

THE CLINICAL PERFUSION PROFESSION

Clinical Perfusionists are skilled allied health professionals, qualified by academic and clinical education, who deal with all the phases of regulating and controlling blood flow outside the body. The perfusionist operates life-sustaining equipment during any medical situation where it is necessary to support or temporarily replace the patient's circulatory or respiratory function.

The perfusionist has diverse responsibilities that include the mechanical support of a patient's circulation and pulmonary function during medical procedures such as open-heart surgery, transplantation, and emergency medicine. The perfusionist is an integral member of the cardiovascular surgery team involved in infant and adult cardiac surgery.

UNDERGRADUATE PREPARATION

Most clinical perfusion programs require the completion of a bachelor's degree prior to admission to their program. Typically, any major is acceptable. The most common undergraduate majors among Clinical Perfusion graduate students include biology, chemistry, biochemistry and molecular biology, and nursing. In selecting a college major, consider how you will satisfactorily complete the prerequisite courses for your desired perfusionist graduate program, in addition to graduation requirements at Nebraska Wesleyan.

REQUIRED AND RECOMMENDED COURSES

Although there is no required undergraduate major for entering the field of clinical perfusion, each institution will have a required list of pre-requisite coursework that must be completed. Some programs accept AP/CLEP/other transfer credits, while other programs do not. Students should contact their desired graduate school directly for specific pre-requisite requirements, transfer equivalencies, or other questions. To the right is a list of courses and credits needed for clinical perfusion school based on Rush University's (Chicago, IL) requirements.

Courses	Credits
Math (including Statistics)	6
Biological & Physical Sciences (including Physics)	16
English	6
Social Sciences	14
Humanities	8
Medical Terminology	3

BEYOND ACADEMICS

Pre-Clinical Perfusion students are encouraged to participate in experiences, such as leadership activities, volunteer opportunities, research, and shadowing of professionals, which will help prepare them for graduate school and the perfusion profession. Activities beyond the classroom play a significant role in a student's application to a professional school program. Such experiences demonstrate a commitment to and knowledge of the profession. In particular, shadowing clinical perfusionists will help students learn more about the daily activities of the profession.

At Nebraska Wesleyan, student organizations that may be interesting or useful to students looking into clinical perfusion include the American Chemical Society, Biology Club, and Pre-Health Club. Additionally, consider Beta Beta Beta (Biology Honorary) and Sigma Theta Tau (Nursing Honorary).

Some clinical perfusion schools require a minimum number of observation hours for admission. For example, students who intend to enter the University of Nebraska Medical Center (UNMC)'s clinical perfusion program are required to complete a minimum of three (3) clinical observations. Documentation of the observation experiences is required.

CLINICAL PERFUSION EDUCATION

There are several accredited schools in the United States that offer various clinical perfusion programs and degrees. In Nebraska, the UNMC offers a master's program in Clinical Perfusion. Other schools offer bachelor's degrees, master's degrees, and/or certification. The total number of credit hours may vary from school to school. Some institutions offer joint degrees, post-doctoral residencies, and fellowships. Practical experience is important, so many clinical perfusion programs have dedicated time spent on clinical education and other training opportunities, rather than just focusing on classroom and lab study.

APPLICATION & ADMISSION

1. Students applying to clinical perfusion programs will follow the specific application procedures for each program to which they wish to apply. For a list of accredited clinical perfusion programs, see the [Commission on Accreditation of Allied Health Education Programs \(CAAHEP\)](#).
2. Some schools require the GRE, while others do not. Check the school website for all application requirements.
3. To be considered, most clinical perfusion programs require at least three letters of recommendation, personal statements, verified clinical observations, and interviews.

Regional Schools	Credit Requirement	Avg. GRE Score	Avg. GPA	Length of Program	Degree Offered
UNMC	Bachelor's Degree	Not required	3.0 min.	21 months	Master's Degree
University of Iowa	Bachelor's Degree	Not required	3.2 min.	21 months	Certificate
Rush University (Chicago, IL)	Bachelor's Degree	Not required	3.0 min.	21 months	Master's Degree
Milwaukee School of Engineering	Bachelor's Degree	Required; above 50 th percentile	3.0 min	2 years	Master's Degree

ADDITIONAL RESOURCES

[Explore Health Careers](#)

[The American Society of Extra-Corporeal Technology \(AmSECT\)](#)

Current students can use the [Career Assistance Network](#) to connect with NWU alumni in the clinical perfusion profession.



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