



Clinical Life Science

(Perfusion Technology)

at Benedictine University

Why study Clinical Life Science with a Perfusion Technology Concentration?

Perfusionists are highly skilled professionals who operate life-support equipment such as heart-lung machines, intra-aortic balloon pumps and ventricular assist devices during open-heart surgery. Integral members of the cardiovascular surgical team, perfusionists are present in the operating room when it is necessary to support or replace a patient's cardiopulmonary and circulatory functions. Perfusionists also provide services for venovenous bypass for liver transplantation, isolated limb or organ chemotherapy perfusion, cardiopulmonary bypass-supported cardiac catheterization procedure; extracorporeal membrane oxygenation and blood salvaging for orthopedic or general surgery procedures.

The 3+2 program between Benedictine University's Clinical Life Science undergraduate program and Rush University's master's program in Perfusion Technology combines didactic, diverse clinical experience and research in adult and pediatric settings. The program uniquely features an emphasis on management techniques relative to the hospital perfusion department. Upon successful completion of the certification exam, perfusionists are certified as clinical perfusionists by the American Board of Cardiovascular Perfusion.

PROGRAM HIGHLIGHTS

- Rush University offers one of the few master's programs in Perfusion Technology in the country.
- Students achieve competency in academic and clinical skills in perfusion technology, attain additional skills in education and research and learn management techniques relative to hospital perfusion departments.
- Students receive an outstanding education from experienced perfusion technologists, cardiovascular and transplant surgeons and other health care professionals.

ACCREDITATION

The Rush University Perfusion Technology program is fully accredited by the Accreditation Committee for Perfusion Education of the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

What careers are available with a degree in Perfusion Technology?

Perfusion technology program graduates are highly desired and successfully employed in a variety of settings, including teaching institutions, major medical centers, community hospitals and private physician and surgeon groups. Salaries for perfusionists range from \$58,000 for beginners to \$100,000 for experienced perfusionists. Many perfusionists are eligible for advancement to chief perfusionist and perfusion program director. Perfusionists with research skills may collaborate on projects with physicians and researchers.

How does the program work?

When you major in Clinical Life Science at Benedictine University, you will follow a three-year sequence of liberal arts and science courses. You are required to maintain a GPA of 3.0 or better. Before March 1 of your junior year, you will have the opportunity to apply to Rush University's Master of Science program. Successful completion of the entire 3+2 program leads to a Bachelor of Arts degree from Benedictine University and a Master of Science degree from Rush University.

(Please visit the departmental website at www.rushu.rush.edu/perfusion for a complete list of admissions requirements.)

Recommended Program

Bachelor of Arts in Clinical Life Science (Perfusion Technology)

FRESHMAN

Writing Colloquium	3
College Trigonometry (MATH 111)	3
Principles of Organismal Biology	3
General Chemistry I and Lab	4
Artistic and Creative (QCA) course	3

Research Writing	3
Principles of Biology	3
Principles of Biology Lab	1
General Chemistry II and Lab	4
Religions/Theological (QRT) course	3
	14

JUNIOR

Basic Speech	3
Human Anatomy	4
Social Scientific II: Political, Global and Economic Systems (QPE)	3
Human Dignity and the Common Good (IDS 301)	3
Electives	4
	17
Apply to Rush University	
Human Physiology and Lab*	4-5
Biostatistics	3
Philosophical (QPL) course***	3
Electives	6
	16-17

SOPHOMORE

Genetics and Lab*	3-4
College Physics I and Lab	4
Social Scientific I: Individuals, Organizations and Societies (QIO) course	3
Catholic and Benedictine Intellectual Traditions (IDS 201)	3
	13-14
College Physics II and Lab	4
Introduction to Organic Chemistry and Biochemistry and Lab	4
Historical (QHT) course	3
Literary and Rhetorical (QLR) course	3
	14

SENIOR

Introduction to Perfusion Technology	2
Anatomy	2
Evidence-based Management II: Managerial Epidemiology	2
Advanced Physiology II	1.33
Pathophysiology of Cardiopulmonary Bypass I	3.33
Seminar I	2
Pharmacology	2
Pathophysiology of Cardiopulmonary Bypass II	3.33
Seminar II	3.33
Project Design and Research	2
Advanced Topics: Cardiovascular Physiology	1.33
Health Care in America	1.33
Biostatistics	2
Advanced Physiology	2.67
	30.65**

*Either Genetics lab or Human Physiology lab must be taken.

**To be transferred back to Benedictine to complete the Bachelor of Arts in Clinical Life Science.

***General Ethics/Philosophical.

Second year of the master's program at Rush University

An additional year is then completed at the master's level at Rush University to complete the requirements for the Master of Science degree.

Acceptance into the program at Rush University is not automatic and requires application.

Students who may wish to attend professional school or graduate schools should take Organic Chemistry (8 semester credit hours) and Biochemistry 361 (3 semester credit hours) instead of the Introduction to Organic Chemistry and Biochemistry courses.