGL 101 or 111	3.0 MATH 101 or 171	3.0-4.0 HSAD Elective	3.0 HSAD 210	3.0
	7	6-7	6	6
Second Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
SOC 101	3.0 PSCI 110	4.0 MATH 102 or 172	4.0 Free Electives	6.0
Natural Science Course with Laboratory*	4.0-5.0 Natural Science course with Laboratory*	4.0-5.0 HSAD 310	3.0	
	7-8	8-9	7	6
Third Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
CS 150**	3.0 ECON 201, 202, or 240	4.0 HSAD 335***	3.0 HSAD Elective	3.0
HSAD 322	3.0 HSAD 321	3.0 HSAD 345	3.0 Free Elective	3.0
	6	7	6	6

Fourth Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
HSAD 334	3.0 ORGB 300	4.0 HSAD 340	3.0 Free Electives	6.0
HSAD 330	3.0 Humanities/Social Science Elective	3.0 HSAD Elective	3.0	
	6	7	6	6
Fifth Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
HSAD 332***	3.0 HSAD Electives	6.0 Humanities/Social Science Elective	4.0 Free Electives	6.0
Humanities/Social Science Elective	3.0	FREE ELECTIVE	3.0	
	6	6	7	6
Sixth Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
HSAD 331***	3.0 HSAD Elective	6.0 HSAD Elective	3.0 Humanities/Social Science Elective	3.0
HSCI 345 or STAT 201	4.0-4.5	Humanities/Social Science Electives	3.0 Free Electives	6.0
	7-7.5	6	6	9
Seventh Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
Free Electives	6.0 Humanities/Social Science Electives	6.0 Free Electives	6.0 Humanities/Social Science Electives	6.0
	6	6	6	6

Total Credits 180-183.5

* Students may select from Biology (BIO 100-499), Chemistry (CHEM 100-499) or HSCI 101, HSCI 102, or HSCI 103 courses. However, any course selected must include a laboratory component. Additional natural science subject options may be considered with the approval of the student's advisor.

** COM 230 may be used as a substitution for CS 150.

*** HSAD 331 [WI] , HSAD 332 [WI] , HSAD 335 [WI] , and ORGB 300 [WI] are Writing Intensive courses that fulfil the Writing Intensive Course requirement. Students should avoid combining these courses in one term.

Health Services Administration Faculty

Jesse Ballenger, PhD (*Case Western Reserve University*). Professor. Healthcare, medicine and ethics; aging and neurodegenerative diseases; Science and Technology Studies.

Fred DiCostanzo, EdD, RN (*Rutgers University*). Assistant Professor. Organizational leadership, Healthcare Management, Human resources and team effectiveness

Stephen F. Gambescia, PhD, MEd, MBA, Hum, MLS, MCHES (*Temple University*). Clinical Professor. Health care policy, nonprofits and health care, and health care management and leadership.

Kevin Mitchell, PhD, MBA (*Walden University*). Assistant Teaching Professor. Health Services Administration; continuous quality improvement, strategic health care management. Research interests include health disparities in vulnerable population, evidenced based medicine and clinical pharmacology and therapeutics.

Kristine A. Mulhorn, PhD, MHSA, FGSA (*University of Delaware*) Chair, Department of Health Administration. Professor. Disability and aging; long-term care and post-acute care administration, cross-national interventions for health aging

Sharrona Pearl, PhD (*Harvard University*). Associate Professor. Medical ethics; science studies; history of science and medicine; critical race, gender, and disability studies; media studies.

Constance Karin Perry, PhD, EMT (*University of Buffalo*). Associate Teaching Professor. Biomedical ethics and ethical theory. Research interests include autonomy, personhood, feminist ethics, the ethics of animal experimentation, and ethical issues in reproduction and pregnancy.

Gina Yacovelli, MAT, CCS, CCS-P, CPC, CPMA, CEMC, CPB (*University of The Arts*). Instructor. Medical Billing and Coding. Coding and compliance specialist; medical record auditor; Evaluation and Management content expert; and Neurosurgery coding.

Hospitality Management

Major: Hospitality Management

Degree Awarded: Bachelor of Science in Hospitality Management (BSHM)

Calendar Type: Quarter

Minimum Required Credits:183.0

Co-op Options: No Co-op (Four years), One Co-op (Four years); Three Co-op (Five years)

Classification of Instructional Programs (CIP) code: 52.0901

Standard Occupational Classification (SOC) code: 11-9051; 11-9081

About the Program

The Hospitality Management major at Drexel University prepares students for leadership positions in the lodging, food service, and tourism and gaming industries. It also provides the necessary foundation for graduate school.

The Hospitality Management program recognizes the critical importance of an interdisciplinary education with a global perspective for tomorrow's leaders and managers. Committed to building student knowledge across functional areas and contributing disciplines, the program allows for increased specialization with elective coursework in the following areas:

- Food and Beverage Management
- Gaming and Resort Management
- Travel and Tourism
- Hotel Administration
- Meeting and Event Planning

Home to one of the top hospitality programs in the region, Drexel prides itself on its reputation for progressive, high-quality education. The thriving metropolis of Philadelphia serves as the learning lab for these unique programs. As the sixth largest city in the United States, Philadelphia is in the midst of a restaurant renaissance featuring world-class cuisine and entertainment. Student-focused faculty members are recognized for their professional affiliations, research, published work, and above all, teaching.

Students also receive a Business Administration minor and have 24.0 credits of free elective to pursue a second minor option.

Additional Information

For more information, visit the Hospitality Management program's (<https://drexel.edu/fhm/academics/Hospitality-and-Tourism/>) website.

Program Delivery Options

Drexel's BS in Hospitality Management degree includes courses in the liberal arts, the humanities, language, sciences, hospitality management and culinary arts. A business administration minor is also included. The BS degree can be completed on a full-time or part-time basis:

Five-year option with three co-op experiences:

This option allows students to pursue a variety of professional experiences in the industry including the option to co-op abroad.

Full-time status evening option without co-op experience:

To be eligible, students should have a minimum of two years full-time work experience related to students' majors, and a minimum of one year of college level work. Full-time students are eligible for full-time financial aid packages.

Part-time option without co-op experience:

Students work closely with academic advisors to develop a customized plan of study toward degree completion.

American University in Rome:

Every three years, the Drexel hospitality management faculty participate in a study and teach abroad experience. Students are invited to spend the fall semester abroad in Rome, Italy and earn 18.0 credits. Students take two Hospitality related courses taught by a Drexel professor and two additional courses at AUR of their choosing. All course instruction is in English, but a term of ITAL 101 *Italian I* is a pre-requisite for the experience. More information can be found on the Study Abroad website.

London option:

Students are invited to spend a term in their sophomore, junior, or senior year in the Study Abroad Program (<http://www.drexel.edu/studyabroad/>), Drexel in London, while earning up to 18.0 credits. The program's emphasis is on the global implications of and opportunities within the hospitality industry.

Degree Requirements

General Education Requirements

CIVC 101	Introduction to Civic Engagement	1.0
COM 181	Public Relations Principles and Theory	3.0
COM 230	Techniques of Speaking	3.0
COM 270 [WI]	Business Communication	3.0
COOP 101	Career Management and Professional Development	1.0
ENGL 101	Composition and Rhetoric I: Inquiry and Exploratory Research	3.0
or ENGL 111	English Composition I	
ENGL 102	Composition and Rhetoric II: Advanced Research and Evidence-Based Writing	3.0
or ENGL 112	English Composition II	
ENGL 103	Composition and Rhetoric III: Themes and Genres	3.0
or ENGL 113	English Composition III	
INFO 101	Introduction to Computing and Security Technology	3.0
MATH 107	Probability and Statistics for Liberal Arts	3.0
MATH 171	Introduction to Analysis A	3.0
MATH 172	Introduction to Analysis B	3.0
NFS 101	Introduction to Nutrition & Food	1.0
NFS 100	Nutrition, Foods, and Health	2.0
UNIV SH101	The Drexel Experience	1.0

Arts and Humanities Electives * **15.0**

Social Science Electives ** **9.0**

Hospitality Major Requirements

CULA 115	Culinary Fundamentals	3.0
FDSC 100	ServSafe	1.0
HRM 110	Introduction to the Hospitality Industry	3.0
HRM 120	Principles of Food-Service Management	3.0
HRM 125	Hotel Operations Management	3.0
HRM 130	Introduction to Tourism	3.0
HRM 131	Tourism Geography	3.0
HRM 150	Food & Beverage Customer Service	3.0
HRM 155	Hotel Customer Service	3.0
HRM 160	Laws of the Hospitality Industry	3.0
HRM 165	Introduction to the Events Industry	3.0
HRM 215	Commercial Food Production	4.0
HRM 220	Purchasing and Cost Controls for the Hospitality Industry	3.0
HRM 330	Hospitality Marketing and Branding	3.0
HRM 335	Beverage Management	3.0
HRM 355	Resort Management	3.0
HRM 415	Fine Dining and Services	4.0
HRM 425	Hospitality Industry Administration	3.0
HRM 450	Hospitality Leadership Seminar	3.0
HRM 455	Hospitality Human Resources Management	3.0

Industry Hours Requirements

HRM 190	Industry Hours I	1.0
HRM 290	Industry Hours II	1.0
HRM 390	Industry Hours III	1.0

Program Electives *** **12.0**

Business Administration Minor Requirement

ACCT 110	Accounting for Professionals	4.0
ECON 201	Principles of Microeconomics	4.0
MIS 200	Management Information Systems	4.0
MKTG 201	Introduction to Marketing Management	4.0
ORGB 300 [WI]	Organizational Behavior	4.0

Complete one of the following courses to complete the BA minor:

BLAW 201	Business Law I	4.0
or ECON 202	Principles of Macroeconomics	
or OPM 200	Operations Management	
or STAT 201	Introduction to Business Statistics	

Free Electives	24.0
Total Credits	183.0

- * Three language courses are required from: ARBC, CHIN, FREN, GER, GREC, ITAL, JAPN, KOR, RUSS, or SPAN and then one additional arts & humanities course from any of the above as well as ENGL, GST, HIST, HUM, JWST, LANG, LING, PHIL, WGST, or WRIT areas.
- ** Students may choose from ANTH, CJS, PSCI, PSY, and SOC courses.
- *** Choose additional Hospitality courses or courses from CULA or SMT.

Writing-Intensive Course Requirements

In order to graduate, all students must pass three writing-intensive courses after their freshman year. Two writing-intensive courses must be in a student's major. The third can be in any discipline. Students are advised to take one writing-intensive class each year, beginning with the sophomore year, and to avoid "clustering" these courses near the end of their matriculation. Transfer students need to meet with an academic advisor to review the number of writing-intensive courses required to graduate.

A "WI" next to a course in this catalog may indicate that this course can fulfill a writing-intensive requirement. For the most up-to-date list of writing-intensive courses being offered, students should check the Writing Intensive Course List (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/writing-intensive-courses/>) at the University Writing Program (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/>). (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/drexel-writing-center/>) Students scheduling their courses can also conduct a search for courses with the attribute "WI" to bring up a list of all writing-intensive courses available that term.

Sample Plan of Study

4 year, no co-op

First Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
ENGL 101 or 111	3.0 CULA 115	3.0 CIVC 101	1.0 VACATION	
FDSC 100	1.0 ENGL 102 or 112	3.0 ENGL 103 or 113	3.0	
HRM 110	3.0 HRM 131	3.0 HRM 125	3.0	
HRM 130	3.0 HRM 150	3.0 MATH 107	3.0	
MATH 171	3.0 HRM 190	1.0 Arts & Humanities elective	4.0	
UNIV SH101	1.0 MATH 172	3.0		
	14	16	14	0

Second Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
ACCT 110	4.0 HRM 155	3.0 COM 230	3.0 VACATION	
HRM 120	3.0 HRM 160	3.0 ECON 201	4.0	
NFS 100	2.0 HRM 165	3.0 MIS 200	4.0	
NFS 101	1.0 HRM 215	4.0 Free elective	3.0	
Arts & Humanities course	4.0 HRM 290	1.0 Program elective	3.0	
Free elective	3.0 Arts & Humanities course	4.0		
	17	18	17	0

Third Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
COM 270	3.0 COM 181	3.0 INFO 101	3.0 VACATION	
HRM 220	3.0 HRM 330	3.0 MKTG 201	4.0	
ORGB 300	4.0 HRM 390	1.0 Free elective	3.0	
Free elective	3.0 Free elective	3.0 Program elective	3.0	
Social Science elective	3.0 Program elective	3.0 Social Science elective	3.0	
	16	13	16	0

Fourth Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
HRM 355	3.0 HRM 335	3.0 HRM 415	4.0 VACATION	
HRM 450	3, HRM 425	3.0 HRM 455	3.0	
Free elective	3.0 Arts & Humanities course	3.0 Free elective	4.0	
Program elective	3.0 Business course	4.0 Social Science elective	3.0	

	Free elective	3.0		
	12-9	16	14	0

Total Credits 183-180

4 year, 1 co-op

First Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
ENGL 101 or 111	3.0 CULA 115	3.0 CIVC 101	1.0 VACATION	
FDSC 100	1.0 ENGL 102 or 112	3.0 COOP 101*	1.0	
HRM 110	3.0 HRM 131	3.0 ENGL 103 or 113	3.0	
HRM 130	3.0 HRM 150	3.0 HRM 125	3.0	
MATH 171	3.0 HRM 190	1.0 MATH 107	3.0	
UNIV SH101	1.0 MATH 172	3.0 Arts & Humanities Elective	4.0	
	14	16	15	0

Second Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
ACCT 110	4.0 HRM 155	3.0 COM 230	3.0 INFO 101	3.0
HRM 120	3.0 HRM 160	3.0 ECON 201	4.0 MKTG 201	4.0
NFS 100	2.0 HRM 165	3.0 MIS 200	4.0 Program elective	3.0
NFS 101	1.0 HRM 215	4.0 Program elective	3.0 Social Science elective	3.0
Arts & Humanities Elective	4.0 HRM 290	1.0 Free elective	3.0 Free elective	3.0
Free elective	3.0 Arts & Humanities Elective	4.0		
	17	18	17	16

Third Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
COM 270	3.0 COM 181	3.0 COOP EXPERIENCE	COOP EXPERIENCE	
HRM 220	3.0 HRM 330	3.0		
ORGB 300	4.0 HRM 390	1.0		
Social Science elective	3.0 Program elective	3.0		
Free elective	3.0 Free elective	3.0		
	16	13	0	0

Fourth Year

Fall	Credits Winter	Credits Spring	Credits
HRM 355	3.0 HRM 335	3.0 HRM 415	4.0
HRM 450	3.0 HRM 425	3.0 HRM 455	3.0
Free elective	3.0 Arts & Humanities elective	3.0 Social Science elective	3.0
Program elective	3.0 Business elective	4.0 Free elective	3.0
	Free elective	3.0	
	12	16	13

Total Credits 183

* Students may be registered in a later term based on their co-op program (4-year or 5-year) and cycle. Select students may be eligible to replace COOP 101 with COOP 001.

5 year, 3 co-op

First Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
ENGL 101 or 111	3.0 CULA 115	3.0 CIVC 101	1.0 VACATION	
FDSC 100	1.0 ENGL 102 or 112	3.0 COOP 101	1.0	
HRM 110	3.0 HRM 131	3.0 ENGL 103 or 113	3.0	
HRM 130	3.0 HRM 150	3.0 HRM 125	3.0	
MATH 171	3.0 HRM 190	1.0 MATH 107	3.0	
UNIV SH101	1.0 MATH 172	3.0 Arts & Humanities Elective	4.0	
	14	16	15	0

Second Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
ACCT 110	4.0 HRM 155	3.0 COOP EXPERIENCE [±]	COOP EXPERIENCE [±]	
HRM 120	3.0 HRM 160	3.0		
NFS 100	2.0 HRM 165	3.0		
NFS 101	1.0 HRM 215	4.0		
Arts & Humanities Elective	4.0 HRM 290	1.0		
Free Elective	3.0 Arts & Humanities Elective	4.0		
	17	18	0	0

Third Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
COM 230	3.0 INFO 101	3.0 COOP EXPERIENCE [±]	COOP EXPERIENCE [±]	
ECON 201	4.0 MKTG 201	4.0		
MIS 200	4.0 Program Elective	3.0		
Program Elective	3.0 Social Science Elective	3.0		
Free Elective	3.0 Free Elective	3.0		
	17	16	0	0

Fourth Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
COM 270	3.0 COM 181	3.0 COOP EXPERIENCE [±]	COOP EXPERIENCE [±]	
HRM 220	3.0 HRM 330	3.0		
ORGB 300	4.0 HRM 390	1.0		
Social Science Elective	3.0 Program Elective	3.0		
Free Elective	3.0 Free Elective	3.0		
	16	13	0	0

Fifth Year

Fall	Credits Winter	Credits Spring	Credits
HRM 355	3.0 HRM 335	3.0 HRM 415	4.0
HRM 450	3.0 HRM 425	3.0 HRM 455	3.0
Free Elective	3.0 Arts & Humanities Elective	3.0 Social Science Elective	3.0
Program Elective	3.0 Business Elective	4.0 Free Elective	3.0
	Free Elective	3.0	
	12	16	13

Total Credits 183

± Students may be registered in a later term based on their co-op program (4-year or 5-year) and cycle. Select students may be eligible to replace COOP 101 with COOP 001.

Facilities

The major facility of the Hospitality Management, Culinary Arts and Food Science programs is located on the sixth floor of the Academic Building. It is a 6,500-square-foot space that includes three state-of-the-art commercial kitchens, bakery and laboratories, as well as the Academic Bistro (<http://www.drexel.edu/hsm/about/academic-bistro/>), the student-run restaurant, bar and lounge. The facility also includes a sensory analysis lab, hospitality and gaming lab, conference room, and the Les Dames d'Escoffier Library.

Philadelphia Location

A unique feature of the Hospitality Management program at Drexel is that it is located in Philadelphia, with close proximity to New York City, Baltimore, and Washington, as well as the resort centers on the Atlantic seacoast and in the Pocono Mountains. These regions include hundreds of hotels, restaurants, resorts, and casinos that are used for field trips and campus visits by hospitality resource professionals. Students also gain hands-on experience through faculty-directed field trips throughout the region.

Hospitality Management Faculty

Michael Traud, EdD (*Villanova University*) Program Director, *Hospitality and Tourism Management*. Associate Clinical Professor. Implementation of Korean Cuisine in the United States; hospitality law; Italian cuisine.

Nursing

Major: Nursing

Degree Awarded: Bachelor of Science Degree in Nursing (BSN)

Calendar Type: Quarter

Minimum Required Credits: 181.0

Co-op Options: Three Co-op (Five years); One Co-op (Four years or three-year transfer option); No Co-op (Two-year transfer student option only)

Classification of Instructional Programs (CIP) code: 51.3801

Standard Occupational Classification (SOC) code: 29-1141

About the Program

The BS in Nursing (BSN) is a full-time, four-year option with one, six-month co-op experience in the third year of study. There is also a five-year program which offers three, six-month co-op experiences. For eligible transfer students, we offer a one coop option with a three-year progression and a no co-op option which allows students to complete the nursing coursework in two full academic years. Students graduate with a Bachelor of Science in Nursing and are eligible to sit for the RN licensure examination.

The BS in Nursing degree is approved by the Pennsylvania State Board of Nursing and the American Association of Colleges of Nursing.

Drexel's nursing curriculum is built to respond to the rapidly changing healthcare system, as well as to students' needs. The graduate of the Bachelor of Science in Nursing Program of Drexel University is prepared to:

- Apply concepts from liberal arts to nursing practice.
- Demonstrate leadership behaviors that enhance patient safety and quality care.
- Apply research-based evidence to nursing practice.
- Integrate technology to support clinical decision making in patient-centered care.
- Examine healthcare policy and financial/regulatory environments that influence the delivery of healthcare.
- Foster caring and collaborative relationships with self, patient, and the healthcare community that provide positive outcomes.
- Practice culturally congruent care that addresses health promotion and disease prevention.
- Assimilate ethical principles and professional standards into practice using evidence-based clinical judgment.
- Apply age-specific knowledge to provide safe, competent care across the lifespan.
- Pursue lifelong learning as a means to enhance practice.

A BSN is awarded at the completion of the program.

Additional Information

For more information about the BSN with co-op option at Drexel, visit the Nursing Co-Op Program (<https://drexel.edu/cnhp/academics/undergraduate/bsn-nursing-co-op/>) page.

Degree Requirements

Students should contact their academic advisor for any changes to their plans of study prior to registration due to ongoing curriculum updates.

General requirements

CIVC 101	Introduction to Civic Engagement	1.0
COOP 101	Career Management and Professional Development *	1.0
UNIV NH101	The Drexel Experience	1.0

English Sequence

ENGL 101	Composition and Rhetoric I: Inquiry and Exploratory Research	3.0
or ENGL 111	English Composition I	
ENGL 102	Composition and Rhetoric II: Advanced Research and Evidence-Based Writing	3.0
or ENGL 112	English Composition II	
ENGL 103	Composition and Rhetoric III: Themes and Genres	3.0
or ENGL 113	English Composition III	

Biology/Nutrition courses

BIO 226	Microbiology for Health Professionals	5.0
NFS 220	Normal & Lifespan Nutrition	4.0
NFS 315	Nutrition in Chronic Disease	4.0

Chemistry courses

CHEM 103	General Chemistry III	4.5
CHEM 108	Health Chemistry I	3.0

Humanities and Social Science courses

ECON 240	Economics of Health Care Systems	4.0
HSAD 210	Health-Care Ethics I	3.0

PSY 101	General Psychology I	3.0
PSY 120	Developmental Psychology	3.0
SOC 101	Introduction to Sociology	3.0
Language Requirement **		4.0
Mathematics/Data Analysis courses		
HSCI 345	Statistics for Health Sciences	4.5
MATH 101	Introduction to Analysis I ***	4.0
Anatomy courses		
HSCI 101	Anatomy and Physiology I	5.0
HSCI 102	Anatomy and Physiology II	5.0
HSCI 103	Anatomy and Physiology III	5.0
Nursing courses		
NURS 120	Contemporary Health Care	3.0
NURS 221	Concepts of Pathophysiology in Nursing	3.0
NURS 225	Health Assessment for Nursing Practice	5.0
NURS 226	Fundamentals of Nursing Practice	6.0
NURS 317 [WI]	Genetics for Healthcare Professionals	3.0
NURS 320	Health and Illness Concepts I	6.0
NURS 321	Health and Illness Concepts II	6.0
NURS 322	Concepts of Mental Health Nursing	6.0
NURS 323	Nursing Pharmacology Concepts I	3.0
NURS 326	Reproductive Health Across the Lifespan	6.0
NURS 327	Population Health Concepts	6.0
NURS 328	Pediatric Health Concepts	6.0
NURS 329	Nursing Pharmacology Concepts II	3.0
NURS 420	Health and Illness Concepts III	6.0
NURS 421	Holistic Gerontological Nursing	6.0
NURS 422	Leadership Concepts in Nursing	3.0
NURS 423 [WI]	Research Basis of Nursing Practice	4.0
NURS 495	Comprehensive Nursing Concepts	3.0
Electives		
Humanities electives		3.0
Social Science electives		3.0
Nursing electives		9.0
Free electives		6.0
Total Credits		181.0

* Students not participating in co-op will not take COOP 101; 1 credit of Free Elective will be added in place of COOP 101.

** Students must take one approved language course, as determined by student's Academic Advisor

*** Or other mathematics equivalent by placement exam.

Writing-Intensive Course Requirements

In order to graduate, all students must pass three writing-intensive courses after their freshman year. Two writing-intensive courses must be in a student's major. The third can be in any discipline. Students are advised to take one writing-intensive class each year, beginning with the sophomore year, and to avoid "clustering" these courses near the end of their matriculation. Transfer students need to meet with an academic advisor to review the number of writing-intensive courses required to graduate.

A "WI" next to a course in this catalog may indicate that this course can fulfill a writing-intensive requirement. For the most up-to-date list of writing-intensive courses being offered, students should check the Writing Intensive Course List (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/writing-intensive-courses/>) at the University Writing Program (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/>). (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/drexel-writing-center/>) Students scheduling their courses can also conduct a search for courses with the attribute "WI" to bring up a list of all writing-intensive courses available that term.

Sample Plans of Study

Students should contact their academic advisor for any changes to their plans of study prior to registration due to ongoing curriculum updates.

4-year, 1 Co-op

First Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
ENGL 101 or 111	3.0 ENGL 102 or 112	3.0 BIO 226	5.0 VACATION	
HSCI 101	5.0 HSCI 102	5.0 CIVC 101	1.0	
MATH 101	4.0 PSY 101	3.0 ENGL 103 or 113	3.0	
NURS 120	3.0 SOC 101	3.0 HSCI 103	5.0	
UNIV NH101	1.0 Language Requirement	4.0 Humanities Elective	3.0	
	16	18	17	0

Second Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
CHEM 108	3.0 CHEM 103	4.5 COOP 101*	1.0 NFS 220	4.0
ECON 240	4.0 NURS 225	5.0 NURS 317	3.0 NURS 321	6.0
NURS 221	3.0 NURS 226	6.0 NURS 320	6.0 NURS 329	3.0
Social Science Elective	3.0	NURS 323	3.0	
		PSY 120	3.0	
	13	15.5	16	13

Third Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
HSAD 210	3.0 NFS 315	4.0 COOP EXPERIENCE	COOP EXPERIENCE	
HSCI 345	4.5 NURS 328	6.0		
NURS 322	6.0 NURS 423	4.0		
Free Elective	3.0 Free Elective	3.0		
	16.5	17	0	0

Fourth Year

Fall	Credits Winter	Credits Spring	Credits
NURS 327	6.0 NURS 326	6.0 NURS 421	6.0
NURS 420	6.0 Nursing Elective	6.0 NURS 495	3.0
NURS 422	3.0	Nursing Elective	3.0
	15	12	12

Total Credits 181

* Co-op cycles may vary. Students are assigned a co-op cycle (fall/winter, spring/summer, summer-only) based on their co-op program (4-year, 5-year) and major. COOP 101 registration is determined by the co-op cycle assigned and may be scheduled in a different term. Select students may be eligible to take COOP 001 in place of COOP 101.

5-year, 3 Co-ops

First Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
ENGL 101 or 111	3.0 ENGL 102 or 112	3.0 BIO 226	5.0 VACATION	
HSCI 101	5.0 HSCI 102	5.0 CIVC 101	1.0	
MATH 101	4.0 PSY 101	3.0 COOP 101*	1.0	
NURS 120	3.0 SOC 101	3.0 ENGL 103 or 113	3.0	
UNIV NH101	1.0 Language Requirement	4.0 HSCI 103	5.0	
		Humanities Elective	3.0	
	16	18	18	0

Second Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
CHEM 108	3.0 CHEM 103	4.5 COOP EXPERIENCE	COOP EXPERIENCE	
ECON 240	4.0 NURS 225	5.0		
NURS 221	3.0 NURS 226	6.0		
Social Science elective	3.0			
	13	15.5	0	0

Third Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
NURS 317	3.0 NFS 220	4.0 COOP EXPERIENCE	COOP EXPERIENCE	
NURS 320	6.0 NURS 321	6.0		
NURS 323	3.0 NURS 329	3.0		
PSY 120	3.0			
	15	13	0	0

Fourth Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
HSAD 210	3.0 NFS 315	4.0 COOP EXPERIENCE	COOP EXPERIENCE	
HSCI 345	4.5 NURS 328	6.0		
NURS 322	6.0 NURS 423	4.0		
Free Elective	3.0 Free Elective	3.0		
	16.5	17	0	0

Fifth Year

Fall	Credits Winter	Credits Spring	Credits
NURS 327	6.0 NURS 326	6.0 NURS 421	6.0
NURS 420	6.0 Nursing electives	6.0 NURS 495	3.0
NURS 422	3.0	Nursing Elective	3.0
	15	12	12

Total Credits 181

* Co-op cycles may vary. Students are assigned a co-op cycle (fall/winter, spring/summer, summer-only) based on their co-op program (4-year, 5-year) and major. COOP 101 registration is determined by the co-op cycle assigned and may be scheduled in a different term. Select students may be eligible to take COOP 001 in place of COOP 101.

About the Co-op

Cooperative education was designed to provide students with real-world experience in a variety of professional settings before graduation. Co-op integrates full-time work experience in the student's field of study throughout the academic program. The College of Nursing and Health Professions co-op program is one of only two of its kind in the nation.

The nursing co-op provides students with 18 months of cooperative education in addition to the traditional clinical educational experiences.

Through co-op, students will have the opportunity to learn the role of the nurse and unlicensed assistive personnel, as well as other daily professional, political, and social issues in a work environment. Both before and during co-op, students will receive instruction on career management and professional development skills, such as résumé writing, job searches, interviewing skills, maintaining a career portfolio, negotiating salary, and professional behavior in the workplace. The clinical background students gain from co-op, coupled with a knowledge of career management, makes the Drexel option a value-added model of nursing education.

Co-op Descriptions

First Experience

Co-op I: Nursing in Contemporary Health Networks

Students will have cooperative education experiences in managed care settings, pharmaceutical companies, and other non-traditional healthcare work environments where nurses and nursing can effect change. Students will either work under the direction of a professional nurse or another healthcare professional with a minimum of a baccalaureate degree. Students will not perform any basic nursing skills in this role.

Second Experience

Co-op II: Acute and Chronic Health and Illness

Students on the four-year track participate in Co-op II, an education experience in the traditional healthcare environment that emphasizes the delivery of nursing care to adults and adolescents with acute and chronic illnesses. The majority of placements will be in general and specialty medical-surgical units. Students will function in the role as an unlicensed assistive person and their job description will be modeled similarly to the role of unlicensed assistive personnel or nursing externs.

Third Experience

Co-op III: Specialty Nursing Concentration

Students will have cooperative education experiences in a specialty area of their choice which will build upon their previous clinical courses and work experiences. For example, students may elect to specialize in labor and delivery, critical care, or return to work for a pharmaceutical or managed care company. Selection of content area for the Co-op III site will be made by each student in consultation with the student's faculty advisor. Students will be given a suggested reading list and texts to be used for supplemental reading and learning for the specialty co-op area. Students will function in the role as an unlicensed assistive person and their job description will be modeled similarly to the role of unlicensed assistive personnel or nursing externs.

Clinical Affiliations

Clinical Placement Sites

The Undergraduate Nursing Programs have an extensive network of clinical placement sites, including:

11th Street Family Health Services
Abington Memorial Hospital

Albert Einstein Medical Center
ARC
Althea Wright House
Belmont Center
Bryn Mawr Hospital
Paoli Hospital
Casa Farnese
Catholic Social Services
Center for Urban Development
Cooper University Hospital
Chandler Hall
Chestnut Hill Hospital
CHOP (Children's Hospital of Philadelphia)
Christiana Care (Wilmington Hospital)
Chester County Hospital
Crozer-Chester Medical Center
Delaware County Memorial Hospital
Devereaux Children's Behavioral Health Center
Doylestown Hospital
Fairmount Behavioral Health
Fox Chase Cancer Center
Foulkeways at Gwynedd
Friends Hospital
Gladys B Jacobs
Good Shepherd Penn Partners
Gray Manor
Harrison Community Center
Holy Redeemer Hospital and Medical Center
Hospital of the University of Pennsylvania
Inspira Medical Center
Jefferson Bucks, Jefferson Torresdale
Jefferson Stratford Hospital
Kirkbride Center
Landsdale Hospital (Abington Health)
Lankenau Hospital
Lourdes Medical Center
Masonic Homes
Mercy Hospital
Methodist Hospital
Moss Rehab - AEMC
Nazareth Hospital
Norris Suarez
North East Treatment Centers
Our Brother's Place
Our Lady of Lourdes
Paul's Run
Pediatrics
Pennsylvania Hospital
Philadelphia School District
Presbyterian Medical Center
Rejuvenations at Fair Acres
Riddle Memorial Hospital
School District of Philadelphia
St. Christopher's Hospital for Children
St. John's Hospice
St. Joseph's Manor
St. Joseph's Villa
St. Mark's
St. Mary's Medical Center
S.H.A.R.E.
Shriners Hospital for Children
SPIN, Inc.

Spring Hospital
 Sunday Breakfast
 Taylor Hospital
 Temple University Hospital
 Temple Children's Hospital
 Thomas Jefferson University Hospital
 United Methodist Communities
 Village of Arts and Humanities
 Virtua Health (Voorhees, Marlton, Memorial)
 Watermark
 West Popular Community Center
 Willowcrest
 Yorktown Manor
 YMCA

Nursing Faculty

Suzan Blacher, PhD, RN, CARN (*Drexel University*) *RN-BSN Program*. Assistant Clinical Professor. Care of the patient with substance use disorders; stigmatization of addictions.

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Nursing (BSN) - Accelerated Career Entry (ACE)

Major: Nursing

Degree Awarded: Bachelor of Science Degree in Nursing (BSN)

Calendar Type: Quarter

Minimum Required Credits: 218.0

Co-op Options: None

Classification of Instructional Programs (CIP) code: 51.3801

Standard Occupational Classification (SOC) code: 29-1141

About the Program

Drexel University offers the Accelerated Career Entry Option (<https://www.drexel.edu/cnhp/academics/undergraduate/Accelerated-Career-Entry-to-Nursing-Program/>), a one-year intensive nursing program for students who already have bachelor's or graduate degrees. The program is ideal for working adults or college graduates who want to change careers and earn a new degree in one year. This innovative program is geared to students who will benefit from intense education in nursing science rather than the traditional program, which takes three or four years.

Like their counterparts in the traditional baccalaureate nursing program, graduates of the accelerated program emerge with a set of skills that will serve them well in their chosen profession. Our graduates:

- Utilize the growing compendium of knowledge and information sources from nursing and other disciplines to learn, teach, heal the sick, and conserve health.
- Contribute to the profession by sharing knowledge and skills with clients, peers, and other professionals in a variety of methods.
- Utilize multiple technologies that access and manage information to guide professional practice.
- Participate in culturally sensitive health promotion activities that contribute to the community's health and wellness.
- Participate in ongoing educational activities related to personal growth, professional practice, and community service.
- Apply knowledge and skills appropriate to their selected areas of career clinical practice.
- Develop personal potential for leadership in a changing health care environment.
- Integrate ethical concepts and principles, The Code of Ethics for Nurses, and professional standards into practice within professional, academic, and community settings.
- Utilize critical-thinking skills to improve the health outcomes of patients, families, and communities across the continuum of care.

Admission Requirements/Prerequisites

Candidates for admission must be college graduates with a 3.0 overall GPA or a 3.0 GPA in their most recent 60.0 semester hours of coursework completed. Admitted students must complete all prerequisites before continuing with the program. Applicants whose native language is not English and/

or were born outside of the United States are required to take both the TOEFL (Test of English as a Foreign Language) and the TSE (Test of Spoken English) and achieve a passing score in each.

Degree Requirements

Prerequisites

The following 8 courses, in semester terms, are prerequisites for the ACE program:

Degree Requirements

Students should contact their academic advisor for any changes to their plans of study prior to registration due to ongoing curriculum updates.

Prerequisites:

General Chemistry I with Lab	4.0
Developmental Psychology	3.0
Anatomy with lab *	4.0
Physiology with lab *	4.0
Microbiology with lab *	4.0
Human Nutrition	3.0
Statistics	3.0
English Composition	3.0

* The anatomy, physiology, and microbiology courses must have been taken within five years of beginning the program.

* Drexel University requires 180.0 quarter credits for conferral of a Bachelor's degree. Students will transfer in 134.0 quarter credits, 96.0 quarter credits from their previous Bachelor Degree and 38.0 quarter credits from their pre-requisites totaling 134.0 quarter credits. Upon completion of the NACE program they will receive an additional 84.0 quarter credits, bringing the total to 218.0 quarter credits.

NURS 120	Contemporary Health Care	3.0
NURS 221	Concepts of Pathophysiology in Nursing	3.0
NURS 320	Health and Illness Concepts I	6.0
NURS 225	Health Assessment for Nursing Practice	5.0
NURS 226	Fundamentals of Nursing Practice	6.0
NURS 317 [WI]	Genetics for Healthcare Professionals	3.0
NURS 321	Health and Illness Concepts II	6.0
NURS 322	Concepts of Mental Health Nursing	6.0
NURS 323	Nursing Pharmacology Concepts I	3.0
NURS 326	Reproductive Health Across the Lifespan	6.0
NURS 327	Population Health Concepts	6.0
NURS 328	Pediatric Health Concepts	6.0
NURS 329	Nursing Pharmacology Concepts II	3.0
NURS 420	Health and Illness Concepts III	6.0
NURS 421	Holistic Gerontological Nursing	6.0
NURS 422	Leadership Concepts in Nursing	3.0
NURS 423 [WI]	Research Basis of Nursing Practice	4.0
NURS 495	Comprehensive Nursing Concepts	3.0
Total Credits		84.0

Writing-Intensive Course Requirements

In order to graduate, all students must pass three writing-intensive courses after their freshman year. Two writing-intensive courses must be in a student's major. The third can be in any discipline. Students are advised to take one writing-intensive class each year, beginning with the sophomore year, and to avoid "clustering" these courses near the end of their matriculation. Transfer students need to meet with an academic advisor to review the number of writing-intensive courses required to graduate.

A "WI" next to a course in this catalog may indicate that this course can fulfill a writing-intensive requirement. For the most up-to-date list of writing-intensive courses being offered, students should check the Writing Intensive Course List (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/writing-intensive-courses/>) at the University Writing Program (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/>). (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/drexel-writing-center/>) Students scheduling their courses can also conduct a search for courses with the attribute "WI" to bring up a list of all writing-intensive courses available that term.

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Nursing: RN/BSN Completion Program

Major: Nursing

Degree Awarded: Bachelor of Science in Nursing (BSN)

Calendar Type: Quarter

Minimum Required Credits: 180.0 quarter credits (for Registered Nurses)

Co-op Options: None

Classification of Instructional Programs (CIP) code: 51.3801

Standard Occupational Classification (SOC) code: 29-1141

About the Program

The RN/BSN Completion program is an option for nurses from associate degree and diploma nursing programs looking to complete the bachelor of science degree in nursing.

The Bachelor of Science in Nursing program continues the education of registered nurses equipping them with the skills needed for complex healthcare environments. Core courses immerse the student in genetics, evidence based practice, systems thinking, leadership and care coordination. Interactive practice experiences are woven throughout the curriculum using innovative learning technologies (e.g. digital clinical learning environments [DCE], problem-based/video case studies, and global classrooms). Learning how to adopt evidence-based practice to both clinical and leadership roles prepare students to work in inter-professional teams, improve health care systems and patient outcomes.

A BSN is awarded at the completion of the program. Qualified students are encouraged to apply to an MSN program in their final quarter for seamless progression.

State restrictions (<https://online.drexel.edu/about/state-regulations.aspx>) *may apply*.

The RN to BSN program at Drexel University is accredited by the Commission on Collegiate Nursing Education (<https://www.aacnnursing.org/CCNE/>).

Additional Information

Additional information is also available on Drexel's College of Nursing and Health Professions RN-BSN Completion Program (<https://drexel.edu/cnhp/academics/undergraduate/RN-to-BSN-Completion-Program/>) webpage and on the Drexel University Online R (<http://online.drexel.edu/online-degrees/nursing-degrees/msn-clinical/>)N-BSN Completion Program (<https://www.online.drexel.edu/online-degrees/nursing-degrees/rn-bsn/>) webpage.

Admission Requirements/Prerequisites

Admission Requirements

- RN licensure (provisional acceptance will generally be offered pending successful completion of the NCLEX-RN examination)
- Official college transcripts
- College grade point average of 2.0 or better
- High school degree or equivalent

To be eligible for admission to the Bachelor of Science in nursing program, students must have completed 60.0 semester hours (90.0 quarter credits) of college prerequisites, as follows, with a grade of C or better. Students may transfer in up to 135.0 quarter credits. Remaining credits will be evaluated on an individual basis. To graduate, students must have completed 180.0 quarter credits.

The required 60.0 semester hours include:

English (includes one semester of composition)	6.0
Humanities (studio courses not acceptable)	3.0
Anatomy and Physiology	8.0

Microbiology	4.0
Sociology	3.0
Growth and Development	3.0
Psychology	3.0
Nursing	30.0
Total Credits	60.0

Students must be graduates of nursing programs that are both regionally accredited and accredited by the Accreditation Commission for Education for Nursing (ACEN) or the National League for Nursing Commission for Education Accreditation (CNEA). Students who meet the criteria of the Pennsylvania Nursing Articulation Model will receive credit for 30.0 semester hours (45.0 quarter credits) of nursing, which may be applied toward the program entrance requirements.

Degree Requirements

The College of Nursing and Health Professions faculty uses a variety of teaching and learning methods to facilitate the achievement of a student's personal objectives. All RN-BSN courses are offered online and incorporate a variety of innovative, interactive learning technologies. Courses are offered in both asynchronous and synchronous formats that allow the student flexibility in completing coursework over 10 week quarters.

Students should contact their academic advisor prior to registration.

TIER 1 COURSES

ENGL 101 or ENGL 111	Composition and Rhetoric I: Inquiry and Exploratory Research English Composition I	3.0
ENGL 102 or ENGL 112	Composition and Rhetoric II: Advanced Research and Evidence-Based Writing English Composition II	3.0
ENGL 103 or ENGL 113	Composition and Rhetoric III: Themes and Genres English Composition III	3.0

Or transfer in 2 English courses (3 semester credits from a semester school) must include one semester of composition)

Humanities Electives	3.0
Intro to Sociology	3.0
General Psychology	3.0
Developmental Psychology	3.0
Nursing Electives	45.0
Anatomy & Physiology I & II (w/ Labs)	10.0
Microbiology w/ Lab	5.0
Science Elective	3.0

TIER 2 COURSES

Intro to Computer Science of Communication	3.0
Statistics of the Health Sciences	4.0
Health Care Economics, Macro, or Micro	4.0
Health Care Ethics I or Advanced Health Care Ethics	3.0
Social Science Electives	3.0
Science Electives	6.0
Pharmacology or Advanced Physiology or Pathophysiology	5.0
Open Electives	23.0

TIER 3 COURSES

NURS 325 [WI]	Critical Issues in Nursing	4.5
NURS 330 [WI]	Nursing Research: Methods and Critical Appraisal for Evidence-Based Practice	4.5
NURS 335	Genetics and Genomics: Application to Nursing Practice	4.5
NURS 340	Transformational Leadership	4.5
NURS 346	Health Assessment	6.0
NURS 380	Complex Systems of Care: Technology, Patient Safety & Quality	6.0
NURS 407 [WI]	Issues in Aging and Longevity	4.5
NURS 460	Population Health: Local & Global	6.0
NURS 465	Senior Capstone in Nursing	4.5

Total Credits	180.0
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Writing-Intensive Course Requirements

In order to graduate, all students must pass three writing-intensive courses after their freshman year. Two writing-intensive courses must be in a student's major. The third can be in any discipline. Students are advised to take one writing-intensive class each year, beginning with the sophomore

year, and to avoid "clustering" these courses near the end of their matriculation. Transfer students need to meet with an academic advisor to review the number of writing-intensive courses required to graduate.

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Sample Plan of Study

The Accelerated RN-BSN program is designed to be completed in 4 terms. Enrollment in Tier III assumes the student has completed an ADN or Diploma program, has passed the NCLEX-RN, and has completed all required coursework in TIER I and TIER II.

TIER III

Term 1	Credits Term 2	Credits Term 3	Credits Term 4	Credits
NURS 325	4.5 NURS 330*	4.5 NURS 346	6.0 NURS 460	6.0
NURS 335	4.5 NURS 380	6.0 NURS 407	4.5 NURS 465	4.5
NURS 340	4.5			
	13.5	10.5	10.5	10.5
Total Credits 45				

* Statistics of Health Sciences is a prerequisite to NURS 330 [WI] Research Basis of Nursing.

Nutrition and Foods

Major: Nutrition and Foods

Degree Awarded: Bachelor of Science (BS)

Calendar Type: Quarter

Minimum Required Credits: 182.0

Co-op Options: One Co-op (Four years); No Co-op (Four years)

Classification of Instructional Programs (CIP) code: 30.1901

Standard Occupational Classification (SOC) code: 29-1031

About the Program

The Nutrition and Foods curriculum emphasizes the relationship between food, food choices, nutrient metabolism, and preventive and therapeutic nutrition to meet the health and nutrient needs of individuals and groups. The BS in Nutrition and Foods requires four years of study and the completion of at least 182.0 credits. The curriculum is designed to provide a sound basis for careers in many areas of food, nutrition, and dietetics including wellness and disease prevention, the food industry, foodservice, and clinical practice. The study of the biochemical nature of nutrients and foods, their interaction with the environment, and their eventual metabolic fate is a strong career path for more research-minded students or those going on to graduate school in the health professions.

Accreditation

The Department of Nutrition Sciences at Drexel University currently has two programs accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics: a Didactic Program in Dietetics (DPD) at both the bachelor's and the master's degree levels, and a Future Graduate (FG) Education Model program at the master's degree level. See "Paths to Becoming a Registered Dietitian" below for more information about the options for becoming a Registered Dietitian (RD)/Registered Dietitian Nutritionist (RDN).

To meet the changing requirements for entry to the profession of dietetics at the master's degree level, Drexel's bachelor's level DPD program will end in September 2023. Therefore, students entering the program in 2021 need to complete an FG program or a master's level DPD and dietetic internship before being eligible to sit for the registration exam. Drexel BS in Nutrition and Foods students who meet minimum GPA requirements are eligible to continue into the department's BS to MS Bridge program (<https://drexel.edu/cnhp/academics/undergraduate/BS-MS-Nutrition-and-Dietetics/>), earning both the BS and MS degrees and meeting eligibility to sit for the RDN exam in just five years. Applicants may apply into the Bridge when they complete their application for admission to the BS or may opt to enroll in the Bridge at the end of their second year in the BS. Alternatively, students may apply into the MS in Human Nutrition Plus Partner Dietetic Internship (<https://drexel.edu/cnhp/academics/graduate/MS-Human-Nutrition/>) during their final year in the BS. This program allows students to complete an MS in one year at Drexel, followed by a dietetic internship at a partner program.

Paths to Becoming a Registered Dietitian

The (<https://www.cdrnet.org/>)Academy of Nutrition and Dietetics (<https://www.eatright.org/>) is the nation's largest organization of food and nutrition professionals, most of whom are RD/RDNs (Note that the "RD" and "RDN" credential are the same credential). The Academy of Nutrition and Dietetics included the "RDN" to reflect that "all registered dietitians are nutritionists, but not all nutritionists are registered dietitians." In addition, the Academy of Nutrition and Dietetics states that adding the word "nutritionist" to the RD credential allows for a broader notion of wellness. Students entering higher education in 2021 to become an RD/RDN can follow one of the following pathways:

Didactic Program in Dietetics and Accredited Dietetic Internship:

- Minimum of a bachelor's degree with coursework approved by ACEND. Coursework typically includes nutrition and food sciences, chemistry, biochemistry, physiology, microbiology, community nutrition, nutrition counseling, basic and quantity food preparation, food service systems management, and medical nutrition therapy. NOTE: As of January 1, 2024, the minimum of a master's degree will be required to sit for the RDN exam.
- An accredited, supervised practice program, also called a dietetic internship (DI) or Individualized Supervised Practice Pathway (IPP), at healthcare facilities, community agencies, and in food service operations. The internship must provide a minimum of 1200 hours of hands-on training.
- Pass a national examination administered by the Commission on Dietetic Registration

OR

Future Graduate Model:

- Bachelor's degree in any discipline including coursework in the following areas as prerequisites to a graduate degree in nutrition: nutrition, chemistry, biochemistry, physiology, biology, psychology, and statistics
- Graduate-level program that integrates experiential learning with coursework in the classroom including nutrition and food sciences, community nutrition, nutrition through the life cycle, food service systems management, and medical nutrition therapy
- Pass a national examination administered by the Commission on Dietetic Registration

Academy of Nutrition and Dietetics
120 South Riverside Plaza
Suite 2000
Chicago, IL 60606
800-877-1600 x5400
www.eatright.org (<http://www.eatright.org>)

Additional Information

For more information, visit the College's Nutrition Sciences (<https://drexel.edu/cnhp/academics/undergraduate/bs-nutrition-and-foods/>) webpage.

Admission/Graduation Requirements

Admission Requirements

Drexel takes into consideration a number of criteria when determining admission including the applicant's application, transcripts, courses in progress, two letters of recommendation, standardized test scores, essay, and special interests (list of extracurricular activities, employment, etc.). Applicants to the Nutrition and Foods program must have completed three years of high school mathematics (algebra I and II, geometry, and trigonometry) and two years of a laboratory science (biology, chemistry, or physics). Applicants should have a strong interest in, and aptitude for, the basic sciences that are required in the program.

To be considered as a transfer student, candidates should have completed a minimum of 24.0 college credits. Drexel operates on a rolling admission basis, which means that students will be notified about the admission decision as soon as possible after their files are complete.

Visit the Admissions (<http://drexel.edu/undergrad/academics/majors/>) website for more information and to apply online.

Graduation Requirements

To receive a BS in Nutrition and Foods, students in the program must complete a plan of study of all required courses and enough elective courses to total at least 180.0 credits. An overall GPA of 2.0 or higher for all coursework undertaken at Drexel University must be earned to receive a BS. A "C" or better is required in all courses in the Didactic Program in Dietetics to receive a Verification Statement.

For the current academic calendar, visit Drexel University Academic Calendars (<http://drexel.edu/provost/calendars/academic-calendars/>).

Degree Requirements

Communications and English

COM 230

Techniques of Speaking

3.0

COM 345	Intercultural Communication	3.0
or COM 310	Technical Communication	
ENGL 101	Composition and Rhetoric I: Inquiry and Exploratory Research	3.0
or ENGL 111	English Composition I	
ENGL 102	Composition and Rhetoric II: Advanced Research and Evidence-Based Writing	3.0
or ENGL 112	English Composition II	
ENGL 103	Composition and Rhetoric III: Themes and Genres	3.0
or ENGL 113	English Composition III	
Physical and Biological Sciences		
BIO 122	Cells and Genetics	4.5
CHEM 101	General Chemistry I	3.5
CHEM 103	General Chemistry III	4.5
CHEM 108	Health Chemistry I	3.0
HSCI 101	Anatomy and Physiology I	5.0
HSCI 102	Anatomy and Physiology II	5.0
HSCI 103	Anatomy and Physiology III	5.0
Humanities and Social Sciences		
ANTH 101	Introduction to Cultural Diversity	3.0
or SOC 101	Introduction to Sociology	
PSY 101	General Psychology I	3.0
Management and Computing		
HRM 455	Hospitality Human Resources Management	3.0
ORGB 300 [WI]	Organizational Behavior	4.0
Foods, Food Safety, and Food Production		
CULA 115	Culinary Fundamentals	3.0
CULA 405 [WI]	Culture and Gastronomy I	3.0
CULA 425	The Kitchen Garden	3.0
FDSC 154	Science of Food and Cooking	4.0
FDSC 270	Microbial Food Safety and Sanitation	4.0
FDSC 350	Experimental Foods: Product Development	3.0
HRM 215	Commercial Food Production	4.0
Mathematics and Statistics		
MATH 101	Introduction to Analysis I	4.0
HSCI 345	Statistics for Health Sciences	4.5
Nutrition and Food Sciences		
NFS 100	Nutrition, Foods, and Health	2.0
NFS 101	Introduction to Nutrition & Food	1.0
NFS 202	Nutrition: Wellness and Weight Management	3.0
NFS 203	Nutrition II: Nutrition in the Lifecycle	4.0
NFS 230	Intermediate Nutrition	4.0
NFS 265	Professional Issues in Nutrition and Foods	3.0
NFS 315	Nutrition in Chronic Disease	4.0
NFS 325	Nutrition & Exercise Physiology	3.0
NFS 345	Foods and Nutrition of World Cultures	3.0
NFS 370	Foodservice Systems Management	4.0
NFS 391	Community Nutrition	4.0
NFS 415	Advanced Nutrition I: Macronutrition	4.0
NFS 416	Advanced Nutrition II: Micronutrients	4.0
NFS 475	Advanced Seminar in the Dietetics Profession	3.0
NFS 494	Senior Project I	2.0
NFS 495	Senior Project II	2.0
NFS 496	Senior Project III	2.0
Additional Requirements		
UNIV NH101	The Drexel Experience	1.0
CIVC 101	Introduction to Civic Engagement	1.0
COOP 101	Career Management and Professional Development *	1.0
Free Electives *		36.0
Total Credits		182.0

* Students on a non co-op plan of study will take 37 Free electives. Students on 4-year co-op plan of study will take 36 Free electives and COOP 101.

Writing-Intensive Course Requirements

In order to graduate, all students must pass three writing-intensive courses after their freshman year. Two writing-intensive courses must be in a student's major. The third can be in any discipline. Students are advised to take one writing-intensive class each year, beginning with the sophomore year, and to avoid "clustering" these courses near the end of their matriculation. Transfer students need to meet with an academic advisor to review the number of writing-intensive courses required to graduate.

A "WI" next to a course in this catalog may indicate that this course can fulfill a writing-intensive requirement. For the most up-to-date list of writing-intensive courses being offered, students should check the Writing Intensive Course List (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/writing-intensive-courses/>) at the University Writing Program (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/>). (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/drexel-writing-center/>) Students scheduling their courses can also conduct a search for courses with the attribute "WI" to bring up a list of all writing-intensive courses available that term.

Sample Plan of Study

4 year, no co-op

First Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
CHEM 108	3.0 CHEM 101	3.5 BIO 122	4.5 VACATION	
ENGL 101 or 111	3.0 ENGL 102 or 112	3.0 CHEM 103	4.5	
PSY 101	3.0 CULA 115	3.0 ENGL 103 or 113	3.0	
NFS 100	2.0 MATH 101	4.0 FDSC 154	4.0	
NFS 101	1.0 CIVC 101	1.0		
UNIV NH101	1.0			
	13	14.5	16	0

Second Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
HSCI 101	5.0 HSCI 102	5.0 HSCI 103	5.0 VACATION	
NFS 230	4.0 FDSC 270	4.0 NFS 203	4.0	
NFS 265	3.0 NFS 202	3.0 COM 345 or 310	3.0	
Free elective	3.0 Free elective	4.0 Free elective	3.0	
	15	16	15	0

Third Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
ANTH 101 or SOC 101	3.0 FDSC 350	3.0 COM 230	3.0 VACATION	
HRM 215	4.0 NFS 315	4.0 HSCI 345	4.5	
NFS 391	4.0 Free electives	7.0 ORGB 300	4.0	
Free electives	3.0	Free electives	7.0	
	14	14	18.5	0

Fourth Year

Fall	Credits Winter	Credits Spring	Credits
CULA 405	3.0 NFS 325	3.0 CULA 425	3.0
NFS 415	4.0 NFS 370	4.0 HRM 455	3.0
NFS 475	3.0 NFS 416	4.0 NFS 345	3.0
NFS 494	2.0 NFS 495	2.0 NFS 496	2.0
Free electives	3.0 Free electives	4.0 Free electives	3.0
	15	17	14

Total Credits 182

4 year, one co-op

First Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
CHEM 108	3.0 CHEM 101	3.5 BIO 122	4.5 VACATION	
ENGL 101 or 111	3.0 CIVC 101	1.0 CHEM 103	4.5	
PSY 101	3.0 CULA 115	3.0 ENGL 103 or 113	3.0	
NFS 100	2.0 ENGL 102 or 112	3.0 FDSC 154	4.0	
NFS 101	1.0 MATH 101	4.0		
UNIV NH101	1.0			
	13	14.5	16	0

Second Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
HSCI 101	5.0 FDSC 270	4.0 COM 345 or 310	3.0 ANTH 101 or SOC 101	3.0
NFS 230	4.0 HSCI 102	5.0 COOP 101*	1.0 COM 230	3.0
NFS 265	3.0 NFS 202	3.0 HSCI 103	5.0 HSCI 345	4.5
Free Elective	3.0 Free Elective	3.0 NFS 203	4.0 Free Electives	6.0
		Free Elective	3.0	
	15	15	16	16.5

Third Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
HRM 215	4.0 FDSC 350	3.0 COOP EXPERIENCE	COOP EXPERIENCE	
NFS 391	4.0 NFS 315	4.0		
NFS 415	4.0 NFS 416	4.0		
Free Elective	3.0 Free Elective	6.0		
	15	17	0	0

Fourth Year

Fall	Credits Winter	Credits Spring	Credits
CULA 405	3.0 NFS 325	3.0 CULA 425	3.0
NFS 475	3.0 NFS 370	4.0 ORGB 300	4.0
NFS 494	2.0 NFS 495	2.0 HRM 455	3.0
Free Electives	6.0 Free Elective	6.0 NFS 345	3.0
		NFS 496	2.0
	14	15	15

Total Credits 182

* Co-op cycles may vary. Students are assigned a co-op cycle (fall/winter, spring/summer, summer-only) based on their co-op program (4-year, 5-year) and major.

COOP 101 registration is determined by the co-op cycle assigned and may be scheduled in a different term. Select students may be eligible to take COOP 001 in place of COOP 101.

Career Opportunities

Possible career opportunities in dietetics include the following:

- *Clinical Dietitians* are specialists in medical nutrition therapy in hospitals, outpatient clinics, and private practices. They assess patient nutrition, develop dietary plans, provide patient counseling, and monitor patient progress.
- *Community Dietitians* work in public health agencies, health and fitness clubs, Women, Infants, and Children, and non-profit organizations with a focus on nutrition. They counsel people on food choices and direct programs in nutrition awareness and disease prevention.
- *Sports Dietitians* work with professional sports teams, Olympic and/or university and college teams. They provide team and individual nutrition counseling, establish fueling stations, work with food service industry during travel, etc.
- *Management Dietitians* specialize in clinical management or food service systems. They work in hospitals, nursing homes, school food service, cafeterias, restaurants, the airline industry, etc. They manage personnel, plan and conduct employee training programs, design food systems, and plan budgets.
- *Business Dietitians* work in the food industry in product development and marketing, public relations, food styling, and menu design.
- *Consultant Dietitians* are independent business people who work as consultants to sports teams, nursing homes, corporations, etc.

Facilities

The Center for Nutrition & Performance, located in the Daskalakis Athletic Center, provides a variety of nutrition services to the Drexel community, including workshops, lectures, support for athletic teams, and individual counseling. An employee weight loss program is available through the Center for Nutrition & Performance. The Center for Nutrition & Performance also works with some professional teams as well as internationally.

Nutrition and Foods Faculty

Nyree Dardarian, MS, RD, LDN, CSSD, FAND (*Drexel University*) Director, Center for Nutrition & Performance. Clinical Assistant Professor. Energy expenditure; sports nutrition

Susan Fuchs, MS, IBCLC (*Drexel University*) Director, Human Lactation Certificate Program. Clinical Instructor. Human lactation

Beth L. Leonberg, MS, MA, RDN, CSP, FAND, LDN (*Colorado State University, Rowan University*) Director, Didactic Program in Dietetics . Associate Clinical Professor. Pediatric nutrition.

Brandy-Joe Milliron, PhD (*Arizona State University*). Associate Professor. The development and evaluation of modifications in the natural environment to promote healthier living; farm to table school initiatives

Jennifer Nasser, PhD, RD, FTOS (*Rutgers University*). Associate Professor. Dopamine-mediated mechanisms of food intake regulation in humans and its impact on metabolic homeostasis, especially as it applies to obesity, eating disorders and aging. Implementation of methods to maximize nutrient density of food provided in community food services.

Kavitha Penugonda, PhD (*Kansas State University*) Manager, *Nutritional Biochemistry Laboratory*. Assistant Clinical Professor. Nutrient bioavailability in foods; nutritional supplements on health

Jennifer Quinlan, PhD (*North Carolina State University*). Professor. Food microbiology; microbiological quality and safety of produce, dairy and meat products in markets in high vs. low socioeconomic areas, Bacillus and Clostridium spores in food processing.

Vicki Schwartz, DCN, RD, LDN, CNSC, FAND (*Rutgers University*). Assistant Clinical Professor. Clinical nutrition; using standardized patients in nutrition counseling

Patricia A. Shewokis, PhD (*University of Georgia*). Professor. Roles of cognition and motor function during motor skill learning; role of information feedback frequency on the memory of motor skills, noninvasive neural imaging techniques of functional near infrared spectroscopy(fNIRS) and electroencephalography (EEG) and methodology and research design.

Deeptha Sukumar, PhD (*Rutgers University*). Associate Professor. Vitamin D and magnesium and bone mineral density; obesity and bone mineral density.

Emeritus Faculty

Donna H. Mueller, PhD (*Temple University*). Associate Professor Emeritus. Clinical nutrition; pediatric nutrition; nutrition in pulmonary diseases, especially cystic fibrosis; nutrition in developmental delay; dental nutrition; dietetic education and professional development.

Bridge Program in Health Sciences BS and Physical Therapy DPT

Major: Health Sciences and Physical Therapy

Degree Awarded: Bachelor of Science (BS) and Doctor of Physical Therapy (DPT)

Calendar Type: Quarter

Minimum Required Credits: 271.0

Co-op Options: One Co-op

BS Classification of Instructional Programs (CIP) code: 51.1199

BS Standard Occupational Classification (SOC) code: 11-9111

DPT Classification of Instructional Programs (CIP) code: 51.2308

DPT Standard Occupational Classification (SOC) code: 29-1123

About the Program

Drexel's undergraduate Health Sciences program and graduate Doctor of Physical Therapy (DPT) program have partnered to offer a BS/DPT Bridge Program option available to high-achieving students enrolled in the Health Sciences program. The BS/DPT Bridge Program is a linked academic track that enables students to complete their Bachelor of Science and Doctor of Physical Therapy degrees in 6 years.

Students pursue a BS degree in Health Sciences during their first three years of study, and a DPT degree during their final 2.5 years of study. The bachelor's degree in Health Sciences is awarded following completion of year four (first year of graduate study), and the doctoral degree is awarded following completion of the Physical Therapy program.

Additional Information

For more information, please visit the Health Sciences Department (<https://drexel.edu/cnhp/academics/departments/health-sciences/>).

Degree Requirements

General Requirements

CIVC 101	Introduction to Civic Engagement	1.0
COOP 101	Career Management and Professional Development *	1.0
UNIV NH101	The Drexel Experience	1.0

English Sequence

ENGL 101 or ENGL 111	Composition and Rhetoric I: Inquiry and Exploratory Research English Composition I	3.0
ENGL 102 or ENGL 112	Composition and Rhetoric II: Advanced Research and Evidence-Based Writing English Composition II	3.0
ENGL 103 or ENGL 113	Composition and Rhetoric III: Themes and Genres English Composition III	3.0

Biology Sequence

BIO 131 & BIO 134	Cells and Biomolecules and Cells and Biomolecules Lab	5.0
BIO 132 & BIO 135	Genetics and Evolution and Genetics and Evolution Lab	5.0
BIO 133 & BIO 136	Physiology and Ecology and Anatomy and Ecology Lab	5.0
BIO 226	Microbiology for Health Professionals	5.0

Chemistry Sequence

CHEM 101	General Chemistry I	3.5
CHEM 102	General Chemistry II	4.5
CHEM 103	General Chemistry III	4.5

Mathematics Sequence

MATH 101	Introduction to Analysis I	4.0
MATH 102	Introduction to Analysis II	4.0

Physics for Life Sciences

PHYS 152	Introductory Physics I	4.0
PHYS 153	Introductory Physics II	4.0

Communications

COM 320 [WI]	Science Writing	3.0
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Health Systems

HSAD 210	Health-Care Ethics I	3.0
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Complete one of the following courses: 3.0

HSAD 309	Advanced Health-Care Ethics	
HSAD 310	Introduction to Health-Systems Administration	

HSAD 345	Ethics in Health Care Management	
Psychology		
PSY 101	General Psychology I	3.0
One Psychology (PSY 100-499) and/or Behavioral Health Counseling (BACS 100-499) course (minimum 3.0 credits)		3.0
Sociology		
SOC 101	Introduction to Sociology	3.0
One Sociology (SOC 100-499) course (minimum 3.0 credits)		4.0
Public Health		
PBHL 101	Public Health 101	3.0
One Public Health (PBHL) course (minimum 3.0 credits)		3.0
Anatomy & Physiology Courses		
HSCI 101	Anatomy and Physiology I	5.0
HSCI 102	Anatomy and Physiology II	5.0
HSCI 103	Anatomy and Physiology III	5.0
Research Courses		
HSCI 310	Introduction to Research Methods	4.0
HSCI 315	Current Issues in Health Sciences	4.0
Statistics and Assessment		
HSCI 201	Health Assessment through the Lifespan	4.0
HSCI 345	Statistics for Health Sciences	4.5
Free Electives		4.0
Health Sciences Electives **		19.0
Physical Therapy DPT Requirements ***		
PTRS 507	Neuroscience I	3.0
PTRS 508	Neuroscience II	2.0
PTRS 530	Kinesiology I	4.0
PTRS 531	Kinesiology II	3.0
PTRS 532	Human Gross Anatomy I	4.0
PTRS 533	Human Gross Anatomy II	4.0
PTRS 534	Physical Therapy Exam & Intervention I	3.0
PTRS 535	Physical Therapy Exam & Intervention II	3.0
PTRS 539	Topics in Pathophysiology I	2.0
PTRS 540	Topics in Pathophysiology II	4.0
PTRS 600	Clinical Reasoning	4.0
PTRS 610	Issues in Pharmacotherapy	3.0
PTRS 613	Integrated Clinical Experience I	0.5
PTRS 614	Integrated Clinical Experience II	0.5
PTRS 615	Integrated Clinical Experience III	0.5
PTRS 616	Integrated Clinical Experience IV	0.5
PTRS 620	Orthopedic Physical Therapy: Upper Extremity	4.0
PTRS 621	Orthopedic Physical Therapy: Lower Extremity	4.0
PTRS 622	Orthopedic Physical Therapy: Spine	4.0
PTRS 623	Physical Agents	3.0
PTRS 624	Functional Mobility	3.0
PTRS 627	Cardiopulmonary Physical Therapy I	4.0
PTRS 630	Cardiopulmonary Physical Therapy II	3.0
PTRS 639	Motor Learning	2.0
PTRS 641	Neurological Exam and Intervention I	4.0
PTRS 642	Neurological Exam and Intervention II	5.0
PTRS 644	Integumentary Physical Therapy	1.5
PTRS 648	Prosthetics and Orthotics	3.0
PTRS 649	Culture, Ethics and Interprofessionalism in Healthcare	2.5
PTRS 654	Topics in Health Policy & Services	3.0
PTRS 655	Health Administration	2.5
PTRS 656	Motor Control and Rehabilitation	2.0
PTRS 663	Pediatric Physical Therapy I	3.5
PTRS 665	Pediatric Physical Therapy II	3.5
PTRS 680	Geriatric Physical Therapy	3.0
PTRS 733	Advanced Clinical Reasoning	2.0
PTRS 751	Evidence-Based Practice	3.0
PTRS 752	Research and Measurement in Physical Therapy	2.0
PTRS 791	Clinical Experience I	4.5

PTRS 792	Terminal Clinical Experience II	4.5
PTRS 793	Terminal Clinical Experience III	4.5
Electives (600 and 700 level PTRS)		6.0
Total Credits		271.0

* Co-op cycles may vary. Students are assigned a co-op cycle (fall/winter, spring/summer, summer-only) based on their co-op program (4-year, 5-year) and major.

COOP 101 registration is determined by the co-op cycle assigned and may be scheduled in a different term. Select students may be eligible to take COOP 001 in place of COOP 101.

** Health Sciences electives include HSCI or NFS courses at the 100-499 level. Up to two science courses (BIO 200-499, CHEM 200-499, PHYS 100-499) may be used as Health Sciences electives with advisor permission. All 100-Level freshman course requirements in BIO, CHEM, ENGL, and MATH must be completed by the time a student reaches 135.0 credits.

*** Students receive their BS degree in Health Sciences after successful completion of the Fall, Winter, and Spring term courses in the first year of the DPT curriculum and fulfilling the undergraduate degree requirements.

Writing-Intensive Course Requirements

In order to graduate, all students must pass three writing-intensive courses after their freshman year. Two writing-intensive courses must be in a student's major. The third can be in any discipline. Students are advised to take one writing-intensive class each year, beginning with the sophomore year, and to avoid "clustering" these courses near the end of their matriculation. Transfer students need to meet with an academic advisor to review the number of writing-intensive courses required to graduate.

A "WI" next to a course in this catalog may indicate that this course can fulfill a writing-intensive requirement. For the most up-to-date list of writing-intensive courses being offered, students should check the Writing Intensive Course List (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/writing-intensive-courses/>) at the University Writing Program (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/>). (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/drexel-writing-center/>) Students scheduling their courses can also conduct a search for courses with the attribute "WI" to bring up a list of all writing-intensive courses available that term.

Sample Plan of Study

Fall-Winter Co-op

First Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
BIO 131 & BIO 134	5.0 BIO 132 & BIO 135	5.0 BIO 133 & BIO 136	5.0 VACATION	
CHEM 101	3.5 CHEM 102	4.5 CHEM 103	4.5	
ENGL 101 or 111	3.0 CIVC 101	1.0 ENGL 103 or 113	3.0	
UNIV NH101	1.0 ENGL 102 or 112	3.0 MATH 102	4.0	
Free Elective	4.0 MATH 101	4.0		
	16.5	17.5	16.5	0

Second Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
BIO 226	5.0 HSCI 102	5.0 COM 320	3.0 COOP 101*	1.0
HSCI 101	5.0 HSCI 310	4.0 HSCI 103	5.0 HSAD 210	3.0
HSCI 345	4.5 Health Science Elective	4.0 HSCI 315	4.0 PSY 101	3.0
Health Science Elective	3.0	SOC 101	3.0 Health Sciences Elective	4.0
			Public Health Elective	3.0
			Sociology Elective	4.0
	17.5	13	15	18

Third Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
COOP EXPERIENCE	COOP EXPERIENCE	PBHL 101	3.0 HSCI 201	4.0
		PHYS 152	4.0 PHYS 153	4.0
		One of the following:	3.0 Health Sciences Elective	4.0
		HSAD 309	Psychology Elective	3.0
		HSAD 310		
		HSAD 345		

		Health Sciences Elective		4.0	
		0	0	14	15
Fourth Year					
Fall	Credits Winter	Credits Spring		Credits Summer	Credits
PTRS 530	4.0 PTRS 531	3.0 PTRS 507		3.0 PTRS 508	2.0
PTRS 532	4.0 PTRS 533	4.0 PTRS 615		0.5 PTRS 616	0.5
PTRS 534	3.0 PTRS 535	3.0 PTRS 620		4.0 PTRS 621	4.0
PTRS 600	4.0 PTRS 539	2.0 PTRS 623		3.0 PTRS 627	4.0
PTRS 613	0.5 PTRS 614	0.5 PTRS 624		3.0 PTRS 641	4.0
	PTRS 751	3.0 PTRS 639		2.0 PTRS 752	2.0
	15.5	15.5		15.5	16.5
Fifth Year					
Fall	Credits Winter	Credits Spring		Credits Summer	Credits
PTRS 791	4.5 PTRS 622	4.0 PTRS 540		4.0 PTRS 733	2.0
	PTRS 630	3.0 PTRS 644		1.5 PTRS 655	2.5
	PTRS 648	3.0 PTRS 610		3.0 PTRS 680	3.0
	PTRS 642	5.0 PTRS 656		2.0 PTRS 665	3.5
	Elective	3.0 PTRS 663		3.5 PTRS 654	3.0
		PTRS 649		2.5 Elective	3.0
	4.5	18		16.5	17
Sixth Year					
Fall	Credits Winter	Credits			
PTRS 792	4.5 PTRS 793	4.5			
	4.5	4.5			

Total Credits 271

* Co-op cycles may vary. Students are assigned a co-op cycle (fall/winter, spring/summer, summer-only) based on their co-op program (4-year, 5-year) and major.

COOP 101 registration is determined by the co-op cycle assigned and may be scheduled in a different term. Select students may be eligible to take COOP 001 in place of COOP 101.

Spring-Summer Co-op

First Year					
Fall	Credits Winter	Credits Spring		Credits Summer	Credits
BIO 131 & BIO 134	5.0 BIO 132 & BIO 135	5.0 BIO 133 & BIO 136		5.0 VACATION	
CHEM 101	3.5 CHEM 102	4.5 CHEM 103		4.5	
ENGL 101 or 111	3.0 CIVC 101	1.0 ENGL 103 or 113		3.0	
UNIV NH101	1.0 ENGL 102 or 112	3.0 MATH 102		4.0	
Free Elective	4.0 MATH 101	4.0			
	16.5	17.5		16.5	0
Second Year					
Fall	Credits Winter	Credits Spring		Credits Summer	Credits
BIO 226	5.0 HSCI 102	5.0 COM 320		3.0 COOP 101*	1.0
HSCI 101	5.0 HSCI 310	4.0 HSCI 103		5.0 HSAD 210	3.0
HSCI 345	4.5 Health Science Elective	4.0 HSCI 315		4.0 PSY 101	3.0
Health Science Elective	3.0	SOC 101		3.0 Health Science Elective	4.0
				Public Health Elective	3.0
				Sociology Elective	4.0
	17.5	13		15	18
Third Year					
Fall	Credits Winter	Credits Spring		Credits Summer	Credits
PBHL 101	3.0 HSCI 201	4.0 COOP EXPERIENCE		COOP EXPERIENCE	
PHYS 152	4.0 PHYS 153	4.0			
One of the following:	3.0 Health Science Elective	4.0			
HSAD 309	Psychology Elective	3.0			
HSAD 310					
HSAD 345					

Health Science Elective	4.0			
	14	15	0	0
Fourth Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
PTRS 530	4.0 PTRS 531	3.0 PTRS 507	3.0 PTRS 508	2.0
PTRS 532	4.0 PTRS 533	4.0 PTRS 615	0.5 PTRS 616	0.5
PTRS 534	3.0 PTRS 535	3.0 PTRS 620	4.0 PTRS 621	4.0
PTRS 600	4.0 PTRS 539	2.0 PTRS 623	3.0 PTRS 627	4.0
PTRS 613	0.5 PTRS 614	0.5 PTRS 624	3.0 PTRS 641	4.0
	PTRS 751	3.0 PTRS 639	2.0 PTRS 752	2.0
	15.5	15.5	15.5	16.5
Fifth Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
PTRS 791	4.5 PTRS 622	4.0 PTRS 540	4.0 PTRS 654	3.0
	PTRS 630	3.0 PTRS 610	3.0 PTRS 655	2.5
	PTRS 642	5.0 PTRS 644	1.5 PTRS 665	3.5
	PTRS 648	3.0 PTRS 649	2.5 PTRS 680	3.0
	Elective	3.0 PTRS 656	2.0 PTRS 733	2.0
		PTRS 663	3.5 Elective	3.0
	4.5	18	16.5	17
Sixth Year				
Fall	Credits Winter	Credits		
PTRS 792	4.5 PTRS 793	4.5		
	4.5	4.5		

Total Credits 271

* Co-op cycles may vary. Students are assigned a co-op cycle (fall/winter, spring/summer, summer-only) based on their co-op program (4-year, 5-year) and major.

COOP 101 registration is determined by the co-op cycle assigned and may be scheduled in a different term. Select students may be eligible to take COOP 001 in place of COOP 101.

Bridge Program in Health Sciences BS and Physician Assistant MHS

Major: Health Sciences and Physician Assistant

Degrees Awarded: Bachelor of Science (BS) and Master of Health Science (MHS)

Calendar Type: Quarter

Minimum Required Credits: 261.5

Co-op Options: One Co-op

BS Classification of Instructional Programs (CIP) code: 51.1199

BS Standard Occupational Classification (SOC) code: 11-9111

MHS Classification of Instructional Programs (CIP) code: 51.0912

MHS Standard Occupational Classification (SOC) code: 29-1071

About the Program

Drexel's undergraduate Health Sciences program and graduate Physician Assistant (PA) program have partnered to offer a BS/MHS Bridge Program option available to high-achieving students enrolled in the Health Sciences program. The BS/MHS PA Bridge Program option is a linked academic track that enables students to complete their bachelor's and master's degrees in Health Sciences, including sitting for the Physician Assistant National Certifying Exam (PANCE), in 5.25 years as opposed to the traditional 6.25 years.

Students pursue a Bachelor of Science degree in Health Sciences during their first three years of study, and a Master of Health Science degree during the final 2.25 years of study. The bachelor's degree in Health Sciences is awarded following completion of year four (first year of graduate study), and the master's degree is awarded following completion of the Physician Assistant program.

Additional Information

For more information, please visit the Health Sciences Department (<https://drexel.edu/cnhp/academics/departments/health-sciences/>).

Degree Requirements

General Requirements

CIVC 101	Introduction to Civic Engagement	1.0
COOP 101	Career Management and Professional Development *	1.0
UNIV NH101	The Drexel Experience	1.0

English Sequence

ENGL 101 or ENGL 111	Composition and Rhetoric I: Inquiry and Exploratory Research English Composition I	3.0
ENGL 102 or ENGL 112	Composition and Rhetoric II: Advanced Research and Evidence-Based Writing English Composition II	3.0
ENGL 103 or ENGL 113	Composition and Rhetoric III: Themes and Genres English Composition III	3.0

Biology Sequence

BIO 131 & BIO 134	Cells and Biomolecules and Cells and Biomolecules Lab	5.0
BIO 132 & BIO 135	Genetics and Evolution and Genetics and Evolution Lab	5.0
BIO 133 & BIO 136	Physiology and Ecology and Anatomy and Ecology Lab	5.0
BIO 226	Microbiology for Health Professionals	5.0

Chemistry Sequence

CHEM 101	General Chemistry I	3.5
CHEM 102	General Chemistry II	4.5
CHEM 103	General Chemistry III	4.5

Mathematics Sequence

MATH 101	Introduction to Analysis I	4.0
MATH 102	Introduction to Analysis II	4.0

Communication

COM 320 [WI]	Science Writing	3.0
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Health Systems

HSCI 125	Medical Terminology	3.0
HSAD 210	Health-Care Ethics I	3.0
Select one of the following:		3.0
HSAD 309	Advanced Health-Care Ethics	
HSAD 310	Introduction to Health-Systems Administration	
HSAD 345	Ethics in Health Care Management	

Psychology

PSY 101	General Psychology I	3.0
One Psychology (PSY) and/or Behavioral Health Counseling (BACS) course (minimum 3.0 credits)		3.0

Sociology

SOC 101	Introduction to Sociology	3.0
One Sociology (SOC) course (minimum 3.0 credits)		4.0

Public Health

PBHL 101	Public Health 101	3.0
One Public Health (PBHL) course (minimum 3.0 credits)		3.0

Anatomy & Physiology Courses

HSCI 101	Anatomy and Physiology I	5.0
HSCI 102	Anatomy and Physiology II	5.0
HSCI 103	Anatomy and Physiology III	5.0

Genetics

HSCI 337	Genetics and Health	4.5
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Research Courses

HSCI 310	Introduction to Research Methods	4.0
HSCI 315	Current Issues in Health Sciences	4.0

Statistics and Assessment

HSCI 201	Health Assessment through the Lifespan	4.0
HSCI 345	Statistics for Health Sciences	4.5

Health Sciences Electives **

19.0

Free electives

6.0

Physician Assistant MHS Courses ***

PA 540	Clinical Anatomy	5.0
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PA 542	Patient Communication	2.0
PA 543	Ethical Issues in Physician Assistant Practice	2.0
PA 544	Clinical Assessment	5.0
PA 545	Physician Assistant Practice	1.0
PA 546	Health Policy for Physician Assistant Practice	2.0
PA 547	Evidence Based Medicine for Physician Assistants	3.0
PA 548	Principles of Medical Science I	2.0
PA 549	Principles of Medical Science II	2.0
PA 550	Principles of Medical Science III	2.0
PA 551	Pharmacology and Therapeutics I	3.0
PA 552	Pharmacology and Therapeutics II	2.0
PA 553	Pharmacology and Therapeutics III	2.0
PA 554	Biopsychosocial Issues in Patient Care	5.0
PA 556	Clinical Medicine I	5.0
PA 557	Clinical Medicine II	5.0
PA 558	Topics in Clinical Practice	5.0
PA 559	Clinical Skills I	2.0
PA 560	Clinical Skills II	2.0
PA 561	Clinical Skills III	4.0
Clinical Year Rotation Courses †		
PA 629	Internal Medicine Rotation	5.0
PA 630	Pediatrics Rotation	5.0
PA 631	Women's Health Rotation	5.0
PA 632	Behavioral Medicine Rotation	5.0
PA 633	Surgery Rotation	5.0
PA 634	Emergency Medicine Rotation	5.0
Practicum		
PA 635	Primary Care Practicum I	10.0
PA 637	Primary Care Practicum II	10.0
Capstone Experiences		
PA 636	Graduate Project I	3.0
PA 638	Graduate Project II	3.0
Total Credits		261.5

* Co-op cycles may vary. Students are assigned a co-op cycle (fall/winter, spring/summer, summer-only) based on their co-op program (4-year, 5-year) and major.

COOP 101 registration is determined by the co-op cycle assigned and may be scheduled in a different term. Select students may be eligible to take COOP 001 in place of COOP 101.

** Health Sciences electives include HSCI or NFS courses at the 100-499 level. Up to two science courses (BIO 200-499, CHEM 200-499, PHYS 100-499) may be used as Health Sciences electives with advisor permission. All 100-Level freshman course requirements in BIO, CHEM, ENGL, and MATH must be completed by the time a student reaches 135.0 credits.

*** Students receive their BS degree in Health Sciences after successful completion of the Fall, Winter, and Spring term courses in the first year of the PA-MHS curriculum and fulfilling the undergraduate degree requirements. Progression to graduate level PA program coursework is contingent upon successful completion of all accelerated track requirements and a successful admission interview

† The sequencing of the six clinical rotations will vary for individual students. Students must complete all six rotations.

Writing-Intensive Course Requirements

In order to graduate, all students must pass three writing-intensive courses after their freshman year. Two writing-intensive courses must be in a student's major. The third can be in any discipline. Students are advised to take one writing-intensive class each year, beginning with the sophomore year, and to avoid "clustering" these courses near the end of their matriculation. Transfer students need to meet with an academic advisor to review the number of writing-intensive courses required to graduate.

A "WI" next to a course in this catalog may indicate that this course can fulfill a writing-intensive requirement. For the most up-to-date list of writing-intensive courses being offered, students should check the Writing Intensive Course List (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/writing-intensive-courses/>) at the University Writing Program (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/>). (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/drexel-writing-center/>) Students scheduling their courses can also conduct a search for courses with the attribute "WI" to bring up a list of all writing-intensive courses available that term.

Sample Plan of Study

Fall-Winter Co-op

First Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
BIO 131 & BIO 134	5.0 BIO 132 & BIO 135	5.0 BIO 133 & BIO 136	5.0 VACATION	
CHEM 101	3.5 CHEM 102	4.5 CHEM 103	4.5	
ENGL 101 or 111	3.0 CIVC 101	1.0 ENGL 103 or 113	3.0	
HSCI 125	3.0 ENGL 102 or 112	3.0 MATH 102	4.0	
UNIV NH101	1.0 MATH 101	4.0		
	15.5	17.5	16.5	0
Second Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
BIO 226	5.0 COOP 101 [*]	1.0 COM 320	3.0 SOC 101	3.0
HSCI 101	5.0 HSCI 310	4.0 HSAD 210	3.0 Health Sciences elective	3.0
HSCI 345	4.5 HSCI 102	5.0 HSCI 103	5.0 Psychology elective	3.0
Health Sciences elective	3.0 PSY 101	3.0 HSCI 315	4.0 Sociology elective	4.0
	Health Sciences elective	4.0	Free elective	3.0
	17.5	17	15	16
Third Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
COOP EXPERIENCE	COOP EXPERIENCE	One of the following:	3.0 HSCI 201	4.0
		HSAD 309	Health Sciences elective	3.0
		HSAD 310	Public Health elective	3.0
		HSAD 345	Free elective	3.0
		HSCI 337	4.5	
		PBHL 101	3.0	
		Health Sciences electives	6.0	
	0	0	16.5	13
Fourth Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
PA 540	5.0 PA 547	3.0 PA 549	2.0 PA 546	2.0
PA 542	2.0 PA 548	2.0 PA 552	2.0 PA 550	2.0
PA 543	2.0 PA 551	3.0 PA 554	5.0 PA 553	2.0
PA 544	5.0 PA 556	5.0 PA 557	5.0 PA 558	5.0
PA 545	1.0 PA 559	2.0 PA 560	2.0 PA 561	4.0
	15	15	16	15
Fifth Year				
Fall	Credits Winter	Credits Spring	Credits Summer	Credits
Clinical Phase ^{**}	Rotation III	5.0 Rotation V	5.0 PA 635	10.0
Rotation I	5.0 Rotation IV	5.0 Rotation VI	5.0 PA 638	3.0
Rotation II	5.0 PA 636	3.0		
	10	13	10	13
Sixth Year				
Fall	Credits			
PA 637	10.0			
	10			

Total Credits 261.5

* Co-op cycles may vary. Students are assigned a co-op cycle (fall/winter, spring/summer, summer-only) based on their co-op program (4-year, 5-year) and major.

COOP 101 registration is determined by the co-op cycle assigned and may be scheduled in a different term. Select students may be eligible to take COOP 001 in place of COOP 101.

Clinical Year Rotation Courses^{**}

The sequencing of the six clinical rotations will vary for individual students. Students must complete all six rotations.

PA 629 Internal Medicine Rotation

PA 630	Pediatrics Rotation
PA 631	Women's Health Rotation
PA 632	Behavioral Medicine Rotation
PA 633	Surgery Rotation
PA 634	Emergency Medicine Rotation

Spring-Summer Co-op

First Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
BIO 131 & BIO 134	5.0 BIO 132 & BIO 135	5.0 BIO 133 & BIO 136	5.0 VACATION	
CHEM 101	3.5 CHEM 102	4.5 CHEM 103	4.5	
ENGL 101 or 111	3.0 CIVC 101	1.0 ENGL 103 or 113	3.0	
HSCI 125	3.0 ENGL 102 or 112	3.0 MATH 102	4.0	
UNIV NH101	1.0 MATH 101	4.0		
	15.5	17.5	16.5	0

Second Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
BIO 226	5.0 COOP 101*	1.0 COM 320	3.0 SOC 101	3.0
HSCI 101	5.0 HSCI 102	5.0 HSAD 210	3.0 Free Elective	3.0
HSCI 345	4.5 HSCI 310	4.0 HSCI 103	5.0 Health Sciences Elective	3.0
Health Sciences Elective	3.0 PSY 101	3.0 HSCI 315	4.0 Psychology Elective	3.0
	Health Sciences Elective	4.0	Sociology Elective	4.0
	17.5	17	15	16

Third Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
HSCI 337	4.5 HSCI 201	4.0 COOP EXPERIENCE	COOP EXPERIENCE	
PBHL 101	3.0 Free Elective	3.0		
One of the following:	3.0 Health Sciences Elective	3.0		
HSAD 309	Public Health Elective	3.0		
HSAD 310				
HSAD 345				
Health Sciences Elective	6.0			
	16.5	13	0	0

Fourth Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
PA 540	5.0 PA 547	3.0 PA 549	2.0 PA 546	2.0
PA 542	2.0 PA 548	2.0 PA 552	2.0 PA 550	2.0
PA 543	2.0 PA 551	3.0 PA 554	5.0 PA 553	2.0
PA 544	5.0 PA 556	5.0 PA 557	5.0 PA 558	5.0
PA 545	1.0 PA 559	2.0 PA 560	2.0 PA 561	4.0
	15	15	16	15

Fifth Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
Clinical Phase**	PA 636	3.0 Rotation V	5.0 PA 635	10.0
Rotation I	5.0 Rotation III	5.0 Rotation VI	5.0 PA 638	3.0
Rotation II	5.0 Rotation IV	5.0		
	10	13	10	13

Sixth Year

Fall	Credits
PA 637	10.0
	10

Total Credits 261.5

* Co-op cycles may vary. Students are assigned a co-op cycle (fall/winter, spring/summer, summer-only) based on their co-op program (4-year, 5-year) and major.

COOP 101 registration is determined by the co-op cycle assigned and may be scheduled in a different term. Select students may be eligible to take COOP 001 in place of COOP 101.

Clinical Year Rotation Courses **

The sequencing of the six clinical rotations will vary for individual students. Students must complete all six rotations.

PA 629	Internal Medicine Rotation
PA 630	Pediatrics Rotation
PA 631	Women's Health Rotation
PA 632	Behavioral Medicine Rotation
PA 633	Surgery Rotation
PA 634	Emergency Medicine Rotation

Health Services Administration BS / Public Health MPH

Major: Health Services Administration (BS) and Public Health (MPH)

Degree Awarded: Bachelor of Science (BS) and Master of Public Health (MPH)

Calendar Type: Quarter

Minimum Required Credits: 236.0

Co-op Options: One Co-op (Four years)

BS Classification of Instructional Programs (CIP) code: 51.0701

BS Standard Occupational Classification (SOC) code: 11-9111

MPH Classification of Instructional Programs (CIP) code: 51.2201

MPH Standard Occupational Classification (SOC) code: 11-9111

About the Program

The Health Services Administration program and the Master of Public Health program in the Dornsife School of Public Health offer an accelerated dual degree option. Participants can earn both a BS degree in Health Services Administration and a Master of Public Health (MPH) degree in five years.

Students in this accelerated, dual degree program apply to the graduate Masters of Public Health Program (<http://catalog.drexel.edu/graduate/schoolofpublichealth/publichealth/>) during the fall quarter of their junior year. They then follow the same application procedures as other applicants. (Any student who does not meet the entrance requirements of the graduate program will be able to complete the fourth year of the Health Services Administration program and receive a BS degree.)

Students in the Master of Public Health program complete 56.0 graduate quarter credits to meet the requirements of the master's program. The accelerated, dual degree program represents an acceleration of only the undergraduate portion of the student's curriculum.

Additional Information

For more information, visit the College of Nursing and Health Professions Accelerated Dual Degree Programs (<https://drexel.edu/cnhp/academics/undergraduate/Health-Services-Administration-BS-Public-Health-MPH/>) page.

Degree Requirements

English Sequence

ENGL 101	Composition and Rhetoric I: Inquiry and Exploratory Research	3.0
or ENGL 111	English Composition I	
ENGL 102	Composition and Rhetoric II: Advanced Research and Evidence-Based Writing	3.0
or ENGL 112	English Composition II	
ENGL 103	Composition and Rhetoric III: Themes and Genres	3.0
or ENGL 113	English Composition III	

Natural Science **

8.0-10.0

Mathematics

MATH 101	Introduction to Analysis I	3.0-4.0
or MATH 171	Introduction to Analysis A	
MATH 102	Introduction to Analysis II	3.0-4.0
or MATH 172	Introduction to Analysis B	

Computing Course

CS 150	Computer Science Principles	3.0
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Drexel Experience

CIVC 101	Introduction to Civic Engagement	1.0
COOP 101	Career Management and Professional Development	1.0
UNIV NH101	The Drexel Experience	1.0

Health Services Administration (HSAD) Courses

HSAD 210	Health-Care Ethics I	3.0
HSAD 310	Introduction to Health-Systems Administration	3.0
HSAD 321	Health-Care Human Resources	3.0
HSAD 322	Health-Care Law	3.0
HSAD 330	Financial Management in Health Care	3.0
HSAD 331 [WI]	Non-profits and Health Care	3.0
HSAD 332 [WI]	Health-Care Marketing	3.0
HSAD 334	Management of Health Services	3.0
HSAD 335 [WI]	Health-Care Policy	3.0
HSAD 340	Leadership in Health Services Administration	3.0
HSAD 345	Ethics in Health Care Management	3.0

Business Courses

ACCT 110	Accounting for Professionals	4.0
Complete 1 of the following ECON courses		4.0
ECON 201	Principles of Microeconomics	
ECON 202	Principles of Macroeconomics	
ECON 240	Economics of Health Care Systems	
ORGB 300 [WI]	Organizational Behavior	4.0
HSCI 345	Statistics for Health Sciences	4.0-4.5
or STAT 201	Introduction to Business Statistics	

Humanities and Social Sciences Courses

PSCI 110	American Government	4.0
SOC 101	Introduction to Sociology	3.0

Health Services Administration (HSAD) Electives

27.0

Humanities and Social Sciences Electives

29.0

Free Electives

39.0

MPH Core Requirements

16.0

BST 571	Introduction to Biostatistics	
EPI 570	Introduction to Epidemiology	
HMP 505	Qualitative Data and Mixed Methods Analysis	
PBHL 500	Practical Experience for the Master of Public Health	
PBHL 510	Public Health Foundations and Systems I	
PBHL 511	Public Health Foundations and Systems II	

MHP Discipline Specific Courses 16.0

MPH Integrated Learning Experience † 6.0

MPH Electives/Graduate Minor Courses 18.0

Total Credits

236.0-240.5

‡ Integrated Learning Experience courses depend on the MPH major. Community Health & Prevention: CHP 750 and CHP 751. Environmental and Occupational Health: EOH 750 and EOH 751; Epidemiology: EOH 750 and EOH 751; Health Management & Policy: HMP 750 and HMP 751.

^^ Students may select from Biology (BIO), Chemistry (CHEM) or Anatomy (ANAT) courses. However, any course selected must include a laboratory component. Additional natural science subject options may be considered with the approval of the student's advisor.

Writing-Intensive Course Requirements

In order to graduate, all students must pass three writing-intensive courses after their freshman year. Two writing-intensive courses must be in a student's major. The third can be in any discipline. Students are advised to take one writing-intensive class each year, beginning with the sophomore year, and to avoid "clustering" these courses near the end of their matriculation. Transfer students need to meet with an academic advisor to review the number of writing-intensive courses required to graduate.

A "WI" next to a course in this catalog may indicate that this course can fulfill a writing-intensive requirement. For the most up-to-date list of writing-intensive courses being offered, students should check the Writing Intensive Course List (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/writing-intensive-courses/>) at the University Writing Program (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/>). (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/drexel-writing-center/>) Students scheduling their courses can also conduct a search for courses with the attribute "WI" to bring up a list of all writing-intensive courses available that term.

Sample Plan of Study

First Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
ACCT 110	4.0 ENGL 102	3.0 CIVC 101	1.0 VACATION	
ENGL 101	3.0 MATH 101	4.0 ENGL 103	3.0	
SOC 101	3.0 PSCI 110	4.0 HSAD 210	3.0	
UNIV 101	1.0 (UG) Humanities & Soc Science Electives	3.0 HSAD 310	3.0	
(UG) Natural Science course w/laboratory	4.0 (UG) Natural Science course w/laboratory	4.0 MATH 102	4.0	
		(UG) Humanities/Soc Science Elective	3.0	
	15	18	17	0

Second Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
CS 150	3.0 ECON 240	4.0 HSAD 335	3.0 COOP 101 [*]	1.0
HSAD 322	3.0 HSAD 321	3.0 HSAD 340	3.0 HSCI 345 or STAT 201	4.0-4.5
HSAD 334	3.0 HSAD 330	3.0 HSAD 345	3.0 (UG) HSAD Electives	6.0
(UG) Humanities/Soc Science Elective	3.0 (UG) HSAD Elective	3.0 (UG) Free Electives	7.0 (UG) Free Electives	6.0
(UG) Free Electives	6.0 (UG) Humanities/Soc Science Elective	4.0		
	18	17	16	17-17.5

Third Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
EPI 570	3.0 BST 571	3.0 COOP Experience [*]	COOP Experience [*]	
ORGB 300	4.0 HSAD 332	3.0 HMP 505	2.0	
(UG) HSAD Elective	3.0 (UG) Humanities & Soc Science Elective	3.0		
(UG) Humanities & Soc Science Elective	3.0 (UG) Free Electives	7.0		
(UG) Free Elective	4.0			
	17	16	2	0

Fourth Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
HSAD 331	3.0 (UG) HSAD Electives	6.0 (UG) HSAD Elective	3.0 Students convert to Grad Status	
(UG) Humanities & Soc Science Elective	3.0 (UG) Humanities & Soc Science Elective	4.0 (UG) Free Electives	6.0	
(UG) HSAD Electives	6.0 (UG) Free Electives	3.0 (UG) Humanities & Soc Science Elective	3.0	
PBHL 510	4.0 PBHL 511	4.0 PBHL 500	0.0	
		(GR) Discipline MPH	4.0	
		(GR) MPH Elective	3.0	
	16	17	19	0

Fifth Year

Fall	Credits Winter	Credits Spring	Credits
(GR) Discipline Specific MPH Course	3.0 (GR) Discipline Specific MPH Course	3.0 (GR) Discipline Specific MPH Course	6.0
(GR) Integrated Learning Experience I ^{**}	3.0 (GR) Integrated Learning Experience II ^{**}	3.0 (GR) MPH Elective	3.0
(GR) MPH Elective	6.0 (GR) MPH Elective	6.0	
	12	12	9

Total Credits 238-238.5

* Students may be registered in a later term based on their co-op program (4-year or 5-year) and cycle. Select students may be eligible to replace COOP 101 with COOP 001.

** Integrated Learning Experience courses depend on the MPH major. Community Health & Prevention: CHP 750 and CHP 751. Environmental and Occupational Health: EOH 750 and EOH 751; Epidemiology: EOH 750 and EOH 751; Health Management & Policy: HMP 750 and HMP 751.

Nursing: Accelerated RN/BSN/MSN

Major: Nursing

Degree Awarded: Bachelor of Science in Nursing (BSN) and Master of Science in Nursing (MSN)

Calendar Type: Quarter

Minimum Required Credits: 75.0

Co-op Options: No Co-op (Three years)

Classification of Instructional Programs (CIP) code: 51.1601

Standard Occupational Classification (SOC) code: 29-1141

About the Program

The RN-BSN-MSN Option is a pathway for RNs who have a bachelor's degree in a field other than nursing and are interested in pursuing a fast-track option to complete a BSN and MSN. This program is also available to students who are currently in the Drexel RN to BSN completion program and are interested in continuing their studies to pursue the MSN.

Application

For the following tracks, students submit an application to the MSN program upon admission:

Eligible MSN Programs

- MSN in Clinical Nurse Leader (<http://catalog.drexel.edu/graduate/collegeofnursingandhealthprofessions/clinicalnurseleaderinadulthealthcon/>)
- MSN in Healthcare Simulation (<http://catalog.drexel.edu/graduate/collegeofnursingandhealthprofessions/healthcaresimulationmsn/>)
- MSN in Nursing Education (<http://catalog.drexel.edu/graduate/collegeofnursingandhealthprofessions/nursingedandfacrolecon/>)
- MSN in Nursing Leadership in Health Systems Management (<http://catalog.drexel.edu/graduate/collegeofnursingandhealthprofessions/nursingleadershipinhealthsystemsmanagementcon/>)
- MSN in Public Health Nursing (<http://catalog.drexel.edu/graduate/collegeofnursingandhealthprofessions/publichealthnursingmsn/>)
- MSN in Quality, Safety and Risk Management in Healthcare (<http://catalog.drexel.edu/graduate/collegeofnursingandhealthprofessions/qualitysafetyriskmanagementmsn/>)
- **Nurse Practitioner programs are not eligible.**

Admission Requirements

The students must meet the admission requirements for the MSN program.

Student's academic transcript and professional experience are reviewed and credit is applied to meet the degree requirements. Students are awarded both the BSN and MSN at the completion of the program.

*Drexel University is currently unable to admit students living in Washington state to this program.

Additional Information

For more information, contact:

Graduate Nursing Division

CNHPGraduateDivision@drexel.edu

Degree Requirements

Note: MSN Nurse Practitioner concentrations are currently not accepting students in this program.

BSN Courses

NURS 325 [WI]	Critical Issues in Nursing	4.5
NURS 335	Genetics and Genomics: Application to Nursing Practice	4.5
NURS 460	Population Health: Local & Global	6.0

Portfolio Assessment

15.0

MSN Core Courses

NURS 500 [WI]	Confronting Issues in Contemporary Health Care Environments	3.0
NURS 502	Advanced Ethical Decision Making in Health Care	3.0
NURS 544	Quality and Safety in Healthcare	3.0
RSCH 503	Research Methods and Biostatistics	3.0
RSCH 504	Evaluation and Translation of Health Research	3.0

MSN Concentration - select one from the options below	30.0-41.0
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Total Credits	75.0-86.0
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MSN Concentrations (Select one)

Clinical Nurse Leader

NURS 531	Epidemiology in Action: Tracking Health & Disease	3.0
NURS 532	Evaluation of Health Outcomes	3.0
NURS 574	Advanced Integrative Clinical Concepts	4.5
NUPR 664	The Economics and Business of Healthcare	4.5
NUPR 602	Foundations for Clinical Nurse Leader	5.0
NURS 603	Clinical Nurse Leader Capstone Immersion I	5.0
NURS 604	Clinical Nurse Leader Capstone Immersion II	5.0

Total Credits	30.0
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Clinical Research

**Applications are not currently being accepted for the Nursing Innovation Concentration*

NURS 548	Advanced Pathophysiology	3.0
NURS 549	Advanced Pharmacology	3.0
NURS 550	Advanced Health Assessment & Diagnostic Reasoning	4.0
NURS 608	Foundations of Good Clinical Practice in Clinical Research	4.0
NURS 645	Concepts of Clinical Research Management I	4.5
NURS 653	Concepts of Clinical Research Management II	4.5
NURS 654	Pre-Practicum	1.0
NURS 655	Writing for Publication: Introduction Capstone	3.0
NURS 668	Practicum, Leadership and Career Development	5.0

Total Credits	32.0
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Nurse Educator

NURS 574	Advanced Integrative Clinical Concepts	4.5
NURS 591	Foundations of Healthcare Education	3.0
NURS 606	Curriculum Design for Higher Level Cognition	3.0
NURS 613	The Role and Responsibility of the Nurse Educator	3.0
NURS 615	Assessment, Measurement and Evaluation	3.0
NURS 616	Teaching Methods in Nursing Education	3.0
IPS 617	Simulation in Healthcare Education	4.5
NURS 632	Nursing Education Practicum	6.0

Total Credits	30.0
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Nursing Innovation

**Applications are not currently being accepted for the Nursing Innovation Concentration*

NURS 564	The Business of Healthcare	3.0
NURS 586	Innovation in Advanced Nursing Practice: Theory and Application	3.0
NURS 587	Case Studies in Intra/Entrepreneurship and Innovation in Nursing	3.0
NURS 652	Innovation Capstone Project	6.0
PROJ 501	Introduction to Project Management	3.0

Electives	12.0-15.0
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Total Credits	30.0-33.0
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Nursing Leadership in Health Systems Management

PROJ 501	Introduction to Project Management	3.0
NUPR 663	Communication and Self-Awareness for Leadership	4.5
NUPR 664	The Economics and Business of Healthcare	4.5
NUPR 665	Managing Operations and Human Resources for Quality Outcomes of Care Delivery	4.5
NURS 666	Leadership in Health Systems Management Practicum	6.0

Electives	7.5
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Total Credits	30.0
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Quality, Safety and Risk Management in Healthcare

IPS 501	Legal Compliance: Structure and Implementation	4.5
IPS 504	Regulations in Health Care	4.5
IPS 505	Health Care Quality and the Legal Context	4.5
IPS 506	HIPAA: A Patient's Legal Right to Privacy	4.5
IPS 584	Analysis of Performance Standards in Healthcare Quality	3.0
IPS 585	Science of Safety, Human Factors, and System Thinking	3.0
IPS 586	Creating a Culture of Safety	2.0
IPS 601	Quality, Safety and Risk Management Capstone	5.0
Total Credits		31.0

Writing-Intensive Course Requirements

In order to graduate, all students must pass three writing-intensive courses after their freshman year. Two writing-intensive courses must be in a student's major. The third can be in any discipline. Students are advised to take one writing-intensive class each year, beginning with the sophomore year, and to avoid "clustering" these courses near the end of their matriculation. Transfer students need to meet with an academic advisor to review the number of writing-intensive courses required to graduate.

A "WI" next to a course in this catalog may indicate that this course can fulfill a writing-intensive requirement. For the most up-to-date list of writing-intensive courses being offered, students should check the Writing Intensive Course List (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/writing-intensive-courses/>) at the University Writing Program (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/>). (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/drexel-writing-center/>) Students scheduling their courses can also conduct a search for courses with the attribute "WI" to bring up a list of all writing-intensive courses available that term.

Writing-Intensive Course Requirement

A [WI], Writing Intensive, next to a graduate course in this catalog indicates that the graduate course is a writing intensive course. The graduate course is a required course in your curriculum.

Sample Plan of Study - Clinical Nurse Leader Concentration

First Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
NURS 325	4.5 NURS 460	6.0 NURS 500	3.0 NURS 502	3.0
NURS 335	4.5 Portfolio Assessment	15.0 NURS 591	3.0 NURS 606	3.0
	9	21	6	6

Second Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
NURS 544	3.0 RSCH 503	3.0 RSCH 504	3.0 NURS 574	4.5
NURS 613	3.0 NURS 615	3.0 NURS 616	3.0	
	6	6	6	4.5

Third Year

Fall	Credits Winter	Credits
IPS 617	4.5 NURS 632	6.0
	4.5	6

Total Credits 75

Nursing Faculty

Suzan Blacher, PhD, RN, CARN (*Drexel University*) RN-BSN Program. Assistant Clinical Professor. Care of the patient with substance use disorders; stigmatization of addictions.

Beth Chiatti, PhD, RN, CTN, CSN (*Widener University*). Assistant Clinical Professor. Genetics, transcultural nursing, immigrant health, human rights and global health

Danielle Devine, PhD, RN (*Villanova University*). Assistant Clinical Professor. Neurology, Critical Care.

Gloria Donnelly, PhD (*Bryn Mawr College*) *Dean Emerita*. Professor. Nursing education and a variety of mental health topics including assertiveness, stress and change.

Katie Duncan, MSN, AGPCNP-BC (*University of Pennsylvania*). Assistant Clinical Professor. Adult-gerontology primary care nurse practitioner.

Theresa Fay-Hillier, DrPH, MSN, PMHCNS-BC (*Drexel University*). Assistant Clinical Professor. Child, adolescent and family mental health nursing.

Maryann Godshall, PhD, RN, CCRN, CPN, CNE (*Duquesne University*). Associate Clinical Professor. Pediatrics, critical care, nursing education, pediatric burn patients.

Karen Goldschmidt, PhD, RN (*Wilmington University*) *Department Chair, RN-BSN Completion Department* . Assistant Clinical Professor. Professional issues, nursing education, staff development, scholarly writing.

Maureen Gonzales, MSN, WHNP (*University of Pennsylvania*). Assistant Clinical Professor. Women's health, high risk obstetrics.

Cynthia Hambach, MSN, RN, CCRN (*Widener University*). Assistant Clinical Professor. Critical care nursing.

Dana C. Kemery, EdD, MSN, RN, CNE, CEN, CPEN (*Drexel University*). Assistant Clinical Professor. Emergency nursing (adult and pediatric), nursing education.

Kayann Laughlin, MAHed, MSN, RN (*Arcadia University*). Assistant Clinical Professor. Community/public health, administration.

MaryKay Maley, DNP, APN, FNP, RN-BC (*University of Miami*). Assistant Clinical Professor. Family health, faith community nursing, health promotion/disease prevention and mindfulness-based stress reduction.

Tasha Martin-Peters, MSN, RN (*Duke University*). Assistant Clinical Professor. Pediatric critical care, pediatric cardiac care.

Pamela McGee, MSN, FNP-BC, CNE (*University of Pennsylvania*). Assistant Clinical Professor. Medical/surgical nursing, gerontology, primary care, family nurse practitioner.

Kristen McLaughlin, PhD (candidate), MSN, RN, CPNP-PC (*Widener University*). Assistant Clinical Professor. Pediatric nurse practitioner.

Nancy Murphy, PhD, RN, CNE (*University of Massachusetts Dartmouth*). Assistant Clinical Professor. Maternal child health, psychiatric/mental health; community, home and public health care.

Maura Nitka, MSN, RN, CPN (*Drexel University*). Assistant Clinical Professor. Pediatric nursing.

Jennifer Olszewski, EdD, MSN, CRNP, ANP-BC (*Drexel University*) *Interim Chair of the BSN Nursing Accelerated Career Entry Program*. Assistant Clinical Professor. Adult-gerontology nurse practitioner, dementia care.

Alis Kotler Panzera, DrNP, WHNP-BC, RN (*Drexel University*) *Director of Nursing Student Success*. Assistant Clinical Professor. Board certified women's health nurse practitioner, reproductive health and female urology.

Genevieve Porrecca, MSN, RN, PCCN (*Holy Family University*). Assistant Clinical Professor. Critical care

Catherine Quay, MSN, RN-BC (*Pace University*). Assistant Clinical Professor. Board certified gerontology, medical/surgical nursing, dementia.

Leland Rockstraw, PhD, RN (*Drexel University*). Clinical Professor. Graduate Nursing-Advanced Roles. Adult orthopedic/surgical, emergency care, critical care, and trauma/surgery intensive care and healthcare simulation.

Al Rundio, PhD, DNP, RN, APRN, CARN-AP, NEA-BC, FNAP, FIAAN, FAAN (*Chatham College*). Clinical Professor. Transference of dependencies from bariatric surgical procedures, relapse prevention in chemically addicted clients.

Deanna Lynn Schaffer, PhD RN, ACNS-BC (*Widener University*). Assistant Clinical Professor. Recruitment and retention in higher education, nursing leadership, nursing practice environment, and nursing informatics.

Meaghan Shattuck, MSN, RN, OCN (*Holy Family University*). Assistant Clinical Professor. Oncology certified, medical/surgical nursing and education.

Helen Teng, PhD, RN (*University of Pennsylvania*). Assistant Clinical Professor. Community health, immigrant health.

Ann Thiel-Barrett, DNP, RN, FNP-BC, CNE (*Chatham University*). Assistant Clinical Professor. Family health nursing.

Denise Way, DNP, MSN, RN (*Wilmington University*). Assistant Clinical Professor. Osteoporosis prevention throughout the lifespan.

Joyce Welliver, MSN, CRNP, CAC, RN (*Drexel University*) *Director of Faculty Role Development and Clinical Performance*. Assistant Clinical Professor. Psychiatric/mental health nursing, adult health

Mary Yost, PhD, RN (*Widener University*) *Interim Chair of the BSN Co-Op Program*. Assistant Clinical Professor. Trauma/Critical Care and Emergency Nursing.

Mary Ann Zimmer, RN, MSN, CPN (*Villanova University*). Assistant Clinical Professor. Pediatrics, adult medical-surgical nursing, nursing education.

Bridge Program in Nutrition Sciences

Major: Nutrition and Foods & Nutrition and Dietetics

Degree Awarded: Bachelor of Science (BS) and Master of Science (MS)

Calendar Type: Quarter

Minimum Required Credits: 225.0

Co-op Options: None

BS Classification of Instructional Programs (CIP) code: 30.1901

BS Standard Occupational Classification (SOC) code: 29-1031

MS Classification of Instructional Programs (CIP) code: 51.4101

MS Standard Occupational Classification (SOC) code: 29-1031

About the Program

The BS/MS Bridge Program in Nutrition Sciences is an academic track that enables students to complete both a bachelor's degree and master's degree in five years in preparation for becoming a Registered Dietitian/Registered Dietitian Nutritionist (RD/RDN). Students pursue the BS in Nutrition and Foods (<https://drexel.edu/cnhp/academics/undergraduate/BS-Nutrition-and-Foods/>) during their first four years of study and the MS in Nutrition and Dietetics (<https://drexel.edu/cnhp/academics/graduate/MS-Nutrition-and-Dietetics/>) during the final year of study. Students are eligible for the program at the end of their second year of study if they have achieved a grade of B or better in all required courses and have a GPA of 3.0 or higher.

The Bachelor of Science in Nutrition and Foods is awarded following completion of year four (first year of graduate study), and the Master of Science in Nutrition and Dietetics is awarded following year five. Experiential learning is provided during the master's degree to fulfill the Accreditation Council for Education in Nutrition and Dietetics Future Graduate model program. Upon completion, graduates are eligible to sit for the Registered Dietitian Nutritionist entry-level exam without completing an additional dietetic internship.

Additional Information

For more information about Nutrition Sciences, visit the College of Nursing and Health Professions' Nutrition Sciences Department (<http://drexel.edu/cnhp/academics/departments/Nutrition-Sciences/>).

Admission Requirements

The BS/MS Bridge Program in Nutrition Sciences is available to high-achieving students in the BS Nutrition and Foods program who plan to become Registered Dietitians/Registered Dietitian Nutritionists. Current students may apply for admission to the program after they have completed the first two years of the undergraduate degree program. Transfer students may apply if they have fulfilled comparable coursework at another accredited college or university and meet all other admission criteria. Applicants must have earned a grade of B or better in all required courses in the first two years of the program.

Degree Requirements

Communication and English

COM 230	Techniques of Speaking	3.0
COM 310 [W]	Technical Communication	3.0
or COM 345	Intercultural Communication	
ENGL 101	Composition and Rhetoric I: Inquiry and Exploratory Research	3.0
or ENGL 111	English Composition I	
ENGL 102	Composition and Rhetoric II: Advanced Research and Evidence-Based Writing	3.0
or ENGL 112	English Composition II	
ENGL 103	Composition and Rhetoric III: Themes and Genres	3.0
or ENGL 113	English Composition III	

Physical and Biological Sciences

BIO 122	Cells and Genetics	4.5
CHEM 101	General Chemistry I	3.5
CHEM 103	General Chemistry III	4.5
CHEM 108	Health Chemistry I	3.0
HSCI 101	Anatomy and Physiology I	5.0
HSCI 102	Anatomy and Physiology II	5.0
HSCI 103	Anatomy and Physiology III	5.0

Humanities and Social Sciences

SOC 101	Introduction to Sociology	3.0
or ANTH 101	Introduction to Cultural Diversity	
PSY 101	General Psychology I	3.0

Management and Computing

HRM 455	Hospitality Human Resources Management	3.0
ORGB 300 [W]	Organizational Behavior	4.0

Foods, Food Safety, and Food Production

CULA 115	Culinary Fundamentals	3.0
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FDSC 154	Science of Food and Cooking	4.0
FDSC 270	Microbial Food Safety and Sanitation	4.0
FDSC 350	Experimental Foods: Product Development	3.0
HRM 215	Commercial Food Production	4.0
Mathematics and Statistics		
HSCI 345	Statistics for Health Sciences	4.5
MATH 101	Introduction to Analysis I	4.0
Nutrition and Food Sciences		
NFS 100	Nutrition, Foods, and Health	2.0
NFS 101	Introduction to Nutrition & Food	1.0
NFS 202	Nutrition: Wellness and Weight Management	3.0
NFS 203	Nutrition II: Nutrition in the Lifecycle	4.0
NFS 230	Intermediate Nutrition	4.0
NFS 265	Professional Issues in Nutrition and Foods	3.0
NFS 345	Foods and Nutrition of World Cultures	3.0
NFS 415	Advanced Nutrition I: Macronutrition	4.0
NFS 416	Advanced Nutrition II: Micronutrients	4.0
NFS 494	Senior Project I	2.0
NFS 495	Senior Project II	2.0
NFS 496	Senior Project III	2.0
Additional BS Requirements		
CIVC 101	Introduction to Civic Engagement	1.0
UNIV NH101	The Drexel Experience	1.0
Free electives		41.0
Shared BS/MS Coursework		
FDSC 506	Food Composition & Behavior	3.0
NFS 510	Profession of Dietetics	3.0
NFS 530	Macronutrient Metabolism	3.0
NFS 531	Micronutrient Metabolism	3.0
NFS 525	Nutritional Assessment Through the Life Cycle	3.0
NFS 526	Lifecycle Nutrition	3.0
NFS 601	Research Methods	3.0
NFS 609	Individualized Supervised Practice Pathway *	3.0
NFS 690	Community Nutrition	3.0
MS Degree Requirements		
NFS 543	Medical Nutrition Therapy I	3.0
NFS 544	Medical Nutrition Therapy II	3.0
NFS 545	Nutrition in Critical Care	3.0
NFS 546	World Nutrition	3.0
NFS 550	Foodservice Systems Management	3.0
NFS 609	Individualized Supervised Practice Pathway *	12.0
NFS 630	Nutrition Counseling	3.0
NFS I699	Independent Study in NFS	3.0
Graduate elective		3.0
Total Credits		225.0

* NFS 609 is taken multiple times for a total of 15.0 credits

Writing-Intensive Course Requirements

In order to graduate, all students must pass three writing-intensive courses after their freshman year. Two writing-intensive courses must be in a student's major. The third can be in any discipline. Students are advised to take one writing-intensive class each year, beginning with the sophomore year, and to avoid "clustering" these courses near the end of their matriculation. Transfer students need to meet with an academic advisor to review the number of writing-intensive courses required to graduate.

A "WI" next to a course in this catalog may indicate that this course can fulfill a writing-intensive requirement. For the most up-to-date list of writing-intensive courses being offered, students should check the Writing Intensive Course List (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/writing-intensive-courses/>) at the University Writing Program (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/>). (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/drexel-writing-center/>) Students scheduling their courses can also conduct a search for courses with the attribute "WI" to bring up a list of all writing-intensive courses available that term.

Sample Plan of Study

No Co-Op Option

First Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
CHEM 108	3.0 CHEM 101	3.5 BIO 122	4.5 VACATION	
ENGL 101 or 111	3.0 CIVC 101	1.0 CHEM 103	4.5	
NFS 100	2.0 CULA 115	3.0 ENGL 103 or 113	3.0	
NFS 101	1.0 ENGL 102 or 112	3.0 FDSC 154	4.0	
PSY 101	3.0 MATH 101	4.0		
UNIV NH101	1.0			
	13	14.5	16	0

Second Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
HSCI 101	5.0 FDSC 270	4.0 COM 345	3.0 COM 230	3.0
NFS 230	4.0 HSCI 102	5.0 HSCI 103	5.0 HSCI 345	4.5
NFS 265	3.0 NFS 202	3.0 NFS 203	4.0 SOC 101 or ANTH 101	3.0
(UG) Free elective	3.0 (UG) Free elective	4.0 (UG) Free electives	3.0 (UG) Free electives	7.0
	15	16	15	17.5

Third Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
HRM 215	4.0 FDSC 350	3.0 HRM 455	3.0 Student converts to Graduate status	
NFS 415	4.0 NFS 416	4.0 NFS 345	3.0	
NFS 494	2.0 NFS 495	2.0 NFS 496	2.0	
(UG) Free electives	9.0 ORGB 300 (UG) Free elective	4.0 (UG) Free electives 6.0	9.0	
	19	19	17	0

Fourth Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
FDSC 506	3.0 NFS 525	3.0 NFS 510	3.0 NFS 543	3.0
NFS 530	3.0 NFS 526	3.0 NFS 609*	3.0 NFS 550	3.0
NFS 531	3.0 NFS 601	3.0 NFS 690	3.0 NFS 609*	3.0
	9	9	9	9

Fifth Year

Fall	Credits Winter	Credits Spring	Credits
NFS 544	3.0 NFS 545	3.0 NFS 546	3.0
NFS 630	3.0 NFS 609*	3.0 NFS 609*	3.0
NFS 609*	3.0 (GR) Graduate Elective	3.0 NFS I699	3.0
	9	9	9

Total Credits 225

* NFS 609 is taken multiple times for a total of 15.0 credits

Nutrition Sciences Faculty

Nyree Dardarian, MS, RD, LDN, CSSD, FAND (*Drexel University*) Director, Center for Nutrition & Performance. Clinical Assistant Professor. Energy expenditure; sports nutrition

Angelo Del Parigi, MD (*University of Bari, Italy*) Courtesy Appointment. Visiting Research Professor.

Jonathan Deutsch, PhD (*New York University*). Professor. Social and cultural aspects of food, culinary education, culinary improvisation, recipe and product development; food sustainability.

RoseAnn DiMaria-Ghalili, PhD, MSN, BSN, CNSC (*New York University, School of Education, Division of Nursing*). Associate Professor. Nutrition and surgical recovery to improve the care of older adults undergoing surgery; nutrition assessment, inflammation, and health outcomes.

Susan Ettinger, PhD, RD, DABN, CDN (*Columbia University*) Courtesy Appointment. Visiting Research Professor.

Debi Page Ferrarello, RN, MSN, MS, IBCLC, RLC (*Jefferson University, Arcadia University*). Instructor. Human lactation

Andrea Judge, MPH, IBCLC, RLC (*University of North Carolina*). Clinical Instructor. Human lactation

Beth L. Leonberg, MS, MA, RDN, CSP, FAND, LDN (*Colorado State University, Rowan University*) Director, Didactic Program in Dietetics . Associate Clinical Professor. Pediatric nutrition.

Rachelle Lessen, MS, RD, IBCLC, LDN (*Arcadia University*). Instructor. Human lactation

Michael Lowe, PhD (*Boston College*). Professor. Prevention and treatment of eating disorders and obesity; effects of appetitive responsiveness and dietary restraint on eating regulation; psychobiology of obesity-proneness; empirical foundations of unconscious processes.

Brandy-Joe Milliron, PhD (*Arizona State University*). Associate Professor. The development and evaluation of modifications in the natural environment to promote healthier living; farm to table school initiatives

Jennifer Nasser, PhD, RD, FTOS (*Rutgers University*). Associate Professor. Dopamine-mediated mechanisms of food intake regulation in humans and its impact on metabolic homeostasis, especially as it applies to obesity, eating disorders and aging. Implementation of methods to maximize nutrient density of food provided in community food services.

Irene E. Olsen, PhD, RD, LDN (*Tufts University*) *Courtesy Appointment*. Visiting Research Professor.

Kavitha Penugonda, PhD (*Kansas State University*) *Manager, Nutritional Biochemistry Laboratory*. Assistant Clinical Professor. Nutrient bioavailability in foods; nutritional supplements on health

Jennifer Quinlan, PhD (*North Carolina State University*). Professor. Food microbiology; microbiological quality and safety of produce, dairy and meat products in markets in high vs. low socioeconomic areas, Bacillus and Clostridium spores in food processing.

Sobhana Ranjan, PhD, RD (*University of Delhi, India*) *Courtesy Appointment*. Visiting Research Professor.

Patricia A. Shewokis, PhD (*University of Georgia*). Professor. Roles of cognition and motor function during motor skill learning; role of information feedback frequency on the memory of motor skills, noninvasive neural imaging techniques of functional near infrared spectroscopy (fNIRS) and electroencephalography (EEG) and methodology and research design.

Deeptha Sukumar, PhD (*Rutgers University*). Associate Professor. Vitamin D and magnesium and bone mineral density; obesity and bone mineral density.

Stella Lucia Volpe, PhD, RD, ACSM-CEP, FACSM (*Virginia Polytechnic Institute and State University*) *Visiting Research Professor, courtesy appointment*. Professor. Nutrition Sciences. Prevention of obesity and diabetes across the lifespan; mineral metabolism and exercise; energy balance; sports nutrition.

Emeritus Faculty

Donna H. Mueller, PhD (*Temple University*). Associate Professor Emeritus. Clinical nutrition; pediatric nutrition; nutrition in pulmonary diseases, especially cystic fibrosis; nutrition in developmental delay; dental nutrition; dietetic education and professional development.

Minor in Addictions Counseling

About the Minor

The minor in addictions counseling provides students with an understanding of current best-practice approaches in counseling interventions aimed at assisting people in recovery from substance use disorders. This minor appeals to students in a wide range of Drexel majors, including psychology, criminal justice, health services administration, sociology, health sciences, education, general humanities and social science, nutrition and foods, as well as other fields of study.

Academic Requirements

The minor includes six required courses and two additional BACS undergraduate courses of the student's choosing. Students may elect to begin coursework in this minor at any point in their undergraduate education. It is strongly suggested that students pursuing this minor consult with faculty in the Department of Counseling and Family Therapy (<http://drexel.edu/cnhp/faculty/counseling-and-family-therapy/>) program for advice in selecting electives that will best meet their goals in this minor.

Required Courses

BACS 220	Counseling Theory and Practice	3.0
BACS 234	Introduction to Addictive Disorders	3.0
BACS 301	Group Counseling I	3.0
BACS 304	Cognitive and Behavioral Counseling I	3.0
BACS 310	Recovery and Relapse Prevention	3.0
BACS 367	Advanced Counseling Intervention	3.0

Select any two additional undergraduate BACS courses

6.0

Total Credits**24.0**

Minor in Culinary Arts

About the Minor

The minor in Culinary Arts is designed for students pursuing a variety of majors who also have an interest in food and cuisine. The required courses introduce the major cuisines and develop necessary technical culinary skills and fundamental knowledge of foods and food preparation. Students are able to select elective courses in various cuisines or can explore other areas of the field through topics including gastronomy, the kitchen garden, and food writing.

Program Requirements

Required Courses

CULA 115	Culinary Fundamentals	3.0
CULA 120	Techniques and Traditions I	3.0
CULA 303	Global Cuisine Studio (Course taken twice for 6 credits total)	6.0
HRM 215	Commercial Food Production	4.0
Select three of the following:		8.0
CULA 121	Techniques and Traditions II	
CULA 125	Foundations of Professional Baking	
CULA 216	A la Carte	
CULA 220	Patisserie I	
CULA 225	Patisserie II	
CULA 320	Advanced Culinary Studio	
CULA 325	Garde Manger Laboratory	
CULA 316	Butchery Laboratory	
CULA 330	Charcuterie	
CULA 400	Directed Studies with a Master Chef	
CULA 405 [WI]	Culture and Gastronomy I	
CULA 410	Culture and Gastronomy II	
CULA 425	The Kitchen Garden	
CULA 426	The Kitchen Garden: Summer	
CULA 427	The Kitchen Garden: Fall	
HRM 415	Fine Dining and Services	

Total Credits**24.0**

Writing-Intensive Course Requirements

In order to graduate, all students must pass three writing-intensive courses after their freshman year. Two writing-intensive courses must be in a student's major. The third can be in any discipline. Students are advised to take one writing-intensive class each year, beginning with the sophomore year, and to avoid "clustering" these courses near the end of their matriculation. Transfer students need to meet with an academic advisor to review the number of writing-intensive courses required to graduate.

A "WI" next to a course in this catalog may indicate that this course can fulfill a writing-intensive requirement. For the most up-to-date list of writing-intensive courses being offered, students should check the Writing Intensive Course List (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/writing-intensive-courses/>) at the University Writing Program (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/>). (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/drexel-writing-center/>) Students scheduling their courses can also conduct a search for courses with the attribute "WI" to bring up a list of all writing-intensive courses available that term.

Minor in Exercise Science

About the Minor

The minor in Exercise Science from the Health Sciences Department helps prepare students for graduate studies in Exercise Physiology, Kinesiology, Athletic Training, Physical Therapy, and other health-related professions. In addition, the minor provides undergraduates with the foundational knowledge, skills, and abilities for professional certifications offered by the American College of Sports Medicine, National Strength and Conditioning Association, and other agencies. These certifications are often required of graduates seeking employment in the fitness industry.

This is an undergraduate minor available to Drexel students in good standing.

Program Requirements

Foundational Courses

HSCI 103	Anatomy and Physiology III *	5.0
or BIO 201 & BIO 202	Human Physiology I and Human Physiology Laboratory	

Core Courses

HSCI 325	Exercise Physiology	4.0
HSCI 380	Strength and Conditioning	4.0
HSCI 381	Exercise for Clinical Populations	4.0
HSCI 425	Exercise Testing and Prescription	4.0

Electives

Select from the following		3.0
HSCI 326	Applied Anatomy and Kinesiology	
HSCI 410	Psychology of Physical Activity	
HSCI 415	Musculoskeletal Pathophysiology	
HSCI 490	Senior Research Project	
HSCI T480	Special Topics in Health Sciences	
NFS 100	Nutrition, Foods, and Health	
NFS 101	Introduction to Nutrition & Food	
NFS 325	Nutrition & Exercise Physiology	

Total Credits

24.0

* If BIO 201 & BIO 202 combination, the total Foundational Course credits will be 6.0.

Minor in Food Science

About the Minor

The minor in Food Science is designed for students interested in applying the basic sciences to the world's largest industry. The minor should be especially attractive to students in chemistry, chemical engineering, nutrition, and biological sciences as it provides a background for excellent employment and post-baccalaureate study opportunities in areas closely allied to their basic disciplines.

The minor consists of 25.0 credits. Interested students should consult with a culinary science faculty member to schedule courses appropriate for their background and goals.

Program Requirements

Required Courses

FDSC 154	Science of Food and Cooking	4.0
FDSC 270	Microbial Food Safety and Sanitation	4.0
FDSC 350	Experimental Foods: Product Development	3.0
FDSC 450	Food Microbiology	3.0
FDSC 451	Food Microbiology Laboratory	2.0
FDSC 456	Food Preservation Processes	3.0
FDSC 460	Food Chemistry	3.0
FDSC 461	Food Analysis	3.0

Total Credits

25.0

Minor in Food Studies

About the Minor

This minor seeks to capture and help students navigate the breadth of course offerings that touch upon food systems. Because food systems can be studied through many different lenses, students can adapt this Food Studies minor to their program of study. For example, students interested in public health policy issues can create a minor of hands-on, community-based culinary classes, public health, and nutrition classes. Students are encouraged to work under guidance from hospitality, culinary, and food science faculty.

Program Requirements

Required Courses

CULA 115	Culinary Fundamentals	3.0
CULA 405 [WI]	Culture and Gastronomy I	3.0

FDSC 120	Food and the Senses	3.0
Food Studies Electives		
Select a minimum of 15.0 credits from the list below:		15.0
CULA 125	Foundations of Professional Baking	
CULA 303	Global Cuisine Studio	
CULA 410	Culture and Gastronomy II	
CULA 412	Food Writing	
ENTP 250	Ideation	
ENTP 270	Social Entrepreneurship	
ENTP 440	Launch It!: Early Stage	
HRM 160	Laws of the Hospitality Industry	
HRM 395	Economics of Tourism	
NFS 100 & NFS 101	Nutrition, Foods, and Health and Introduction to Nutrition & Food	
NFS 215	Nutritional Chemistry	
NFS 217	Nutrient Quality & Composition	
NFS 230	Intermediate Nutrition	
NFS 345	Foods and Nutrition of World Cultures	
NFS 391	Community Nutrition	
PBHL 101	Public Health 101	
PBHL 306	Introduction to Community Health	
PSCI 369	The Politics of Food	
Total Credits		24.0

Writing-Intensive Course Requirements

In order to graduate, all students must pass three writing-intensive courses after their freshman year. Two writing-intensive courses must be in a student's major. The third can be in any discipline. Students are advised to take one writing-intensive class each year, beginning with the sophomore year, and to avoid "clustering" these courses near the end of their matriculation. Transfer students need to meet with an academic advisor to review the number of writing-intensive courses required to graduate.

A "WI" next to a course in this catalog may indicate that this course can fulfill a writing-intensive requirement. For the most up-to-date list of writing-intensive courses being offered, students should check the Writing Intensive Course List (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/writing-intensive-courses/>) at the University Writing Program (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/>). (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/drexel-writing-center/>) Students scheduling their courses can also conduct a search for courses with the attribute "WI" to bring up a list of all writing-intensive courses available that term.

Minor in Health Services Administration

About the Minor

The minor in Health Services Administration is designed for students interested in preparing for careers in health services administration while pursuing a major in another area. In addition, the curriculum can prepare students wishing to pursue graduate studies in health administration, business administration, public health, and law.

A grade of C (2.0) or better must be earned for each of these courses in this minor for it to be counted (HSAD 210, HSAD 310, and HSAD 334) and then a solid C or better in one of HSAD 330, HSAD 340, or HSAD 345.

Program Requirements

Required Courses

HSAD 210	Health-Care Ethics I	3.0
HSAD 310	Introduction to Health-Systems Administration	3.0
HSAD 334	Management of Health Services	3.0

Complete 1 of the following courses:

HSAD 330	Financial Management in Health Care	
HSAD 340	Leadership in Health Services Administration	
HSAD 345	Ethics in Health Care Management	

Health Services Administration (HSAD) electives

Complete 4 of the following courses:		12.0
HSAD 215	Physician Practice Management	
HSAD 225	Perspectives on Disability	
HSAD 305	Aging & the Law	

HSAD 308	The Affordable Care Act
HSAD 309	Advanced Health-Care Ethics
HSAD 312	Development of World Health Care
HSAD 313	Evolution of Health Care in the United States
HSAD 315	Interdisciplinary Health Services
HSAD 316	Health Care across Cultures
HSAD 317	Religious Views on Health Care
HSAD 318	Health and Vulnerable Populations
HSAD 319	Women and the Health Professions
HSAD 320	Managed Health Care
HSAD 321	Health-Care Human Resources
HSAD 322	Health-Care Law
HSAD 323	Introduction to Long-Term Care Administration
HSAD 324	Health Technology and Ethical Responsibility
HSAD 325	Issues in the Health Care System
HSAD 326	Holism and Health Care
HSAD 327	Partnerships in Health Care
HSAD 328	Health Care for Diverse Groups
HSAD 329	Health Care and the Media
HSAD 330	Financial Management in Health Care
HSAD 331 [WI]	Non-profits and Health Care
HSAD 332 [WI]	Health-Care Marketing
HSAD 336	Urban Health Care
HSAD 337	Health Care/Quality Improvement
HSAD 340	Leadership in Health Services Administration
HSAD 341	Risk Management in Healthcare Organizations
HSAD 342	Children and Health Care
HSAD 343	Health and Illness in Film
HSAD 345	Ethics in Health Care Management
HSAD 346	Mental Illness in the Media and Arts
HSAD 351	Ethical Issues in Reproduction
HSAD 353	Public Health Ethics
HSAD 357	Health Information Systems
HSAD 360	Applied Healthcare Leadership
HSAD 362	Madness, Mental Health and Psychiatry in the Modern West
HSAD 363	Health Care Privacy & Security
HSAD 365	Advanced Healthcare Finance *
HSAD 366	Global Aging Intensive Course Abroad
HSAD T180	Special Topics in Health Services Administration
HSAD T280	Special Topics in Health Services Administration
HSAD T380	Special Topics in Health Services Administration
HSAD T480	Special Topics in Health Services Administration

Total Credits
24.0

* Prerequisite is HSAD 330.

Writing-Intensive Course Requirements

In order to graduate, all students must pass three writing-intensive courses after their freshman year. Two writing-intensive courses must be in a student's major. The third can be in any discipline. Students are advised to take one writing-intensive class each year, beginning with the sophomore year, and to avoid "clustering" these courses near the end of their matriculation. Transfer students need to meet with an academic advisor to review the number of writing-intensive courses required to graduate.

A "WI" next to a course in this catalog may indicate that this course can fulfill a writing-intensive requirement. For the most up-to-date list of writing-intensive courses being offered, students should check the Writing Intensive Course List (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/writing-intensive-courses/>) at the University Writing Program (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/>). (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/drexel-writing-center/>) Students scheduling their courses can also conduct a search for courses with the attribute "WI" to bring up a list of all writing-intensive courses available that term.

Minor in Nutrition

About the Minor

The minor in Nutrition is designed for students interested in enhancing their major with an application in human nutrition. The Nutrition minor should be especially attractive to students in the premedical, biological, and behavioral neurological sciences because it provides a background for enhanced employment and post-baccalaureate study opportunities in areas closely allied to their basic disciplines.

The minor consists of 25.0 credits. Interested students should consult with a faculty member within the Department of Nutrition Sciences to schedule courses appropriate for their background and goals.

Program Requirements

Required courses

NFS 100 & NFS 101 or NFS 202	Nutrition, Foods, and Health and Introduction to Nutrition & Food Nutrition: Wellness and Weight Management	3.0
NFS 203	Nutrition II: Nutrition in the Lifecycle	4.0
NFS 315	Nutrition in Chronic Disease	4.0
Select four of the following elective courses:		14.0
NFS 202	Nutrition: Wellness and Weight Management	
NFS 205	Introduction to Human Lactation	
NFS 230	Intermediate Nutrition	
NFS 305	Clinical Issues in Human Lactation	
NFS 320	Pediatric Nutrition	
NFS 325	Nutrition & Exercise Physiology	
NFS 405	Public Policy of Breastfeeding	
NFS 415	Advanced Nutrition I: Macronutrition	
NFS 416	Advanced Nutrition II: Micronutrients	
NFS T480	Special Topics in NFS	

Total Credits

25.0

Minor in Psychiatric Rehabilitation

About the Minor

The minor in Psychiatric Rehabilitation provides students with an understanding of how people with serious mental illnesses learn skills and acquire resources that promote recovery and wellness. The curriculum covers a variety of evidence-based practices that support healthy living, learning, working, and socializing. This minor appeals to students in a wide range of Drexel majors, including psychology, criminology and justice studies, health services administration, sociology, health sciences, education, general humanities and social science, nutrition and foods, as well as other fields of study.

Academic Requirements

The minor requires completion of 24.0 credits, comprised of six required courses and two additional BACS undergraduate courses of the student's choosing. Students may elect to begin coursework in this minor at any point in their undergraduate education. It is strongly suggested that students pursuing this minor consult with faculty in the Behavioral Health Counseling (<https://drexel.edu/cnhp/faculty/profiles/>) program for advice in selecting electives that will best meet their goals in this minor.

Program Requirements

Required Courses

BACS 220	Counseling Theory and Practice	3.0
BACS 236 [WI]	Psychiatric Rehabilitation Principles and Practices	3.0
BACS 320	Crisis and Brief Intervention	3.0
BACS 325	Psychopharmacology for Counselors	3.0
BACS 414	Co-Occurring Disorders	3.0
BACS 420	Psychiatric Rehabilitation Competencies	3.0
Select any two additional undergraduate BACS Courses		6.0

Total Credits

24.0

Writing-Intensive Course Requirements

In order to graduate, all students must pass three writing-intensive courses after their freshman year. Two writing-intensive courses must be in a student's major. The third can be in any discipline. Students are advised to take one writing-intensive class each year, beginning with the sophomore year, and to avoid "clustering" these courses near the end of their matriculation. Transfer students need to meet with an academic advisor to review the number of writing-intensive courses required to graduate.

A "WI" next to a course in this catalog may indicate that this course can fulfill a writing-intensive requirement. For the most up-to-date list of writing-intensive courses being offered, students should check the Writing Intensive Course List (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/writing-intensive-courses/>) at the University Writing Program (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/>). (<http://drexel.edu/coas/academics/departments-centers/english-philosophy/university-writing-program/drexel-writing-center/>) Students scheduling their courses can also conduct a search for courses with the attribute "WI" to bring up a list of all writing-intensive courses available that term.

Certificate in Food Entrepreneurship

Certificate Level: Undergraduate

Admission Requirements: High School Diploma

Certificate Type: Certificate

Number of Credits to Completion: 19.0

Instructional Delivery: Campus

Calendar Type: Quarter

Expected Time to Completion: 1 year

Financial Aid Eligibility: Not aid eligible

Classification of Instructional Program (CIP) Code: 12.0509

Standard Occupational Classification (SOC) Code: 11-9051

About the Program

This program prepares undergraduate students to design and launch a new food product or concept from initial consumer research and conceptualization, through the development and testing of a value proposition and business model. The certificate can be taken on its own or as an adjunct to degree studies in business, entrepreneurship, nutrition, hospitality, or related fields. Both consumer packaged goods and foodservice offerings are considered.

Program Requirements

CULA 115	Culinary Fundamentals	3.0
ENTP 105	Entrepreneurial Thinking	3.0
ENTP 205	Ready, Set, Fail	3.0
ENTP 440	Launch It!: Early Stage	3.0
FDSC 154	Science of Food and Cooking	4.0
FDSC 350	Experimental Foods: Product Development	3.0
Total Credits		19.0

Sample Plan of Study

First Year			
Fall	Credits Winter	Credits Spring	Credits
ENTP 105	3.0 CULA 115	3.0 ENTP 440	3.0
FDSC 154	4.0 ENTP 205	3.0 FDSC 350	3.0
	7	6	6

Total Credits 19

Certificate in Medical Billing and Coding

Certificate Level: Undergraduate

Admission Requirements: High school transcript or equivalent minimum

Certificate Type: Certificate

Number of Credits to Completion: 30.0

Instructional Delivery: Online

Calendar Type: Quarter

Expected Time to Completion: 1.25 years

Financial Aid Eligibility: Aid eligible

Classification of Instructional Program (CIP) Code: 51.0713

Standard Occupational Classification (SOC) Code: 29-2071

About the Program

This online certificate program is designed for those who want to begin medical billing, coding, and medical record auditing careers or prepare for certification exams in these areas. Students will learn principles of medical billing and coding related to the four main coding manuals: CPT, ICD-10-CM, ICD-10-PCS, and HCPCS. The curriculum covers principles of medical billing and coding for in-patient and outpatient hospitals.

Program Requirements

Required Courses

Select one option:		6.0
DMBC 120 & DMBC 200	Practical Applications in Electronic Health Records and Practical Applications in Health Care Reimbursement	
HSCI 125 & HSCI 202	Medical Terminology and Regional Anatomy	
DMBC 320	Pathophysiology for Medical Billers and Coders	3.0
DMBC 321	Pharmacology for Medical Billers & Coders	3.0
DMBC 322	Diagnostic Coding I	3.0
DMBC 323	Procedural Coding I	3.0
DMBC 324	Diagnostic Coding II	3.0
DMBC 325	Procedural Coding II	3.0
DMBC 326	Understanding Insurance, Admin & the Law for Med Billers & Coders	3.0
DMBC 327	Virtual Lab for Medical Billers & Coders	3.0
Total Credits		30.0

Sample Plan of Study

First Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
Select one option:	6.0 DMBC 320	3.0 DMBC 322	3.0 DMBC 324	3.0
DMBC 120 & DMBC 200	DMBC 321	3.0 DMBC 323	3.0 DMBC 325	3.0
HSCI 125 & HSCI 202				
	6	6	6	6

Second Year

Fall	Credits
DMBC 326	3.0
DMBC 327	3.0
	6

Total Credits 30

Additional Information

For more information, please contact:

Drexel University Online

DUonline@drexel.edu

877-215-0009

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