Health Careers:

A resource for undergraduate students in the Health Sciences

* **Administration/Management**: Salary Range: **$92,000 - $100,000**
  + [Healthcare Administration](#F1)
  + [Healthcare Technologies Management](#F2)
* **Biomedical Sciences**: Salary Range: **$75,000 - $91,410**
  + [Bioinformatics](#F3)
  + [Biomedical Engineering](#F4)
  + [Biomedical Scientist](#F5)
  + [Biostatistics](#F6)
  + [Health Informatics](#F7)
* [**Cardiovascular Perfusion**](#F8): Median Salary: **$124,000**
* [**Dental**](#F9): Median Salary: **$75,000**
  + Dental Assisting
  + Dental Hygiene
* **Food Science**: Salary Range: **$46,000 - $74,000**
  + [Dietitian](#F10)
  + [Food Scientist](#F11)
  + [Nutritionist](#F12)
* [**Genetics Counselor**](#F13): Median Salary: **$80,370**
* [**Gerontology**](#F14): Salary Range: **$35,692 – 98,350**
* [**Health Science Librarian**](#F15): Median Salary: **$64,900**
* **Laboratory**: Salary Range: **$85,000 - $89,000**
  + [Medical Laboratory Scientist](#F16)
  + [Pathology Assistant](#F17)
* [**Nuclear Medicine Technologist**](#F18): Salary Range: **$54,410 - $75,660**
* **Nursing**: Salary Range: **$50,000 - $179,480**
  + [Associate Degree in Nursing](#F19)
  + [Bachelor’s Degree in Nursing](#F20)
  + [Master’s in Nursing](#F21)
  + [Nurse Anesthetist](#F22)
  + [Nurse Midwife](#F23)
  + [Nurse Practitioner](#F24)
* **Pharmacy**: Salary Range: **$84,000 - $149,000**
  + [Pharmacist](#F25)
  + [Pharmacologist](#F26)
* **Physical Medicine and Rehabilitation**: Salary Range: **$50,000 - $89,000**
  + [Exercise Pathologist](#F27)
  + [Master’s in Kinesiology](#F28)
  + [Medical Physiology](#F29)
  + [Occupational Therapist](#F30)
  + [Physical Therapist](#F31)
  + [Therapeutic Recreation Specialist](#F32)
* [**Podiatric Physician**](#F33): Median Salary: **$205,600**
* [**Psychologist/Counselor**](#F34): Salary Range: **$60,000 - $102,530**
* **Public Health**: Salary Range: **$32,000 - $117,420**
  + [Epidemiologist](#F35)
  + [Environment Occupational Health](#F36)
  + [Global Health and Medicine](#F37)
  + [Infection Prevention](#F38)
* **Research**: Salary Range: **$68,000 - $100,000**
  + [Clinical and Translational Scientist](#F39)
  + [Molecular Epidemiologist](#F40)
  + [Molecular Medicine](#F41)
  + [Stem Cell Biology and Regenerative Medicine](#F42)
* **[Respiratory Therapy](#F43)**: Median Salary: **$73,000**
* [**Speech Pathology**](#F44): Median Salary: **$82,000**

**Healthcare Administration**

* **Overview:** Health administrators oversee all aspects of administrative operations in a healthcare facility.
* **Requirements:** License is not required; some employers require certification: America College of Health Care Administrators or Professional Association of Health Care Office Management
* **Salary:**
  + US median: $92,000
  + MN median: $94,000
* **Programs:**
  + *University of Minnesota – School of Public Health – Masters of Healthcare Administration (MHA)* <https://www.sph.umn.edu/academics/degrees-programs/mha/master-healthcare-administration/>
    - Admission Requirements:
      * Bachelor’s degree with 3.0 minimum GPA
      * GRE of 300, or GMAT of 500
      * TOEFL for non-native English speakers
      * Recommended Coursework
        + Statistics\*\*
        + Accounting
        + Microeconomics
    - Length:
      * 21-month program
      * 60 credits total (51 Required, 9 Electives)
    - Cost:
      * MN Resident: $60,840
      * Nonresident: $79,920
  + *Des Moines University – Medicine & Health Sciences – Master of Healthcare Administration* **Online Program** <https://www.dmu.edu/mha/>
    - Admission Requirements:
      * Bachelor’s degree, preferred with a GPA of 3.0 or higher
      * No GRE or GMAT required
      * TOEFL for non-native English speakers
    - Length:
      * Full-time 2 years to complete
      * Part-time 3 years to complete
      * 48-credit program
    - Cost:
      * Per credit hour: $718

**Healthcare Technologies Management**

* **Overview:** Healthcare technologies managers combine their knowledge of science, technology, and business in guiding various healthcare facilities through its day-to-day activities.
* **Salary**:
  + US median: $100,000
  + MN median: $110,000
* **Programs:**
  + *Marquette University – College of Engineering – Healthcare Technologies Management Program* <https://www.marquette.edu/engineering/healthcare-technologies-management/>
    - Admission Requirements:
      * Bachelor’s degree in engineering, science, or a clinical field with a minimum GPA of 3.0
      * GRE, GMAT, or MCAT
      * TOEFL for nonnative English speakers
    - Length:
      * 16 courses representing 37 credit hours
      * Enroll part-time or full-time
      * Full-time students complete the program in 3 semesters
    - Cost:
      * $1,205 per credit hour
  + *Marymount University – Health Care Management/Information Technology Master of Science Dual Degree* <https://www.marymount.edu/Academics/School-of-Business-and-Technology/Graduate-Programs/Dual-Degree-Programs/Health-Care-Management-Information-Technology-(M-S>
    - Admission Requirements: (Marymount University takes a holistic approach to application review)
      * Bachelor’s Degree
      * TOEFL, IELTS, PTE for nonnative English speakers
    - Length:
      * 63 credits
    - Cost:
      * $1,060 per credit

**Bioinformatics**

* **Overview:** A master’s in bioinformatics can give an individual a strong base in biotechnology, computer programming, statistics, database management, and computational mathematics; preparing them for careers in bioinformatic, biotechnology, pharmaceutical, and vaccine industries.
* **Salary:**
  + US median: $75,000
  + MN median: $73,000
* **Programs:**
  + *The University of Texas – Health Sciences Center at Houston – School of Biomedical Informatics – Master of Science in Biomedical Informatics* **Online Program** <https://sbmi.uth.edu/prospective-students/academics/masters.htm#bmi>
    - Admission Requirements:
      * Bachelor’s Degree
      * GPA – no minimum requirement but the majority of accepted applications have a GPA of 3.00 or higher
      * TOEFL (87 minimum) or IELTS (7 minimum) for non-native English speakers
    - Length: 39 semester credit hours
    - Cost:
      * Resident: $254 per credit
      * Nonresident: $863 per credit
  + *The University of Maine – The Graduate School of Biomedical Science and Engineering – Professional Science Master’s Program in Bioinformatics* **Online Program** <https://online.umaine.edu/grad/professional-science-masters-in-bioinformatics/>
    - Admission Requirements:
      * Students are expected to come from a cell\*\* and molecular\*\* biology background and require more intensive training in math, computer, and information science, or come from a math, computer and information science background and require more intensive training in cell and molecular biology
      * Bachelor’s degree
      * TOEFL, IELTS, or PTE Academic for non-native English speakers
    - Length:
      * 30 credit - program
    - Cost:
      * Resident: $461 per credit
      * Nonresident: $576 per credit

**Biomedical Engineering**

* **Overview:** Biomedical engineers use their skill and knowledge in biology, engineering, and biomechanical principles to design, develop, and evaluate biological and health systems and products.
* **Salary:**
  + US median: $88,000
  + MN median: $91,000
* **Programs:**
  + *University of Minnesota – College of Science and Engineering – Master’s in Biomedical Engineering* <https://cse.umn.edu/bme/masters>
    - Admission Requirements:
      * Bachelor’s degree in engineering or in a physical or biological science related degree
      * No minimum GPA but at least a 3.2 is preferred
      * GRE is optional
      * TOEFL, IELTS, PTE Academic, or Cambridge C1 Advanced for non-native English speakers
      * Prerequisites: (Applicant’s with a bachelor’s degree in engineering do not need any specific coursework completed before applying)
        + Calculus I
        + Calculus II
        + Linear Algebra
        + Differential Equations
        + One year of Physics\*\*, preferably calculus-based
    - Length:
      * MS Plan A with thesis: 20 credits of coursework with 10 thesis credits, 2-year program
      * MS Plan B with project: 28 course credits with 2-3 credits of the Plan B Project, Full-time students complete within 1.5 years, Part-time students complete within 5 years
      * MS Plan C with coursework only: 30 credits of coursework, Full-time students complete within 3 semesters, Part-time students complete within 5 years
    - Cost:
      * Resident:
        + Part time, per credit: $1465
        + Full time, 6-14 credits: $8790
        + Each credit over 14: $1465
      * Nonresident:
        + Part time, per credit: $2267
        + Full time, 6-14 credits: $13,602
        + Each credit over 14: $2267
  + *The University of Iowa – College of Engineering – Roy J. Carver Department of Biomedical Engineering – Master of Science in Biomedical Engineering* <https://bme.engineering.uiowa.edu/graduate-program>
    - Admission Requirements:
      * Bachelor’s degree with a minimum GPA of 3.0
      * GRE: 310 (verbal + quantitative)
      * TOEFL: 85 (IBT version) for non-native English speakers
      * Prerequisites: (Students who have a bachelor’s degree in engineering or a related field such as mathematical, physical, or life sciences do not need any specific coursework completed before applying)
        + Calculus I
        + Calculus II
        + Matrix Algebra
        + Differential Equations
        + Full year of calculus-based Physics\*\*
        + Introductory Engineering coursework such as Statics and Dynamics
    - Length:
      * MS Thesis degree – 24 credits with 6 thesis credits, usually completed in 4 semesters
      * MS Non-thesis degree – 24 (3000-level) credits and 6 (5000-level) credits, usually completed in 3-4 semesters
    - Cost: based on students enrolled for 9 or more semester hours in the fall and spring
      * Resident: $11,906.50
      * Nonresident: $30,853.50

**Biomedical Sciences**

* **Overview:** A master’s in biomedical sciences can help enhance admission to and performance in professional healthcare programs. It can also help develop competence in directed research for advanced technical positions in medical research laboratories, industry, government and so on.
* **Salary:**
  + US median: $81,000
  + MN median: $83,000
* **Programs:**
  + *University of Wisconsin-Madison – School of Medicine and Public Health – Master of Science in Biotechnology* <https://www.ms-biotech.wisc.edu/program.cfm>
    - Admission Requirements:
      * Bachelor’s Degree with minimum GPA of 3.0
      * GRE not required
      * Work Experience
      * TOEFL, IELTS, or MELAB for non-native English speakers
      * Prerequisites:
        + Two semesters of Biology\*\* or other related life science courses
    - Length: 32 credit program – four semesters total
    - Cost: Total program: $42,000
  + *The University of Illinois at Chicago – College of Medicine – Master of Science in Medical Biotechnology* <https://catalog.uic.edu/gcat/colleges-schools/medicine/mbt/ms/>
    - Admission Requirements:
      * Bachelor’s degree in a science or engineering related field with minimum GPA of 3.0
      * GRE, MCAT, DAT, or PCAT
      * TOEFL, IELTS<, or PTE Academic for non-native English speakers
      * Prerequisites:
        + College Mathematics
        + General Biology
        + Biochemistry\*\*
        + General Chemistry\*\*
        + Organic Chemistry\*\*
    - Length: 34 credits
      * Research Project Option: 20 required course credits and 6 elective credits plus 8 credits in a master’s Research Project
      * Coursework Only Option: 20 required course credits and 14 elective credits
    - Cost:
      * Resident:
        + 12 or more credit hours: $9384
        + 6 to 11 credit hours: $7290
        + 1 to 5 credit hours: $3128
        + 0 credit hours: $1564
      * Nonresident:
        + 12 or more credit hours: $15,818
        + 6 to 11 credit hours: $10,545
        + 1 to 5 credit hours: $5273
        + 0 credit hours: $1564
  + *The University of North Texas – Health Science Center at Fort Worth – Graduate School of Biomedical Sciences – Master of Science in Cell Biology, Immunology, and Microbiology* <https://www.unthsc.edu/graduate-school-of-biomedical-sciences/cell-biology-immunology-and-microbiology/>
    - Admission Requirements:
      * Bachelor’s degree
      * GRE
      * TOEFL or IELTS for non-native English speakers
      * Prerequisites: No specific prerequisite courses required, but a strong science back round with lab experience in highly recommended
    - Length: 30 credit program, usually completed within 2 years
    - Cost: per year
      * Resident: $5018
      * Nonresident: $10,897

**Biostatistics**

* **Overview:** A master’s in biostatistics will give individuals the analytical, biological, and communication skills necessary for contribution to the rapidly expanding and diverse field of biomedical research.
* **Salary:**
  + US median: $85,000
  + MN median: $89,000
* **Programs:**
  + *University of Minnesota – School of Public Health – Master of Public Health in Biostatistics* <https://www.sph.umn.edu/academics/degrees-programs/mph/biostatistics/>
    - Admission Requirements:
      * Bachelor’s degree with minimum GPA of 3.0
      * TOEFL or IELTS for non-native English speakers
      * Prerequisites:
        + Three semesters of Calculus (including multivariable calculus)
        + One semester of linear Algebra
        + Two semesters of probability and mathematical statistics is recommended
        + Experience with a programming language (eg. R, Java, C, Python) is recommended
        + Exposure to applied statistics is recommended
      * Length:
        + 42 credit-program
      * Cost of degree:
        + Resident: $42,588
        + Nonresident: $55,944
  + *University of Nebraska – Master of Public Health with a concentration in Biostatistics* **Online Program** <https://online.nebraska.edu/program/university-of-nebraska-medical-center-public-health-mph-biostatistics-master-mph-1436403146126>
    - Admission Requirements:
      * Bachelor’s degree
      * TOEFL for non-native English speakers
      * GRE \*Temporary Suspension of GRE Requirement\*
      * Prerequisites – must have a grade of “B” or higher:
        + Statistics\*\*
        + Differential Calculus
        + Integral Calculus
    - Length:
      * 42 credits
    - Cost:
      * $597 per credit

**Health Informatics**

* **Overview:** A masters in a health informatics program aims to cover the many aspects of IT communications and data management within the healthcare field (also known as Health Information Technology). For many jobs in the health informatics field, you will need a combination of IT and nursing/clinical care skills. A hybrid job requiring specific skill sets from different disciplines.
  + To achieve a Master’s in Health Informatics you can complete either a Bachelor in IT, Science, MDs, BSNs, RNs, or a Health-related degree.
* **Certifications:** No specific certification is required to work in the health informatics sector but is highly recommended to boost your resume. A few certificate programs that can further your qualifications for a particular job are:
  + Advanced Health Informatics Certification (AHIC)
  + Registered Health Information Administration (RHIA)
  + Registered Nurse Board Certified (RN-BC)
  + Certified Professional in Healthcare Information and Management Systems (CPHIMS)
* **Potential Jobs:**
* **Clinical informaticist:** would be responsible for organizing and managing patient data. They prepare the information for health care providers, staff, and patients.
  + **Nurse informaticist:** Nurse informaticists are liaisons between nurses and developers. They study patterns of activity to help developers build tools that nurses can use.
  + **Informatics manager:** The informatics manager is responsible for making sure systems are working when they are needed and to make sure they are in regulation with federal and state guidelines.
* **Median Salary:** $77,000
* **Programs:**
* *The Johns Hopkins Master of Science in Bioinformatics* program studies the topics and applied methods of computational modeling, molecular biology, systems biology, structural biology, proteomics, genomic sequencing and genomic analysis, microarrays, and microarray analysis. The degree covers not only the theoretical aspects of the field, but also the practical side of bioinformatics. <https://advanced.jhu.edu/academics/graduate-degree-programs/bioinformatics/>
  + - 11-course
    - Length of program: 16-24 months
    - Tuition: $4,675 per course
    - Prerequisites:
      * Two semesters of Organic Chemistry\*\* (or 410.302 Bio-Organic Chemistry)
      * One semester of Biochemistry\*\* (or 410.601 Biochemistry)
      * Introduction to Programming Using Java, C++, or C (or 605.201 Introduction to Programming Using Java)
      * Data Structures (or 605.202 Data Structures)
      * One course in Probability and Statistics (or 410.645 Biostatistics) and
      * Calculus
      * 3.0 GPA or higher.
      * For more information on prerequisites: <https://advanced.jhu.edu/academics/graduate/ms-bioinformatics/admission-application-requirements/>
* *University of Minnesota Master of Science in Bioinformatics and Computational Biology* offers coursework in five core areas: 1) biochemistry, molecular and cell biology; 2) database, data mining, and computing; 3) informatics, analysis, and machine learning; 4) mathematics, biostatistics, and statistics and 5) computational and systems biology. <https://onestop2.umn.edu/pcas/viewCatalogProgram.do?programID=7521>
  + The master’s is offered under two plans:
    - Plan A (with thesis).
    - Plan B (with project).
* Length of program: 30 credits.
* Requires summer semesters.
* Must submit GRE test score.
* Strong background in the quantitative sciences and varied backgrounds in the life/health sciences.

**[Cardiovascular Perfusion](http://ri.search.aol.com/_ylt=A0geK.hDmexa2pUAriFpCWVH;_ylu=X3oDMTBybGY3bmpvBGNvbG8DYmYxBHBvcwMyBHZ0aWQDBHNlYwNzcg--/RV=2/RE=1525483972/RO=10/RU=http%3a%2f%2fwww.liu.edu%2fHome%2fCWPost%2fAcademics%2fSchools%2fSHPN%2fDept%2fBiomedical%2fGraduate-Programs%2fMS-CP/RK=0/RS=kJ5.HTOW4M5lHGF4EHCrIsAJ9N8-)**

* **Overview:** A Cardiovascular Perfusionist plays a vital role in the operating room. They operate extracorporeal circulation equipment that assists in open-heart surgery and other cardiac-related surgeries. These machines are there to keep the patient alive when the heart cannot fully function.
* **Requirements:** M.S. in Cardiovascular Science and pass certification exam given by the American Board of Cardiovascular Perfusion (ABCP)
* **Median Salary:** $124,000
* **Programs:**
  + *Mayo Clinic School of Health Sciences/Midwestern University* offers a clinical rotation program in Phoenix, Arizona. You will receive a Master of Science in Cardiovascular Science. <https://www.midwestern.edu/academics/degrees-and-programs/master-of-science-in-cardiovascular-science-az.xml>
    - Admission Requirements:
      * Bachelor’s degree - 2.75 Cumulative GPA and 2.75 Science GPA and completed required science classes
      * Completed GRE
      * Prerequisites
        + Social and Behavioral Sciences (e.g., Sociology\*\*, Psychology\*\*, Anthropology\*\*) -6 semester hours
        + Biology\*\* with lab – 8 hours
* General Chemistry\*\* (inorganic) with lab - 4 hours
* Anatomy\*\* - 3 hours
* Physiology\*\* - 3 hours
* Biochemistry\*\* - 3 hours
* Physics\*\* - 3 hours
* Applied Mathematics\*\* (college algebra or higher) - 3 hours
* English (emphasizing composition, communication, and language skills) - 6 hours
* General Education Electives (recommended courses include fine arts, humanities, ethics, philosophy, foreign language, business principles, computer information systems, economics, and cultural anthropology) - 25 hours
* Total Hours: 61
* Length: 7 quarters including 48 weeks clinical rotation, full-time.
* Course program tuition: $44,000
  + *Cleveland Clinic* offers a Cardiovascular Perfusion Program that results in a Certificate of Completion and eligibility to take the ABCP certification exam. <https://my.clevelandclinic.org/departments/heart/medical-professionals/fellowship-residency/cardiovascular-perfusionist>
    - Admission Requirements:
      * Bachelor’s degree with 3.0 Cumulative GPA and completed prerequisite course work
      * Prerequisites:
        + Biology\*\*: First full year, 8 credit hours, 2 semesters with labs
        + Chemistry\*\*: First full year, 8 credit hours, 2 semesters with labs
        + Physics\*\*: First full year, 8 credit hours, 2 semesters with labs
        + Human Anatomy and Physiology\*\*: 8 credit hours, 2 semesters with labs
        + Biochemistry\*\*: 4 credit hours with lab
        + Statistics\*\*: 3 credit hours
        + Pharmacology: 1 credit hour
        + Research Methodology: 1 credit hour or integral component of a course
    - Total Tuition: $32,000
    - Length: Full-time, 18-month (4 term) program

**Dental Assisting/Dental Hygiene**

* **Overview:** A master’s in dental assisting/dental hygiene can help advance your career as a dental hygienist with career options in education, public health, leadership, and management.
* **Requirements:** Dental Hygiene License
* **Salary:**
  + US median: $75,000
  + MN median: $77,000
* **Programs:**
  + *University of Minnesota – School of Dentistry – Master of Science in Dental Hygiene* <https://www.dentistry.umn.edu/degrees-programs/dental-hygiene/master-science>
    - Admission Requirements:
      * Graduation from a school or program in dental hygiene accredited by the Commission on Dental Accreditation
      * Bachelor’s degree with minimum GPA of 3.0
      * GMAT – minimum score of 500, or GRE – with a minimum quantitative score of 153 and a minimum verbal of 150
      * TOEFL for non-native English speakers
      * Prerequisites – Statistics\*\*
    - Length:
      * Two Track Options:
        + Education track – 33 credit hours
        + Management track – 36-41 credit hours
    - Cost:
      * $989 per credit hour
  + *University of Bridgeport – Fones School of Dental Hygiene – Master of Science in Dental Hygiene* <https://www.bridgeport.edu/academics/schools-colleges/fones-school-dental-hygiene/dental-hygiene-ms>
    - Admission Requirements:
      * Active Dental Hygiene License
      * Bachelor’s Degree in dental hygiene or a related field
      * Cumulative undergraduate GPA of 3.0 or higher
      * English proficiency test for non-native English speakers
    - Length:
      * Two-year program: 34-36 credits
    - Cost:
      * Tuition (per credit hour) $700
      * General Fee (9 or more credits) $1,025
      * General Fee (5-8 credits) $620
      * General Fee (0-4 credits) $390
      * Health Science Program Fee $50
      * One-time Orientation Fee $200

**Dietitian**

* **Overview:** Dietitians help diagnosis eating disorders and assist in meal planning to help manage symptoms of health problems. They promote healthy eating habits to help prevent illness or disease.
* **Requirements:** Complete 1,200 hours of a dietetic internship, become a registered dietitian by passing the Commission on Dietetic Registration (CDR) exam. Some states may require a state license.
* **Salary:**
  + US median: $60,000
  + MN median: $66,000
* **Programs:**
  + *University of Minnesota – School of Public Health – Public Health Nutrition MPH* <https://www.sph.umn.edu/academics/degrees-programs/mph/public-health-nutrition/>
    - Admission Requirements:
      * Bachelor’s Degree with minimum GPA of 3.0
      * TOEFL or IELTS for non-native English speakers
      * GRE no longer required (may still submit if was taken)
      * Prerequisites:
        + One Human Biology\*\* course
        + Two General Chemistry\*\* courses
        + One Organic Chemistry\*\* course
        + One Biochemistry\*\* course
        + One Social Science\*\* course
        + One Introduction to Human Nutrition course
        + One Microbiology\*\* course
        + One Human Physiology\*\* course
        + One Introduction to Food Science course
        + One Food Systems Operations Management course
        + \*Note\*: students that have a Verification Statement from an accredited Didactic Program in Dietetics have met all the prerequisites of this program
    - Length: 64 Credit Program
    - Cost of Degree:
      * Resident: $55,770
      * Nonresident: $73,260
  + *University of Illinois at Chicago – College of Applied Health Sciences – Master’s in Nutrition* <https://ahs.uic.edu/kinesiology-nutrition/admissions-and-programs/ms-in-nutrition/what-to-expect-in-the-nutrition-coordinated-program/>
    - Admission Requirements:
      * Bachelor’s Degree with minimum GPA of 3.0
      * TOEFLiBT, IELTSAcademic, PTEAcademic, or TOEFLrPT for non-native English speakers
      * Prerequisites:
        + English Composition I\*\* and II
        + Speech: One course with emphasis on Public Speaking
        + Mathematics: One course in Algebra or higher\*\*
        + Psychology: One course in introductory Psychology\*\* or Human Behavior
        + Sociology: One course in Introduction to Sociology\*\*
        + Foods: One course with laboratory
        + Nutrition: One general course
        + Cell Biology\*\* with lab
        + Inorganic Chemistry: two courses with lab
        + Organic Chemistry\*\*: One course, no lab required
        + Biochemistry\*\*: one course, no lab required
        + Anatomy\*\* and Physiology\*\*: two courses with labs
      * Length: 2 ½ to 3-year program with 79 credits (includes the 13 credits for supervised practice)
      * Cost:
        + Resident: $6,560 per semester
        + Nonresident: $12,994

**Food Scientist**

* **Overview:** Food scientists research, study, create or improve food and food processes to ensure that it is safe for consumption.
* **Requirements:** Certification or licensure is not required, but some employers may require a certain certification.
* **Salary:**
  + US median: $74,000
  + MN median: $75,000
* **Programs:**
  + *University of Minnesota – Department of Food Science and Nutrition – Food Science Master’s Degree* <https://fscn.cfans.umn.edu/graduate-programs/food-science>
    - Admission Requirements**:**
      * Bachelor’s Degree with GPA of 3.0 minimum
      * GRE
      * TOEFL for non-native English speakers
    - Length:
      * Master’s Plan A: 2-year 20 course credits with 10 credits master’s thesis
      * Master’s Plan B: 2-year 20 credits with 10 additional credits in place of the thesis
    - Cost:
      * Resistant
        + Part time per credit: $1465
        + Full time 6-14 credits: $8790
        + Each credit over 14: $1465
      * Nonresident
        + Part time per credit: $2267
        + Full time 6-14 credits: $13602
        + Each credit over 14: $2267
  + *Michigan State University – College of Agriculture and Natural Resources – Department of Food Science and Human Nutrition* [*https://reg.msu.edu/AcademicPrograms/ProgramDetail.aspx?Program=0354*](https://reg.msu.edu/AcademicPrograms/ProgramDetail.aspx?Program=0354)
    - Admission Requirements:
      * Bachelor’s Degree with GPA of 3.0 minimum
      * GRE
      * Prerequisites
        + Physics\*\*
        + Inorganic Chemistry
        + Organic Chemistry\*\*
        + Biochemistry\*\*
        + Mathematics through integral calculus
        + Microbiology\*\*
    - Length:
      * 2-year program with 32 credits: Plan A with thesis, Plan B without thesis
    - Cost:
      * Resident: per credit: $785.75
      * Nonresident: per credit: $1544

**Nutritionist**

* **Overview:** Nutritionists help teach patients about general food nutrition and health benefits of foods and give nutritional food advise. Nutritionists take on a more holistic approach and are not registered dietitians.
* **Requirements:** Each state varies on its requirement for licensure or certification
* **Salary:**
  + US median: $46,000
  + MN median: $49,000
* **Programs:**
  + *Northwestern Health Sciences University – Master of Health Science in Applied Clinical Nutrition* [*https://www.nwhealth.edu/academics/nutrition/*](https://www.nwhealth.edu/academics/nutrition/)
    - Admission Requirements
      * Bachelor’s degree with 2.5 minimum GPA
      * Completion of an undergraduate Biology\*\*, Chemistry\*\*, or Physiology\*\* course with a minimum of a “C” grade
    - Length: 30 credit - program
    - Cost: $12,480
  + *Logan University – Masters of Science in Nutrition and Human Performance:* **Online Program** <https://www.logan.edu/academics/online-masters-nutrition-human-performance/>
    - Admission Requirements:
      * Bachelor’s degree with 2.5 minimum GPA
      * Prerequisites:
        + 6 semester credit hours in either physics\*\*, kinesiology, exercise science, biomechanics, or statistics\*\*
        + 6 semester credit hours of biological science\*\*
    - Nutrition Degree Tracks:
      * Sports and Fitness Nutrition
      * Nutrition Wellness
      * Heath Education and Promotion
      * Registered Dietitian
      * Integrative Nutrition and Practice
    - Length: 36-39 credit program, depending on which nutrition degree track is chosen
    - Cost: $450 per credit hour

**Genetics Counselor**

* **Overview:** Genetics Counselors are specialized in genetics and counseling to help and support their patients. Most genetic counselors work in a hospital or clinic and work alongside obstetricians, oncologists and/or other doctors. Genetic Counselors work closely alongside researchers to interpret test and provide detailed reports to physicians
* **Requirements:** 
  + Bachelor's Degree (typically in Science, Biology, Social Science or other related field).
  + Master’s in Genetic Counseling, must be accredited by the [Accreditation Council for Genetic Counseling](http://gceducation.org/Pages/default.aspx) (ACGC).
  + Certification through the [American Board of Genetic Counseling](http://www.abgc.net/ABGC/AmericanBoardofGeneticCounselors.asp) (ABGC)
* **Salary:** 
  + Median Salary in USA: $80,370.
  + Median Salary in Minnesota: $81,623.
* **Programs:** 
  + *University of Minnesota Graduate Studies in Genetic Counseling-* is one of the 46 graduate programs in North America and provides its students with the necessary skills to succeed as a genetic counselor. Employment for Genetic Counseling is projected to grow 41% from 2012 to 2022. <https://cbs.umn.edu/genetic-counseling/home>
    - Accredited by the Accreditation Council of Genetic Counseling.
    - Accepts 10-12 students a year.
    - Offers Teaching Assistantships.
    - Offers collaboration with Mayo Clinic.
    - Prerequisites:
      * GPA over 3.0 (3.4 is average GPA of accepted students).
      * GRE Score
      * Coursework in Biochemistry\*\*, General Genetics\*\*, Intro Statistics\*\* and Probability, and Intro to Psychology\*\*.
      * Volunteer work recommended.
      * For more information on prerequisites: <https://cbs.umn.edu/genetic-counseling/admissions>
* *Northwestern University Graduate Program in Genetic Counseling-* is one of the top graduate programs in North America. It creates a strong development of professional skills used, preparing students in multiple clinical settings and specialties. <https://www.cgm.northwestern.edu/education/graduate-genetic-medicine/index.html>
  + Approximately 250 students apply each year, 77 are given interviews.
  + 20 students are accepted into the program each year.
  + Bachelor's degree in either biology, chemistry, psychology, social work, nursing, or a related field.
  + Undergraduate GPA of 3.0 or above.
  + GRE scores required before December of application year.
  + Class prerequisites and other information can be found here: <https://www.cgm.northwestern.edu/education/graduate-genetic-medicine/admissions.html>

**Gerontology**

* **Overview:** [Gerontology](https://www.gradschools.com/programs/gerontology) is an interesting field of study that examines the aging process and the problems that they may encounter. Typically studying individuals aged 65 years and helping to treat physical, mental, emotional, and social problems.
* **Potential Jobs** after Bachelor in Gerontology:
* Recreation Aide (median salary$35,692/year)
* Personal Support Worker (median salary $47,980/year)
* **Potential Jobs** after specified Masters in Gerontology:
* Medical Scientist (median salary: $82,090/year)
* Epidemiologist (median salary: $ 69,660/year)
* Medical and Health Care Service Managers (median salary $98,350/year)
* Registered Practical Nurse (median salary $43,358/year)
* Registered Nurse (median salary $67,873/year)
* **Programs:**
* [*Minnesota State University - Mankato*](https://www.gradschools.com/graduate-schools-in-united-states/minnesota/minnesota-state-university-mankato-main-campus?programid=225365)[*Gerontology*](https://www.gradschools.com/form/2753/225365)*- Long Term Care Administration* is for graduate students and others who have earned a four-year degree who want to become a licensed Nursing Home Administrator can pursue the Long-Term Care Administration Certificate. At the end of the two-year degree you will earn your Board of Examiners for Nursing Home Administrators (BENHA) set for Minnesota. <https://mankato.mnsu.edu/academics/academic-catalog/graduate/aging-studies#Degrees>
* 23 total credits
* *Minnesota State University – Mankato – Aging Studies-Graduate Certificate*
* Fully online program
* Admission Requirements:
* Bachelor’s Degree with 3.00 minimum GPA
* No GRE required
* 15 total credits
* *Minnesota State University – Mankato – Aging Studies-MS*
* Program can be fully online
* Admission Requirements:
* Bachelor’s Degree with 3.00 minimum GPA
* No GRE required
* 34 total credits
* *University of Michigan*- *Adult-Gerontology Acute Care Nurse Practitioner program* will prepare you to excel as an acute care nursing leader in the most complex situations and environments. <https://nursing.umich.edu/academics/specialties/adult-gerontology-acute-care-nurse-practitioner>
* Prerequisites:
* Earned a BS in nursing or are in the process of completing a BS in nursing from a CCNE, AACN or NLN-accredited institution. Note: Successful completion of the BS in nursing must occur prior to the desired term of admission.
* Minimum B average in all undergraduate coursework (this includes all courses taken to satisfy the degree requirements for a BS in nursing; an overall B average is usually equivalent to a 3.0 GPA on a 4.0 scale).
* Tuition: $807/credit in-state; $832/credit out-of-state
* Credit Requirements: 47 credits
* Program Length: 5 semesters
* [*Purdue University Global*](https://www.gradschools.com/graduate-schools-in-united-states/florida/purdue-university-global-main-campus?programid=300741)[*MSN - Adult Gerontology Acute Care Nurse Practitioner*](https://www.gradschools.com/graduate-schools-in-united-states/online/purdue-university-global/msn-adult-gerontology-acute-care-nurse-practitioner-300741) *Post Graduate Certificate* is designed for master’s-prepared nurses who want to obtain further knowledge in the professional practice of medical, surgical, and critical care management of acutely ill adult patient populations. <https://www.purdueglobal.edu/degree-programs/nursing/acute-care-nurse-practitioner-certificate/>
* 15 hours of class per week, 10-week terms.
* 51 required credits. $420 per credit.

**Health Science Librarian**

* **Overview:** A health science librarian oversees the choosing, obtaining, sorting, categorizing, circulating, and maintaining in-depth research on different medical topics to find the latest information available. These librarians are in charge of arranging and distributing clinical, scientific, and biomedical information for texts, journals, and electronic databases.
* **Requirements:** 
  + Bachelor’s degree in Science
  + Master’s Degree in Library Science (MLS)
* **Potential Jobs:** 
  + Public or Academic Librarian
  + Library Media Specialist
  + Archive and Special Collections Librarian
  + Law Librarian
  + Reference and Information Service
* **Salary:** 
  + Median Salary: $64,900
* **Programs:** 
  + *St. Catherine University Masters of Library and Information Science-* Provides students to make real-world career connections, advocate for change, and advance access to information for all. <https://www.stkate.edu/academics/academic-programs/gc-library-and-information-science>
    - Completion Time: 24 months
    - Credits: 36
    - Cost per credit: $998 ($35,928 for degree)
    - Requirements:
      * Baccalaureate Degree with GPA of 3.0 or higher.
      * If GPA is lower than 3.0, GRE or MAT test scores are required.
      * More info on prerequisites: <https://www.stkate.edu/admission-and-aid/gc/library-and-information-science-application-instructions>
* *San Jose State University Master of Library and Information Science-* prepares graduate students for exciting careers as information professionals who work in myriad information environments and professional positions. <https://ischool.sjsu.edu/master-library-and-information-science?gclid=EAIaIQobChMIufWq8LTQ6QIVCbSzCh0YRAoVEAAYASAAEgJ40PD_BwE>
  + The MLIS is exclusively online
  + Over 200 internship positions
  + Tuition differentiates between “Regular Session” and “Special Session”
    - Regular Session students live near the San José State University campus, and their tuition is established by the California State University system. Tuition: $4,643.00 per semester.
    - Special Session students live anywhere in the world, except the San José, California catchment area. Tuition: $20,382 for the degree.
  + **Requirements:** 
    - Baccalaureate Degree with GPA of 3.0 or higher in the last 60 semester or 90 quarter units.
    - Does NOT require a GRE or GMAT test score.
    - For more information on requirements visit: <https://ischool.sjsu.edu/mlis-admissions-requirements>

**Medical Laboratory Science**

* **Overview:** A master’s in medical laboratory science can advance your career as a MLS in leadership, academia, research, or pharmaceutical companies. This laboratory profession helps to diagnose, treat, and monitor diseases through diagnostic laboratory testing.
* **Requirements:** American Society of Clinical Pathology Generalist (MLS) Board of Certification exam (ASCP BOC). Some states require licensure.
* **Salary:**
  + US median: $89,000
* **Programs:**
  + *University of Minnesota - Center for Allied Health – Master of Medical Laboratory Sciences* [file:///C:/Users/Huff.000/Downloads/Medical+Laboratory+Sciences+MMLS.pdf](file:///C:\Users\Huff.000\Downloads\Medical+Laboratory+Sciences+MMLS.pdf)
    - Admission Requirements:
      * Bachelor’s degree with minimum GPA of 3.0
      * TOEFL or MELAB for non-native English speakers
      * Prerequisites:
        + Biology\*\*
        + General Chemistry\*\*(2 semesters with labs)
        + Organic Chemistry\*\* (2 semesters)
        + Biochemistry\*\*
        + Calculus
        + Statistics\*\*
        + Human Physiology\*\*
        + Microbiology\*\* (with lab)
        + Genetics\*\*
        + Immunology
    - Length: 55 credit - program
    - Cost: $700 per credit
  + *Rush University – College of Health Sciences – Master’s in Medical Laboratory Science* <https://www.rushu.rush.edu/college-health-sciences/academic-programs/master-science-medical-laboratory-science>
    - Admission Requirements:
      * Bachelor’s degree with a minimum GPA of 3.0
      * TOEFL for non-native English speakers
      * Prerequisites:
        + Chemistry\*\* (14 semester credits)
        + Biology\*\* (12 semester credits)
        + College-level Math (3 semester credits)
    - Length: 80 credit program – 21-months
    - Cost: $836 per credit

**Pathology Assistant**

* **Overview:** Pathology assistants work under a licensed pathologist and aid in study and examination of body fluids and tissues in order to help diagnose diseases.
* **Requirements:** certification as a Pathologists’ Assistant from the American Society for Clinical Pathology Board of Certification (ASCP BOC)
* **Salary:**
  + US median: $85,000
  + MN median: $90,000
* **Programs:**
  + Rosalind Franklin University of Medicine and Science – College of Health Professions – Pathologists’ Assistant (MS) <https://www.rosalindfranklin.edu/academics/college-of-health-professions/degree-programs/pathologists-assistant-ms/>
    - Admission Requirements:
      * Bachelor’s Degree with a minimum GPA of 2.75 (Preference is given to a GPA of 3.0 or higher)
      * TOEFL is required for non-native English speakers
      * Prerequisites:
        + Biology (with lab preferred, Human Anatomy\*\* and/or Physiology\*\* recommended)
        + Microbiology\*\* (with lab preferred)
        + General Chemistry\*\* (with lab preferred)
        + Organic Chemistry\*\* and/or Biochemistry\*\* (with lab preferred)
        + College-level Mathematics (Statistics\*\* recommended)
        + English Composition (English Composition I\*\* or II and/or Rhetoric recommended)
    - Length: 8 academic quarters or approximately 22 months
    - Cost: $71,740 total
  + Wayne State University - Eugene Applebaum College of Pharmacy and Health Sciences – Pathologists’ Assistant
    - Admission Requirements:
      * Bachelor’s Degree (BA or BS) with 3.0 minimum overall GPA and 3.0 minimum prerequisite GPA
      * TOEFL is required for non-native English speakers
      * Prerequisites: (completed with a grade of “C” or better)
        + Biology\*\* – 2 courses
        + Microbiology\*\* with lab – 1 course
        + Anatomy\*\* and Physiology\*\* with lab – 1 course
        + General Chemistry\*\* with lab – 1 course
        + Organic\*\* and/or Biochemistry\*\* – 1 course
        + Mathematics or Statistics\*\* – 1 course
        + English Composition\*\* – 1 course
    - Length: 2-year program
    - Cost:
      * Nonresident: $89,223 total
      * Resident: $46,498 total

**Nuclear Medicine Technologist**

* **Overview:** A Nuclear Medicine Technologist is a highly specialized field, working directly with radioactive chemical compounds and administering radiopharmaceuticals to patients. They will operate medical imaging software (PET scans; SPECT scans) and provide physicians with this data. They will work directly with patients, ensuring safety in the imaging process and explaining procedures to them.
* **Requirements:** Accreditation is granted from Nuclear Medicine Technology Certification Board (NMTCB) or The American Registry of Radiologic Technologists (ARRT) (Minnesota licensure uses ARRT.)
* **Salary**:
  + Median Annual Salary: $75,660 ($36.37/hour)
  + Top 10% Annual Salary: More than $103,660 ($49.83/hour)
  + Bottom 10% Annual Salary: Less than $54,410 ($26.15/hour)
* **Programs:**
  + Master’s degree program:
    - Bachelor’s or Associate’s Degree in Nuclear Medicine Technology
    - Master of Science in Radiologic Sciences or Imaging Sciences or a Ph.D. in Nuclear Medicine.
  + Schools offering a M.S:
    - Online/Classroom Hybrid: *The University of Texas M.D. Anderson School of Professions* in Houston, TX offers a Master’s of Science in radiologic science: 5 Semester track in administrative or educational leadership. <https://www.mdanderson.org/education-training/degrees-programs/school-of-health-professions/academics/radiologic-sciences.html>
      * Admission Requirements:
        + Bachelor’s degree with 3.00 GPA
        + Undergraduate course in mathematics statistics or basic research with a grade of “C” or higher
        + Hold credentials from one of the following agencies:

ARDMS, ARRT, MDCB, NMTCB

* + - Online: *Southern Illinois University* in Carbondale, IL offers a Master’s in Radiologic Sciences. <https://sah.siu.edu/graduate/msrs/>
      * Admission Requirements:
        + Completion of an undergraduate program
        + Hold a valid certification in the imaging or therapeutic field of radiologic sciences
        + 2.70 GPA on approximately the last 2 years of your bachelor’s degree
        + Minimum GPA of 3.00 on all previous graduate coursework
* **Other info**:
  + Minnesota licensure requires technicians to take continued education courses every two years (<5 hours)
  + Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT).

**Associate Degree in Nursing**

* **Overview:** An Associate Degree in Nursing (AND) is typically a 2-year program where learning and training are done in the classroom and clinical settings. Completion of the degree should prepare students to take the required RN licensing exam.
* **Requirements:** Nurse Licensure by state
* **Salary:**
  + MN Median: $50,000
  + US Median: $44,000
* **Programs:**
  + *Rochester Community and Technical College – Associate Degree Nursing Program* <https://www.rctc.edu/program/nurs/>
    - Admission Requirements:
      * High School Diploma or GED
      * Nursing Assistant Course
      * Cumulative GPA of 2.5
      * Grade C or better in one year of high school or one semester of college in Biology\*\* with a lab and Chemistry\*\* with a lab
      * Demonstrated college level reading and writing
      * Math requirement can be met by Accuplacer or ACT scores
      * ATI TEAS exam with a composite score must be Proficient level or higher (58.7%)
      * BLS for Healthcare certification
    - Length
      * Nursing (A.D.) Degree: 64 credits total
      * Nursing curriculum: 34 credits
      * MnTC curriculum/General Education: 30 credits
      * Full-term students complete in 4 semesters
    - Cost:
      * $193.90 per credit
  + *Hibbing Community College – Associate degree in Nursing* [*https://hibbing.edu/academics/areas-of-study/medical-/-dental/nursing-as-degree-(traditional-program-plan)*](https://hibbing.edu/academics/areas-of-study/medical-/-dental/nursing-as-degree-(traditional-program-plan))
    - Admission Requirements
      * Transfer of Required general education courses with a GPA of 3.0 and an overall GPA of 2.0 **OR** scores from ACT/SAT
        + ACT: 23 or higher (within 2 years of application)
        + SAT: 1070 or higher (within 2 years of application)
      * Required General Education Courses:
        + Composition I\*\*
        + General Psychology\*\*
        + Human Anatomy and Physiology I\*\*
        + Human Anatomy and Physiology II\*\*
        + Nutrition
        + Lifespan Development\*\*
        + Microbiology\*\*
        + Ethics
        + Psych of Adjustment
        + Second Communication Course
    - Length: 2-year Program
    - Cost:
      * Nursing Courses: $224.53 per credit
      * General Education Courses: $181.70 per credit
      * Online Courses: $204.70 per credit

**Bachelor’s in Nursing**

* **Overview:** A Bachelor of Science in Nursing is typically a 4-year program where learning and training are done in the classroom and clinical settings. Completion of the degree should prepare students to take the required RN licensing exam.
* **Requirements:** Nursing Licensure by a state
* **Salary**:
  + MN Median: $77,000
  + US Median: $73,000
* **Programs:**
  + *University of Minnesota – Bachelor of Science in Nursing* <https://www.nursing.umn.edu/degrees-programs/bachelor-science-nursing>
    - Admission Requirements for Transfer Students:
      * Minimum GPA of 3.0
      * TOELF for non-native English speakers
      * Prerequisites:
        + General Chemistry \*\* or Principles of Chemistry (minimum 3 credits)
        + General Biology\*\* (minimum 3 credits)
        + First Year Writing\*\* (minimum 3 credits)
        + Lifespan Development or Human Growth & Development\*\* (minimum 3 credits)
        + Human Nutrition (minimum 2 credits, 3 credits preferred)
        + General Psychology\*\* (minimum 3 credits)
        + Optional: Anatomy & Physiology\*\* (minimum 3 credits)
        + Waiver: if Microbiology, Anatomy, and Physiology are completed the General Biology prerequisite is waived
    - Length:
      * 4-year program
    - Cost:
      * Resident: $13,318
      * Nonresident: $31,616
  + *Minnesota State University Mankato – College of Allied Health and Nursing - Bachelor of Science in Nursing* [*https://ahn.mnsu.edu/academic-programs/nursing/nursing-bs/*](https://ahn.mnsu.edu/academic-programs/nursing/nursing-bs/)
    - Admission Requirements
      * Completion of 30 semester credits
      * A minimum total cumulative GPA of 3.0
      * Completion of required core prerequisites with a minimum grade of “C”
      * Prerequisites:
        + Human Anatomy
        + Principles of Human Physiology
        + Chemistry of Life Processes
        + Composition
        + Intro to Cultural Geography
        + Human Development
        + Courage, Caring, and Teambuilding
        + Elementary Statistics
      * Complete the ATI TEAS Exam
      * Group Interview
      * TOEFL or IELTS for non-native English speakers
    - Length: 4-year program
    - Cost:
      * MN, Manitoba, Wisconsin, North Dakota Residents:
        + 1-11 credits, per credit: $297.80
        + 12-18 credits banded: $3807.80
      * South Dakota Residents:
        + 1-11 credits, per credit: $316.14
        + 12-18 credits banded: $4074.60
      * Nebraska, Missouri, Michigan, Kansas, Illinois, Indiana, and Ohio residents:
        + 1-11 credits, per credit: $446.70
        + 12-18 credits banded: $5711.70
      * Out of State Residents:
        + 1-11 credits, per credit: $640.50
        + 12-18 credits banded: $8078.55

**Master of Nursing**

* **Overview:** These Master of Nursing programs are intended for students who already have a bachelor’s degree in a non-nursing field of study and would like to shift into the field of nursing.
* **Requirements:** Nursing Licensure by state
* **Salary:**
  + US median: $90,000
  + MN median: $94,000
* **Programs:**
  + *University of Minnesota – School of Nursing – Master of Nursing* <https://www.nursing.umn.edu/degrees-programs/master-nursing>
    - Admission Requirements:
      * Bachelor’s degree with minimum 3.0 GPA
      * GRE
      * English proficiency score for non-native English speakers
      * Prerequisites
        + General Chemistry\*\* - minimum 3 credits, lab recommended
        + Human Anatomy\*\* – minimum 3 credits, lab recommended
        + Human Physiology\*\* – minimum 3 credits, lab recommended
        + Microbiology\*\* – minimum 3 credits, lab recommended
        + Lifespan, Growth, and Development – minimum 3 credits
        + Human Nutrition – minimum 2 credits, 3 preferred
        + Human Pathology – minimum 3 credits
        + Abnormal Psychology – minimum 3 credits
        + Inferential Statistics – minimum 3 credits
    - Length:
      * Full-time 16-month program
    - Cost:
      * Total program cost: $47,000 - $51,000
  + St. Catherine University – Graduate College – Henrietta Schmoll School of Health – Nursing: Entry Level <https://www.stkate.edu/academics/academic-programs/gc-nursing-msn-entry-level>
    - Admission Requirements:
      * Bachelor’s degree with minimum 3.0 GPA (GPA of 2.80-2.99 may petition to be considered)
      * TOEFL or IELTS for non-native English speakers
      * Prerequisites: cumulative prerequisite GPA of 3.0 or higher, with a grade of “C” or higher in each course, only one prerequisite course may be repeated one time-including withdrawals
        + Human Anatomy and Physiology I\*\* and II\*\* with lab (4 semester credits each)
        + Statistics – must be inclusive of descriptive and inferential statistics (3-4 semester credits)
        + Lifespan Development Psychology (3-4 semester credits)
        + Microbiology\*\* with lab (3-4 semester credits)
    - Length:
      * 26-month program, 57 credits
    - Cost Per credit: $930

**Nurse Anesthetist**

* **Overview:** A certified nurse anesthetist (CRNA) administers anesthesia and medication during surgery, working with surgeons and anesthesiologists. A CRNA will work with patients both pre-surgery (patient evaluation - assessing anesthesia and medication amounts) and post-surgery (monitor patients post-anesthesia and their airway management and provide care to patients on life-supporting machines).
* **Requirements:**
* BSN or MSN
* Pass the NCLEX-RN exam (National Council Licensure Examination - Registered Nurse)
* **Salary:** 
  + Median Salary: $167,950
  + Median Salary in Minnesota: $179,480
* **Programs:** 
  + Minnesota St. Mary’s University of Minnesota offers Master of Science in Nurse Anesthesia: <https://www.smumn.edu/academics/graduate/health-human-services/m.s.-in-nurse-anesthesia>
    - 64 credits, $660 per credit
    - 3- year program
    - Student handbook: <https://www.smumn.edu/Resources/pdf/SGPP/NAStudentHandbook2020.pdf>

**Nurse Midwife**

* **Overview:** Nurse midwives are registered nurses who have completed their nurse midwife accreditation and national exam. They are health professionals that provide primary care to you and your baby during pregnancy, labor, birth and the postpartum period.
* **Requirements:** 
  + Bachelor of Science in Nursing that is accredited (BSN).
  + Obtain licensure to become Registered Nurse (RN).
  + Pass NCLEX-RN examination.
  + Master of Science in Nursing- Specializing in Nurse-Midwife.
  + Pass the American Midwifery Certification Board (AMCB) certification exam.
  + Obtain certified nurse-midwife licensure through the Minnesota Board o**f** Nursing.
* **Potential Jobs** (besides Nurse Midwife)**:**
  + Doula or Birthing Partner
  + Health Visitor
  + Teach pregnancy and birthing classes privately or through National Childbirth Trust (NCT).
  + Care worker
* **Salary:** 
  + Median Salary: $103,770
  + Median Salary in Minnesota: $117, 025.
  + Approx. $30,000 higher than Registered Nurse
* **Programs:** 
  + *University of Bethel (St. Paul, Minnesota) Master of Science in Nurse Midwifery-*offers the credentials you will need in prenatal, birth, newborn, and gynecological care as a health care worker. You can complete the degree in as quickly as 2-3 years. <https://www.bethel.edu/graduate/academics/nurse-midwifery/>
    - Graduates have a 100% pass rate on the NCLEX-RN examination.
    - 57 credits total, $836 per credit.
    - Tuition: $47,652.
    - Prerequisites:
      * GPA of 3.3 or lower must submit a MAT (400) or GRE (150) exam
      * RN License
      * Baccalaureate degree
      * For more information on prerequisites: <https://www.bethel.edu/graduate/academics/nurse-midwifery/how-to-apply>
* *University of Emory- Nursing (Atlanta, Georgia) Nurse Midwifery MSN Program*- is one of the leading programs in the country. Faculty bring together leadership, research, and clinical experience both nationally and internationally to provide an advanced educational experience. <http://nursing.emory.edu/admission-and-aid/msn-programs/nurse-midwifery.html>
  + Semester Rate: $ 22,866, degree cost: $91,464.
  + Summer semester so the degree can be finished in as fast as 1.5 years.
  + Prerequisites:
    - A baccalaureate degree from an accredited nursing program (CCNE, NLNAC)
    - Unencumbered RN license in the state of Georgia

**Nurse Practitioner**

* **Overview:** Collaborate with physicians, perform physical examinations, evaluate diagnostic tests, recommend types of treatment and medication. Administer medication, educate patients general wellness, illness, self-care responsibilities.
* **Requirements:**
  + Must have an MSN (Master of Sciences in Nursing.)
  + Must pass the national licensing exam to become a registered nurse.
* **Salary Median**: $107,000
  + **Programs** offering an MSN (Master of Sciences in Nursing):
    - *University of Minnesota - Twin Cities* offers an MSN <https://www.nursing.umn.edu/degrees-programs/master-nursing>
      * Admission Requirements:
        + Bachelor’s degree with 3.00 GPA minimum
        + Completed GRE
        + English proficiency score (only applicable to non-native English speakers)
        + Prerequisites

General Chemistry\*\*

Microbiology\*\*

Lifespan Growth & Development

Human Anatomy\*\*

Pathology

Abnormal Psychology

Human Physiology\*\*

Human Nutrition

Inferential Statistics

* + - * Total Program Cost: $47,000 – 51,000
      * Length: Full-time 16 month (4 semesters) program
    - *St. Catherine’s University* offers an MSN (Entry-Level). Evening and weekend classes. <https://www.stkate.edu/academics/academic-programs/gc-nursing-msn-entry-level>
      * Cost of tuition: 47,000 - 53,000
      * Length:26 months

**Pharmacist**

* **Overview:** Pharmacists are health care professionals who provide patients and other health care professionals with information about prescribed medications. They give instruction on dosage, drug interactions, side effects and all things related to the medication.
* **Requirements:** To become a licensed pharmacist a Doctoral of Pharmacy (PharmD) is required.
  + Pass NAPLEX some states also require the MPJE
* **Salary:**
  + Median in US $136,000
  + Median in MN $128,000
* **Programs:**
  + *University of Minnesota - Doctor of Pharmacy* <https://www.pharmacy.umn.edu/degrees-and-programs/doctor-pharmacy>
    - Admission Requirements:
      * PCAT is optional, but highly encouraged especially if:
        + Overall GPA is below 3.0
        + Grades in science prerequisites are a C or below
        + Science prerequisites were taken 5+ years ago
        + Grades have trended down over time
      * Prerequisites:
        + General Biology\*\* (1 course with lab)
        + Microbiology\*\* (1 course, recommended with lab)
        + Human or Comparative Anatomy \*\*(1 course, recommended with lab and human-focused course)
        + Human or Comparative Physiology\*\* (1 course, recommended with lab and human-focused course)
        + Advanced Biology (1 course – Biochemistry\*\*, Cell Biology\*\*, or Molecular Biology)
        + Calculus I (1 course)
        + Statistics\*\* (1 course)
        + General Chemistry\*\* (2 courses with 1 lab, recommended 2 courses with 2 labs)
        + Organic Chemistry\*\* (2 courses with 1 lab, recommended 2 courses with 2 labs)
        + General Physics\*\* (1 course)
        + Social & Behavioral Science\*\* (2 course or U.S. bachelor’s degree, recommended U.S. bachelor’s degree)
        + English Composition, advanced (1 course or U.S. bachelor’s degree, recommended U.S. bachelor’s degree)
        + Introductory Communication\*\* (1 course or U.S. bachelor’s degree, recommended U.S. bachelor’s degree)
    - Length: 4-year program
    - Cost:
      * MN Resident: $125,000
      * Nonresident: $183,000
  + *University of Wisconsin-Madison – School of Pharmacy* <https://pharmacy.wisc.edu/academics/pharmd/>
    - Admission Requirements:
      * Prerequisites:
        + Calculus (1 course)
        + General Chemistry I & II\*\* (2 courses and labs)
        + Organic Chemistry I & II\*\* (2courses and labs)
        + General Biology I\*\* & II (2course and labs)
        + Microbiology\*\* (1 course)
        + Human Physiology or Anatomy and Physiology I &II\*\* (1 course if Human Physiology) (2 courses if Anatomy and Physiology I & II course sequence)
        + General Physics\*\* (1 course and lab)
        + Statistics\*\* (1 course)
        + English Composition\*\*/Communication A (1 course or bachelor’s degree)
        + Social Sciences (1 course or bachelor’s degree)
        + United States Diversity/Ethnic Studies (1 course or bachelor’s degree)
        + Humanities (2 courses (6 credits) or bachelor’s degree)
        + Additional Elective Coursework (72 total credits)
      * PCAT
        + Optional (but highly recommended)
        + No minimum score, but scores below 50% will be viewed with some concern
      * Length: 4 year program
      * Cost:
        + Resident: $112,500
        + Nonresident: $191,000
        + MN resident: TBD

**Pharmacologist**

* **Overview:** Pharmacologists study and research the effects of drugs and medications on humans, animals, and plants.
* **Salary:**
  + Average between $84,000 - $149,000
  + MN average is $120,000
* **Programs:**
  + *University of Minnesota – Department of Pharmacology* Offers a PhD and MS degree

<https://med.umn.edu/pharmacology/education-training/graduate-program>

* + - Admission Requirements:
      * Four-year BA or BS degree (or equivalent) in life or physical sciences
      * English proficiency score (only applicable to non-native English speakers)
        + TOEFL or IELTS
      * GPA: the average GPA of matriculating students is 3.5/4.0
      * Research Experience not formally required, however, most applicants have moderate to extensive research experience
    - MS degree:
      * Full-time, on-site program
      * Three terms: Fall, Spring, and Summer
    - PhD:
      * Full-time
      * Average time to complete 5 years and 4 months
  + *University of Michigan Medical School – Department of Pharmacology* Master of Science in Pharmacology

<https://medicine.umich.edu/dept/pharmacology/academics/masters-program>

* Admission Requirements:
  + Minimum cumulative GPA of 3.0 in major sciences course
    - Biology\*\*
    - Biochemistry\*\*
    - Physiology\*\*
    - Chemistry\*\*
    - Physics\*\*
  + English proficiency score (only applicable to non-native English speakers)
* Length: if pursued full-time the 33 credit course loads takes 12 months
* Cost:
  + Michigan resident: $36,000
  + Non-resident: $72,000

**Exercise Physiologist**

* **Overview:** Exercise physiologists provide custom fitness and exercise regimes in order to help to improve their patient’s health or maintain good overall wellbeing.
* **Requirements:** There are no nationally standardized academic certification or licensure requirements, however, most employers do require certification from either the American College of Sports Medicine (ACSM) or the American Society of Exercise Physiologists (ASEP).
* **Salary:**
  + US median: $50,000
  + MN median: $56,000
* **Programs:**
  + *University of Minnesota School of Kinesiology M.S. in Kinesiology Emphasis: Exercise Physiology* <https://www.cehd.umn.edu/kin/academics/grad/masters/ms-exphys.html>
    - Admission Requirements:
      * Bachelor’s Degree with a minimum GPA of 3.00
      * GRE
      * TOEFL, IELTS, or MELAB for non-native English speakers
    - 30 credits total to complete program:
      * Plan A: 14 major credits, 6 credits outside major, 10 thesis credits, final exam is oral
      * Plan B: 18 major credits, 12 credits outside major, final exam is oral, Capstone project required
    - Cost:
      * Resident
        + Per credit: $732
        + 12-24 credits: $8,784
        + Each credit over 24: $732
      * Nonresident
        + Per credit: $1,133
        + 12-24 credits: $13,596
        + Each credit over 24: $732
  + *Aurora University - Exercise Science M.S. - Specialization in Clinical Exercise Physiology (*available online or on campus) <https://online.aurora.edu/online-degrees/ms-masters-in-exercise-science/>
    - Admission Requirements:
      * Bachelor’s degree with a minimum of 3.0 (GPAs below 3.0 would be considered on a case-by-case basis)
      * Prerequisites if previous major was not exercise science or kinesiology
        + Anatomy\*\* and Physiology\*\*
        + Exercise Physiology
        + College Algebra
    - Length: 1-2 years, 30 Credits total
    - Cost per Credit: $565

**Master’s in Kinesiology**

* **Overview:** A master’s in kinesiology can prepare students for a variety of careers, many of which involve athletics, such as an athletic trainer, coach, physical education teacher, kinesiotherapist and so on.
* **Salary:**
  + US median: $50,000
  + MN median: $54,000
* **Programs:**
  + *Michigan State University – College of Education – Master’s in Kinesiology* <https://education.msu.edu/kin/graduate/masters/>
    - Admission Requirements:
      * Bachelor’s degree with minimum 3.0 GPA
      * GRE
      * TOEFL for non-native English speakers
    - Length:
      * 30 credit program with either Plan A (thesis) or Plan B (without thesis)
      * Seven major areas of study to concentrate from:
        + Athletic Training
        + Cognitive and Motor Neuroscience
        + Exercise Physiology
        + Psychosocial Aspects of Sports and Physical Activity
        + Sport Administration
        + Strength and Conditioning
        + Student Athlete Development
    - Cost:
      * Resident: $818
      * Nonresident: $1577 per credit
  + *University of Minnesota – School of Kinesiology – Master of Science in Kinesiology* <https://www.cehd.umn.edu/kin/academics/grad/ms.html>
    - Admission Requirements:
      * Bachelor’s degree with minimum 3.0 GPA
      * GRE
      * TOEFL, MELAB, IELTS, PTE Academic, or Cambridge C1 Advanced Test for non-native English speakers
    - Length:
      * 30 credit program with either Plan A (thesis) or Plan B (without thesis)
      * Seven major areas of study to concentrate from:
        + Behavioral aspects of physical activity
        + Biomechanics and neuromotor control
        + Exercise physiology
        + Perceptual-motor control and learning
        + Physical activity and health
        + Sport and exercise psychology
        + Sport sociology
    - Cost:
      * Resident:
        + $732 per credit
        + $8784 for 12-24 credits
        + $732 each credit over 24
      * Nonresident:
        + $1133 per credit
        + $13,596 for 12-24 credits
        + $1133 each credit over 24

**Medical Physiology**

* **Overview:** A master’s in physiology can help enhance admission to and performance in professional healthcare programs. It can also help develop competence in directed research for advanced technical positions in medical research laboratories, industry, government and so on.
* **Salary:**
  + US median: $52,000
  + MN median: $53,000
* **Programs:**
  + *The University of Illinois – College of Medicine – Master of Science in Medical Physiology* <https://chicago.medicine.uic.edu/education/masters-and-doctorate-programs/master-of-science-in-medical-physiology/>
    - Admission Requirements:
      * Bachelor’s degree in the chemical/physical/biological sciences or pre-med programs
      * At least a 3.0 GPA cumulative for the final 60 semester hours of undergraduate studies and at least a 3.0 in science courses
      * MCAT, GRE, or DAT
    - Length:
      * Full-time one-year program
      * 33 credit- program
    - Cost:
      * Resident: $15,700 per year
      * Nonresident: $26,494
  + *Ball State University – Department to Biology – Master of Science in Physiology or Master of Arts in Physiology* <https://www.bsu.edu/academics/collegesanddepartments/biology/academic-programs/masters/masters-physiology>
    - Admission Requirements:
      * Bachelor’s degree with a minimum GPA of 2.7
    - Length:
      * 30-31 credit program
    - Cost:
      * Resident: $417 per credit hour
      * Nonresident: $1,145

**Occupational Therapist**

* **Overview:** Occupational therapists are trained in therapeutic approaches that work with a patient’s ability to perform routine tasks and activities, usually as a means of rehabilitation or therapy after and an injury or illness.
* **Requirements:** National Board for Certification in Occupational Therapy (NBCOT)
* **Salary:**
  + US median: $89,000
  + MN median: $94,000
* **Programs:**
  + *University of Minnesota – Center for Allied Health Programs – Occupational Therapy Program* <https://www.alliedhealth.umn.edu/occupational-therapy-ot/ot-program>
    - Admission Requirements:
      * Bachelor’s Degree
      * Observation (shadow an OT) or Introductory Course Completion
      * TOEFL or TSE for non-native English speakers
      * Prerequisites – GPA at least 3.0 and no single grade lower than a “C”:
        + Human Anatomy\*\* – 3 credits (no lab required)
        + Human Physiology\*\* – 3 credits (no lab required)
        + Introduction to Physics\*\* – 3 credits (must include kinematics, non-calculus based, lab not required)
        + Statistics\*\* – 3 credits (descriptive and inferential statistics)
        + Intro to Sociology\*\* and Intro to Cultural Anthropology\*\* – 6 credits
        + General Psychology\*\* – 3 credits
        + Abnormal Psychology\*\* – 3 credits
        + Human Development across the Life Span – 3 credits
        + Technical Writing/Scientific Writing – 3 credits
        + Medical Terminology\*\* – 0-1 credit
    - Length:
      * 23 months, 77credit over the course of five full-time semesters
    - Cost:
      * Resident:
        + $1012 per credit
        + $12,144 for 12 or more credits
      * Nonresident:
        + $1520 per credit
        + 18,240 for 12 or more credits
  + *St. Catherine University – Graduate College – Henrietta Schmoll School of Health – Occupational Therapy* <https://www.stkate.edu/academics/academic-programs/gc-occupational-therapy-entry-level>
    - Admission Requirements:
      * Bachelor’s Degree with 3.2 or higher GPA
      * 50 hours of Volunteer/Work Experience
      * Prerequisites – courses must be completed with a grade “C” or higher with a cumulative prerequisite GPA of 3.2 or higher:
        + Human Anatomy\*\* – 3-4 credits
        + Human Physiology\*\* – 3-4 credits
        + General Psychology\*\* – 3-4 credits
        + Lifespan Development Psychology – 3-4 credits
        + Understanding Psychological Disorders (Abnormal Psychology\*\*) – 3-4 credits
        + Introduction to Sociology\*\* (or Anthropology\*\*) – 3-4 credits
        + Medical Terminology\*\* – 1-3 credits
        + Statistics\*\* – 3-4 credits
    - Length:
      * 2.5 years
      * 72 credit - program
    - Cost:
      * $1120 per credit

**Physical Therapist**

* **Overview:** Physical therapists assist injured or ill patients improve movement and help manage pain through prescribed exercise, hands and care, and patient education.
* **Requirements:** Passing the National Physical Therapy Examination (NPTE)
* **Salary:**
  + US median: $87,000
  + MN median: $90,000
* **Programs:**
  + *Mayo Clinic – College of Medicine and Science – Physical Therapy Doctoral Program* <https://college.mayo.edu/academics/health-sciences-education/physical-therapy-doctoral-program-minnesota/>
    - Admission Requirements:
      * Bachelor’s degree with minimum 3.0 cumulative GPA and a 3.0 or higher prerequisite GPA
      * Prerequisites:
        + At least four biology courses, each with a lab, including:

One course in human physiology

One course in human anatomy (or a combined anatomy/physiology\*\* course distributed over two academic terms that meet the anatomy and physiology requirements)

Any of the two following courses:

Cell biology\*\*

Histology

Embryology

Molecular biology\*\*

Neuroscience

Exercise physiology

* + - * + Two chemistry\*\* courses with labs
        + Two physics\*\* courses with labs
        + One course in statistics\*\*
        + Two courses in Psychology including General or Introductory Psychology\*\* and Abnormal Psychology\*\* (or equivalent)
        + Medical Terminology\*\* recommended, but not required
      * GRE
      * TOEFL for non-native English speakers
      * Work and/or observation experience (minimum of 40 hours, 100 hours is preferred)
    - Length:
      * 33-month program, 133 credits
    - Cost**:**
      * $721 per credit
  + *University of Minnesota – Department of Rehabilitation Medicine – Doctor of Physical Therapy (DPT)* <https://med.umn.edu/rehabmedicine/about/divisions/physical-therapy/doctor-physical-therapy>
    - Admission Requirements:
      * Bachelor’s degree
      * GRE
      * TOEFL for non-native English speakers
      * 100 observation hours(currently waived for the 2020-2021 year due to COVID)
      * Prerequisites with a letter grade of “C” or better:
        + Biology – two semesters

General Biology\*\* with lab

Cell-based Biology\*\* course with lab of students choosing (Exercise Physiology will not meet this requirement

* + - * + Chemistry – two semesters

General Chemistry I\*\* with lab

General Chemistry II\*\* with lab

* + - * + Human Anatomy – one semester, lab strongly recommended

If taking Anatomy and Physiology, A&P I\*\* and II\*\* must be taken to meet the anatomy and physiology prerequisite requirements

* + - * + Human Physiology – one semester, lab strongly recommended

If taking Anatomy and Physiology, A&P I\*\* and II\*\* must be taken to meet the anatomy and physiology prerequisite requirements

* + - * + Physics – two semesters (content must include mechanics and electricity)

Physics I\*\* with lab

Physics II\*\* with lab

* + - * + Statistics\*\* – one semester

ANOVA and regression analysis content strongly recommended

* + - * + Calculus – one semester

Short calculus or Intro to calculus is accepted, precalculus is not accepted

* + - * + Psychology – two semesters

General Psychology\*\*

Abnormal Psychology (specifically require abnormal psychology and do accept lifespan or developmental psychology to meet the prerequisite requirement

* + - * + Medical Terminology\*\*– one semester (pass/fail is accepted)
    - Length:
      * Three-year (nine semesters) of year-round graduate study with a total of 140 credits
    - Cost:
      * MN resident: $9,163 per semester
      * Nonresident: $10,500

**Therapeutic Recreation Specialist**

* **Overview:** A Therapeutic Recreation Specialist uses recreation services to help people with potentially limiting conditions make the most of their lives. Sports, arts and crafts, dance, music, and other techniques to reduce stress, improve functioning, and build confidence may be used as methods to help rehabilitation. The majority of Therapeutic Recreation Specialists are hired by private health care systems. Growth Rate from 2012 to 2022 is 14% in this job field.
* **Requirements:**
* Certified Therapeutic Recreation Specialists (CTRS)
  + - REQUIRED in New Hampshire, Oklahoma, North Carolina, highly recommended from all other states.
    - CTR is a credential highly recommended and valued from employers.
  + CTRS is an examination run by the National Council for Therapeutic Recreation Certification (NCTRC).
  + Bachelor's degree needed, can receive masters in Therapeutic Recreation for better job
* **Work setting such as:**
  + Hospitals
  + Rehabilitation Facilities
  + Special Service Communities
  + Nursing Homes
  + Assisted Living Homes
* **Salary:** 
  + Median Salary in USA: $58,079.
  + Median Salary in Minnesota: $60,159.
* **Programs:** 
  + *Vermillion College (St. Ely, Minnesota) Outdoor Recreation Therapy Program-* develops your skill set to begin your career, along with also qualifying you in other outdoor activities such as kayaking, expeditions courses and outdoor pursuits.
    - 60 credits.
    - Academic Plan Can be found here: <http://www.vcc.edu/wp-lib/wp-content/uploads/2020/03/Outdoor-Recreation-Therapy-AS.pdf>
    - Application steps visit: <https://www.vcc.edu/application-steps-for-new-returning-transfer-students/>
* *Temple University Master of Science in Recreational Therapy-* has the option of an online Master’s program that provides students with evidence-based recreational therapy within healthcare and human services. Top tier program known nationally and internationally that is one of the oldest in the country.
  + Temple’s College of Public Health is fully accredited by CEPH.
  + 36 credits for students who already hold NCTR certification.
  + 36 + 6 extra credits for students without NCTR certification.
  + Tuition: $975 per credit.
  + GPA of at least 3.0 required.
  + GRE score required (GRE score will be waived if you have GPA higher than 3.25).

For more information on requirements visit: <https://bulletin.temple.edu/graduate/scd/cph/recreation-therapy-ms/#admissiontext>

**Podiatric Physician**

* **Overview:** A Podiatric Physician is a medical specialist that focuses on preventions, diagnosis and treatment with your lower legs and feet. A Podiatric Physician can do surgeries, reset broken bones, prescribe drugs, and do lab tests or X-rays. Conditions Podiatrists often treat:
  + Fractures and Sprains
  + Diabetes
  + Heel Pain
  + Bunions and Hammertoes
  + Nail disorders
  + Growing pains
  + Morton’s neuroma
* **Requirements:**
  + Bachelor's Degree
  + MCAT
  + Graduate from Accredited Podiatric Medical School (D.P.M)
  + National Boards are taken in two parts while at Pediatric Medical School.
    - Part I: Basic Sciences, after year 2.
    - Part II: Written exam and Clinical Skills Patient Encounter (CSPE) components of the examination.
  + Residency Training (about 36 months)
  + Licensing and Board Certification

#### [American Podiatric Medical Association (APMA)](http://www.apma.org/) is the professional organization for DPMs.

* **Specialized Jobs:** 
  + Surgery
  + Wound Care
  + Diabetes
  + Sports Medicine
  + Pediatric (children)
* **Salary:** 
  + Median Salary in Minnesota: $210,329.
  + Median Salary in the USA: $205,600.
* **Programs:** 
  + *Kent State University College of Podiatric Medicine-* focuses its four-year training on highly developing its students' knowledge to be prepared for residency. Kent State College is one of the nine accredited Podiatric School of Medicine in the USA. <https://www.kent.edu/cpm>
    - Accredited by the [Council on Podiatric Medical Education](http://www.cpme.org/).
    - In your Bachelor’s at least 90 semester credit hours or 135 quarter hours, including the following:
      * 8 Semester or 12 Quarter Hours of Biology\*\*.
      * 8 Semester or 12 Quarter Hours of General/Inorganic Chemistry\*\*.
      * 8 Semester or 12 Quarter Hours of Organic Chemistry\*\*.
      * 8 Semester or 12 Quarter Hours of Physics\*\*.
      * 6 Semester or 9 Quarter Hours of English.
* MCAT score of around 494.
* Experience shadowing a Podiatrist.
* For more information on prerequisites visit: <https://www.kent.edu/cpm/admission-requirements>
* *Rosalind Franklin University of Medicine and Science-College of Podiatric Medicine*- you will have the opportunity to rotate around several different hospitals and help patients long before graduation. The four year fully accredited program also leads the way in innovative research through the Center for Lower Extremity Ambulatory Research. <https://www.rosalindfranklin.edu/academics/dr-william-m-scholl-college-of-podiatric-medicine/>
  + Completed 90 semester hours of undergraduate academic work from an accredited college or university.
  + Competitive GPA score.
  + Competitive MCAT score from the last 3 years.
  + Prerequisites:
    - 8 Semester or 12 Quarter Hours of Biology\*\* with Lab.
    - 8 Semester or 12 Quarter Hours of General Chemistry\*\* with Lab.
    - 8 Semester or 12 Quarter Hours of Organic Chemistry\*\* with Lab.
    - 8 Semester or 12 Quarter Hours of Physics\*\*.
    - 6 Semester or 9 Quarter Hours of English.
* For more information on prerequisites visit: <https://www.rosalindfranklin.edu/academics/dr-william-m-scholl-college-of-podiatric-medicine/doctor-of-podiatric-medicine-dpm/application-requirements/>

**Psychologist/ Counselor**

* **Overview:** A Psychologist studies mental health and human behavior. Collecting their information through observations, interviews, surveys, tests, and other methods, a psychologist will then predict the behavioral patterns to try to help patients.
* **Requirements: (for State of Minnesota):**
  + Earn a Bachelor's degree
  + Earn a Master’s degree in Psychology
  + Earn a PhD in Psychology (2-4 years)
  + Pass the Examination for Professional Practice in Psychology (EPPP).
* **Specialized Jobs (highest paid):** 
  + Industrial-Organizational Psychologist, Salary: $102,530.
  + Neuropsychologist, Salary: $93,440.
  + Engineering Psychologist, Salary: $90,340.
  + Psychology Teacher, Salary: $85,050.
  + Clinical Psychologist, Salary: $81,330.
  + Counseling Psychologist, Salary: $81,330.
  + School Psychologist, Salary: $77,430.
  + Forensic Psychologist, Salary: $61,220.
  + Sports Psychologist, Salary: $60,000.
* **Salary:** 
  + Median Salary as a psychologist in Minnesota: $64,380.
  + Median Salary as a psychologist in the USA: $70,580.
* **Programs:** 
  + *Minnesota State University Mankato Master in Sports and Exercise Psychology-* develops your knowledge to sports performance issues associated with competitive athletics and exercise settings. The program is accredited, and you will receive certification after completion of the program.
    - 36 credits, 2-year program.
    - Tuition: $5,129.40 per 12 credits
    - 25% of graduates receive Graduate Assistantships.
    - Bachelor’s degree from accredited University required.
    - For more information on requirements visit: <https://grad.mnsu.edu/all-graduate-programs/sport-exercise-psychology/>
  + *Purdue University Global (West Palm Beach, FL) Master’s in Psychology-*is available online and emphasizes contemporary applications of science with the traditional academic psychology. <https://www.purdueglobal.edu/degree-programs/psychology/master-degree-psychology/>
    - Program focuses on:
      * General Psychology
      * Addictions
      * Applied Behavioral Analysis
      * Forensic Psychology
      * Industrial/organizational psychology
* Minimum 2.5 GPA
* Top jobs you can do with this degree:
  + Social and Community Service Manager
  + Social and Human Service Assistants
* Purdue Global is a NAADAC Approved Education Provider. In addition, The Master of Science in Psychology with a concentration in addictions is accredited by the [National Addiction Studies Accreditation Commission (NASAC)](http://nasacaccreditation.org/).
* 15 hours of coursework a week, 10-week terms.
* Credits required 60-75, cost per credit $420.
* Tuition: $25,200- $31,500.
* For more information on admissions visit: <https://www.purdueglobal.edu/admissions/general-requirements/>

**Epidemiology**

* **Overview:** An epidemiologist tracks and investigates patterns and causes of disease and injury in humans/animals to reduce it from public health. They seek to reduce the risk and occurrence of negative health outcomes through research, community education and health policy.
* **Requirements:** 
  + An Epidemiologist requires a Master's degree from an accredited college or university. Most often a Master’s degree in public health (MPH) or a related field.
  + Fellowship experience typically required.
  + Can receive certification and licensing to further their education and higher chance of employment.
    - The Certification Board for Infection Control and Epidemiology ([CBIC](http://www.cbic.org/))
    - Association for Professional in Infection Control and Epidemiology ([APIC](http://www.apic.org/))
    - American Medical Association ([AMA](http://www.ama-assn.org/ama)).
* **Jobs:** 
  + **Survey Researcher**
    - Design and analyze surveys ranging from public opinion and education to medical and scientific surveys.
    - Average Salary: $57,700
  + **Statistician** 
    - Collects, studies, analyzes, and presents data to understand a concept or dilemma.
    - Average Salary: $101,900
  + **Community Health Worker**
    - Work with the general public in order to teach healthy behaviors and implement public health strategies.
    - Average Salary: $39,540
* **Specialized Jobs:**
  + **Database Administrator** 
    - manages information for companies by identifying the best ways to organize, store and present data according to user needs
  + **Disease Ecologist**
    - studies the nexus of the behavior of hosts – human or animal populations with the biology of the diseases that affect them.
* **Median Salary:**
  + $96,980 per year.
  + $104,000 per year (with PhD).
* **Programs:**
  + *The George Washington University Master of Public Health in the Field of Epidemiology* is to help students develop the necessary methodological and quantitative skills while engaging in and promoting public service qualities essential for future epidemiologists and public health practitioners. <https://publichealth.gwu.edu/programs/epidemiology-mph>
    - 45 credits to graduate
    - Online masters that can be completed in as quickly as 12 months.
    - Flexible hours, take up to 15 credits online.
    - No GRE score required.
    - For more information on admissions visit: <https://publichealth.gwu.edu/admissions/graduate-admissions>
* *Baylor University Master of Public Health (MPH) Online Degree* promotes health in local and global settings as they work in government-sponsored public health agencies, nonprofit organizations, university and corporate wellness programs, and population health programs in healthcare settings.

<https://www.baylor.edu/graduate/doc.php/322834.pdf/>

* + Courses online are offered in the quarter system.
  + Can choose the pace of completion for the degree:
    - Full time accelerated: 12 months
    - Full time standard: 18 months
    - Part time: 24 months
  + Must have 3.0 or higher GPA from Bachelor’s degree.
  + No GRE required for this degree.
* *University of Minnesota Master of Health- Epidemiology* prepares students to analyze public health trends, design and implement studies, and interpret results for policy and program development.

<https://www.sph.umn.edu/academics/degrees-programs/mph/epidemiology/>

* Cost of degree for resident: $42,588.00
* Cost of degree for nonresident: $55,944.00
* Minimum GPA required 3.0 (3.58 of average admitted students).
* No GRE required for this degree.
* Bachelor's degree or higher from accredited University or college to apply.
* For more information on prerequisites visit: <https://www.sph.umn.edu/prospective/application-process/>

**Environmental Occupational Health**

* **Overview:** Primarily focuses on the connection between people and their various environments. Understanding the process of external hazards and our environmental system so that humans can avoid disease and remain safe.
* **Potential Jobs:**
  + **Safety Specialist:** Inspect, test, and evaluate workplace environments, equipment, and practices to government regulations.
    - Median Salary: $79,654

**Safety Manager:** Developing and executing health and safety plans in the workplace according to legal guidelines.

* Median Salary: $117,420

**Environmental Health Officer:** Investigate when there is an incident, such as pollution, Noise level problems, toxic contamination, pest infestation or an outbreak of food poisoning.

* Median Salary: $76,849
* **Programs:** 
  + *University of Minnesota Masters in Environmental Health* ***“General Program”*-** The University offers many customized degrees that may suit to your liking more, but if uncertain the General Program starts you on a firm foundation in environmental studies. <http://sph.umn.edu/sph-2018/wp-content/uploads/docs/info-sheet/umn-sph-info-environmental-health-mph-ms.pdf>

Concentrated Masters Programs at the University of Minnesota include:

* ***Global Environmental Health***- Studying global health issues such as water and air quality, food safety, food security, industrialization and deforestation.
* ***Environmental Infectious Disease-*** Studies environmental factors that lead to air borne, food borne, vector borne and sexually transmitted infectious diseases, and what interventions can be made to reduce them.
* ***Regulatory Toxicology and Risk Assessment***- Informs students of biochemical mechanisms of toxicity and the basic science to toxicology.
* ***Occupational and Environmental Health Nursing-*** Nurses who want further knowledge in management and evaluation of health services that promote health and prevent work-related injuries and disease.
* ***Occupational Injury Prevention Research Training-*** Studying the prevention and control in workplace injuries.
* ***Industrial Hygiene-*** Studies primarily the health and safety of people at their work environments.
* ***Environmental Sciences-*** Studies the interactions of pollutants with air, water, and soil, and their exposures to humans and wildlife.
* ***Exposure Sciences-*** Studying and analyzing human exposure using measurements and modeling.
  + - 42 credits
    - Tuition in State: $47, 793.
    - Out of State: $59,149.
    - Prerequisites:
      * GPA of at least 3.00
      * GRE Test Score of a combination of 300 on the quantitative and verbal sections of the test and a score of 3.5 on the analytical writing assessment.
      * For more information of prerequisites: <https://www.sph.umn.edu/academics/divisions/enhs/degrees/general/admissions/>
* *Minnesota State University Mankato Masters in Environmental Science-* educates students to solve environmental problems using the scientific method along with knowledge of environmental regulations. <https://grad.mnsu.edu/all-graduate-programs/environmental-science-ms/>
  + 34 credits
  + 25% of graduates receive Graduate Assistantship.
  + Approximately 35 graduate Teaching Assistantships.
  + 2 years to complete.
  + Online courses available.
  + Tuition for 12 credits: $7,826.40
  + Requirements:
    - Bachelor’s Degree in Science from an accredited University.
    - Minimum GPA of 3.0.
    - Requirements DURING degree: <https://grad.mnsu.edu/graduate-college-policy/>

**Global Health and Medicine**

* **Overview:** A master’s in global health and medicine will give you the tools to help address global disease, find new ways for helping to prevent global health crises, and help enhance the health status of communities around the world.
* **Salary:** $32,000-$84,000
* **Programs:**
  + *Michigan State University – Graduate Degree – Global Health – Master of Science* <https://reg.msu.edu/AcademicPrograms/ProgramDetail.aspx?Program=4225> **Online Program**
    - Admission Requirements:
      * Bachelor’s Degree
      * English language proficiency for non-native English speakers
    - Length:
      * 30 credit - program
    - Cost:
      * $890 per credit
  + *University of California, San Francisco – Institute for Global Health Sciences – Master of Science in Global Health* <https://globalhealthsciences.ucsf.edu/education/masters-program>
    - Admission Requirements:
      * Bachelor’s degree with minimum GPA of 3.0
      * If taken GRE, MCAT, LSAT, or GMAT (not required)
      * TOEFL or IELTS for non-native English speakers
      * Prerequisites with at least a “B” grade:
        + Mathematics: Calculus, Algebra, or Statistics\*\*
        + General Biology
        + Health-Related Science: Nutrition, Microbiology\*\*, Anatomy\*\*, or Physiology\*\*
    - Length:
      * One-year program
      * 42-43 Quarter Units
    - Cost:
      * $49,140 for the program

**Infection Preventionist**

* **Overview:** Infection preventionists work to keep patients and other health care professionals save by preventing and limiting the spread on infection.
* **Requirements:** Most employers prefer a certification in Infection Control (CIC) through the Certification Board of Infection Control
* **Salary:**
  + US median: $94,000
  + MN median: $96,000
* **Programs:**
  + *University of South Florida – Public Health M.P.H. Concentration in Infection Control*  <https://confluence.usf.edu/display/COPHHB/MPH+Infection+Control> **Online Program**
    - Admission Requirements
      * GRE or equivalent (GMAT, MCAT, DATE, or PCAT)
      * TOEFL, IELTS, IELA, FCE/B2 First, C1, C2, PTE-A, GRE (exam verbal score 153 or higher), or GMAT (verbal 30 or higher) for non-native English speakers
      * Bachelor’s with minimum of 3.0 GPA
    - 42 credit program, plus comprehensive exam
    - Cost:
      * Florida Resident: $431.43 per credit
      * Nonresident: $877.17
  + *University of Pittsburgh – Graduate School of Public Health – Master of Public Health in Infectious Disease Management, Intervention, and Community Practice* <https://publichealth.pitt.edu/mph-mic>
    - Admission Requirements:
      * Bachelor’s Degree
      * GRE
      * Prerequisites:
        + Minimum 6 credits of college-level behavioral science, to include at least one course in Sociology\*\* or Social Psychology and an additional course in Anthropology\*\*, Economics, Political Science, Psychology\*\*, or Sociology\*\* with a grade of C or better
      * TOEFL or IELTS for non-native English speakers
    - 42 credit - program, plus thesis
      * Two-Year Full-Time Program
      * 3-4 years for Part Time
    - Cost:
      * Nonresident
        + Full Time per term: $22,322
        + Part Time per credit: $2,084
      * PA Resident
        + Full Time per term: $14,350
        + Part Time per credit: $1,347

**Clinical and Translational Scientist**

* **Overview:** Clinical and translational scientists research basic biology and clinical trials to help develop and improve health outcomes.
* **Salary:**
  + US median: $100,000
  + MN median: $101,000
* **Programs:**
  + *The George Washington University – Master of Science in Health Sciences in Clinical and Translational Research* **Online Program** <https://online.gwu.edu/master-science-health-sciences-clinical-translational-research>
    - Admission Requirements:
      * Bachelor’s Degree with minimum of 3.0 GPA
      * Previous work experience (preferably Healthcare related)
      * TOEFL, PTE, or IELTS for nonnative English speakers
    - Length:
      * 24-month program, 36 credits total
    - Cost:
      * $49,680
  + *Marshall University Joan C. Edwards School of Medicine – Master of Science in Clinical and Translational Science*<https://jcesom.marshall.edu/research/office-of-research-and-graduate-education/graduate-education-programs/master-of-science-ms-clinical-and-translational-science/>
    - Admission Requirements:
      * Bachelor’s degree with minimum 3.0 GPA (recommended-3.0 for combined science and math courses)
      * Completion of all prerequisite coursework with a grade “C” or better
      * Prerequisites:
        + Two semesters of General Biology with labs
        + Two semesters of General Chemistry\*\* with labs
        + Two semesters of Organic Chemistry\*\* with labs
        + Two semesters of Physics\*\* with labs
        + One semester of Biochemistry\*\* or Cell Biology\*\* are highly recommended but not required
    - Three areas of interest:
      * Clinical Trials – 43 credits – 5 semesters
      * Clinical Research – 45 credits – 5 semesters
      * Clinical Informatics – 45 credits – 5 semesters
    - Cost:
      * WV resident: $9,641 per semester
      * Nonresident: $15,041 per semester

**Molecular Epidemiology**

* **Overview:** Molecular [epidemiology](https://www.sciencedirect.com/topics/medicine-and-dentistry/cohort-effect) uses molecular or genetic markers to trace the development of a disease in a population and to understand transmission, population structure and evolution of bacterial pathogens. Graduate degree programs in this field are mostly research based, include laboratory work, and may require a thesis or dissertation, depending on the degree level.
* **Requirements:**
  + Bachelor's degree.
  + Students applying to the graduate certificate program in the field need to be current master's level students.
* **Potential Jobs:** 
  + **Laboratory Analyst:** perform tasks such as conducting tests and analyzing the results, maintaining workspaces, and preparing experiments.
  + **Statistical Scientist:** works at collecting numerical data from sampling the population.
  + **Research Positions:** collect, analyze, interpret, and report data on a variety of health indicators that include, but are not limited to, mortality, morbidity, natality, and risk-related statistics.
* **Median Salary:** $86,120 per year
* **Programs:** 
  + *Master of Science in Molecular Epidemiology at The University of Southern California* focuses on the methods of biomedical research. Students in this degree work with laboratories to gain hands-on experience in statistical and epidemiological methods. <https://preventivemedicine.usc.edu/divisions/biostatistics/graduate-programs-in-biostatistics-epidemiology/>
    - 2-year program, 38-unit degree.
    - GRE score required.
    - Prospective biostatistics students should have undergraduate degrees in mathematics, statistics, computer science or related fields.
    - Prospective epidemiology students may have clinical backgrounds in psychology, public health, allied health, or biological sciences. Undergraduate preparation should have included applied statistics, college algebra, an introductory course in calculus, and basic computer programming.
    - Admission Information: <https://preventivemedicine.usc.edu/divisions/biostatistics/graduate-programs-in-biostatistics-epidemiology/biostatistics-epidemiology-admissions/>
  + *University of Minnesota School of Public Health Research Programs:*
    - *Cancer:* Faculty bring several methods of expertise including traditional epidemiology, decision modeling, and molecular biology to solve cancer research questions.

Projects: <https://www.sph.umn.edu/academics/divisions/epich/research/cancer/#faculty>

* + - *Infectious Disease:* Primarily focusing on infectious disease methodology, including transmission dynamics, screening strategies, decision and cost-effectiveness modeling, technology-based public health interventions, and randomized community intervention trials.

Projects: <https://www.sph.umn.edu/academics/divisions/epich/research/infectious-disease/>

* + - *Social Epidemiology:* Seeking to understand the ways in which social, political, cultural, and economic circumstances influence our chances for a healthy life.

Projects: <https://www.sph.umn.edu/academics/divisions/epich/research/social-epidemiology/>

* *University of Washington Masters of Science in Genetic Epidemiology:* was one of the first such programs to be developed. Training in genetic epidemiology focuses on methods to identify genetic diseases and their interactions with environmental exposures in populations. The program emphasizes applied research skills.
  + Program does not require GRE scores.
  + Requires Research based Masters Thesis to graduate.
  + Minimum of 63 Course credits during 2-year masters.
  + Tuition:
    - In State: $19,293
    - Out of State: $33,534
  + Course Prerequisites: <http://iphg.biostat.washington.edu/programs/ms/required-courses>
  + Prospective students visit: <http://iphg.biostat.washington.edu/prospective-students>

**Molecular Medicine**

* **Overview:** A master’s in molecular medicine can help enhance admission to and performance in professional healthcare programs. It can also help develop competence in directed research for advanced technical positions in medical research laboratories, industry, government and so on.
* **Salary:**
  + US median: $68,000
  + MN median: $72,000
* **Programs:**
  + *Drexel University – Master of Science in Molecular Medicine* **Online Program Available** <https://www.online.drexel.edu/online-degrees/biomedical-degrees/ms-molecular-medicine/index.aspx>
    - Admission Requirements:
      * Bachelor’s degree with a minimum GPA of 3.0
      * TOEFL for non-native English speakers
      * GRE or MCAT are optional
      * Prerequisites:
        + Biology\*\*
        + Microbiology\*\*
        + Immunology
        + Chemistry\*\*
        + Biochemistry\*\*
        + Mathematics
    - Length: 36 credit - program
    - Cost: $1634 per credit
  + *Liberty University – Health Science School – Master’s of Medical Sciences – Molecular Medicine* **Online Program**<https://www.liberty.edu/online/health-sciences/masters/medical-sciences/molecular-medicine/>
    - Admission Requirements:
      * Bachelor’s degree with minimum GPA of 2.75
      * TOEFL, IELTF, or iTEP for non-native English speakers
      * Prerequisites:
        + 2 semesters of General Biology with a lab OR 2 semesters of Anatomy\*\* and Physiology\*\* with a lab
        + 1 semester of Organic \*\* with a residential lab (2 semesters recommended)
        + 2 semesters of General Chemistry\*\* with a lab
        + Additional recommended courses:

Biostatistics

Physiology\*\* (1 year)

Anatomy\*\* (1 year)

Biochemistry\*\*

Cell Biology\*\*

Microbiology\*\*

Genetics\*\*

* + - Length: 34 credits average completion 1.5 years
    - Cost: $565 per credit

**Stem Cell Biology and Regenerative Medicine**

* **Overview:** A master’s in stem cell biology and regenerative medicine can help enhance admission to and performance in professional healthcare programs. It can also help develop competence in directed research for advanced technical positions in medical research laboratories, industry, government, and so on.
* **Salary:**
  + US median: $88,000
  + MN medina: $90,000
* **Programs:**
  + *University of Minnesota – Stem Cell Institute – Stem Cell Biology Master’s Program* <https://med.umn.edu/stemcell/graduate-programs/master-science-stem-cell-biology>
    - Admission Requirements:
      * Bachelor’s degree in biological sciences or related field with a minimum GPA of 3.2
      * GRE
      * TOEFL or IELTS for non-native English speakers
    - Length:
      * 30 credit - program
        + Plan A: 20 major credits, plus 10 thesis credits
        + Plan B: 30 major credits: including written paper and seminar on a topic in Stem Cell Biology
    - Cost:
      * Resident:
        + Part time, per credit: $1465
        + Full time, 6-14 credits: $8790
        + Each credit over 14: $1465
      * Nonresident:
        + Part time, per credit: $2267
        + Full time, 6-14 credits: $13,602
        + Each credit over 14: $2267
  + *University of Southern California – Master of Science in Stem Cell Biology and Regenerative Medicine* <https://scrm.usc.edu/>
    - Admission Requirements:
      * Bachelor’s degree with a minimum GPA 3.0
      * GRE, MCAT, or DAT
      * TOEFL or IELTS for non-native English speakers
    - Length:
      * One-year 27 units program
      * Optional second research year with 8-14 units
    - Cost:
      * Flat Rate: Taking 15 -18 units per semester: $59,260
      * Full-Time: Taking 8 to 14 units per semester: $39,900
      * Half-Time: Taking 4-7 units per semester

**Respiratory Therapy**

* **Overview:** Respiratory Therapist provides treatment for cardiac and pulmonary issues, providing mechanical ventilation, therapeutic procedures, and cardiopulmonary resuscitation.
* **Requirements:** [National Board for Respiratory Care](https://www.nbrc.org/) examination will accredit you with one of the following certifications: Accredited Respiratory Therapist, Registered Respiratory Therapist, Certified Pulmonary Function Technologist, and others, which allows acquiring one of many of the potential jobs listed below. <https://www.nbrc.org/candidates/>
* **Potential Jobs:** 
  + **Respiratory Therapists** assist doctors and nurses in all aspects of cardiopulmonary care including analyzing oxygen content in blood samples, assisting with life support ventilation systems, taking vital signs, and assisting patients with rehabilitation.
  + **Registered Sleep Center Technologist** conduct sleep studies to patients, working in either sleep labs, Durable Medical Equipment (DME) settings, home environments, and even academic facilities. Sleep technologists will work closely with their patients to diagnose, analyze, and treat them in a relaxed setting.
    - American Board of Sleep Medicine certification required (ABSM).
  + **Sleep Disorder Specialist** is mainly responsible for diagnosing sleeping disorders.
    - [National Board of Respiratory Care provides an exam](https://www.nbrc.org/examinations/sds/)ination required.
  + **Polysomnographic Technologists** perform sleep studies, evaluate, and educate patients on sleep disorders, explain the sleep study procedure to patients, and prepare study materials for patient use.
    - Registered Polysomnographic Technician (RPSGT) through the [Board of Registered Polysomnographic Technologists (BRPT)](https://www.brpt.org/) required.
  + **Pulmonary Function Technician** diagnoses patients who may have respiratory disorders tools such as walking tests, nitric oxide, or stress tests.
  + **Adult Critical Care Specialists** are trained to treat respiratory critical care procedures (specialized gases for respiratory care, managing airways, and delivering pharmacological agents) to patients.
    - [Adult Critical Care Specialty Examination](https://www.nbrc.org/examinations/accs/) required by theNational Board of Respiratory Care.
* **Median Salary:**
  + $73,000/yr USA.
  + $67,190/yr in Minnesota.
* **Programs:** 
  + *Ohio State University Master of Respiratory Therapy* is the first advanced practice clinical master’s degree for respiratory care in the nation. Partners with The Ohio State University Wexner Medical Center and Nationwide Children’s Hospital to give incredible experience to students.

<https://hrs.osu.edu/academics/graduate-programs/master-of-respiratory-therapy>

* + - Tuition in State: $12,425, Out of State: $33,897
    - Graduate of a Bachelor of Science or MS degree from a CoARC accredited Respiratory Therapy program.
    - Minimum of 3.0 GPA.
    - Will earn 47 credits.
    - GRE score required.
    - Other admission criteria: <http://gpadmissions.osu.edu/programs/program.aspx?prog=0269#&&tab=criteria>
* *Bellarmine University Master of Respiratory Therapy* is one of six of its program kinds in the United States.

<https://catalog.bellarmine.edu/2019-2020/prog/mhsrt>

* + Require a bachelor’s degree in a field other than respiratory therapy, with a minimum GPA of 2.75.
  + $770 per credit hour.
  + Total Program Credit Hours: 72
  + Prerequisites:
    - Anatomy and Physiology I and II\*\*: 8 credit hours
    - Microbiology\*\*: 4 credit hours
    - Chemistry\*\*: 4 credit hours
    - Physics\*\*: 3-4 credit hours
    - Psychology\*\*: 3 credit hours
    - Pathophysiology: 3-4 credit hours
    - Statistics\*\*: 3-4 credit hours
    - Total Credit Hours: 28-30

**Speech Language Pathologist**

* **Overview:** Speech language pathology focuses on a range of human communication and swallowing disorders of patients of all ages.
* **Requirements:** Vary by state, but most require the CCC-SLP for Licensure
* **Salary:**
  + US median $82,000
  + MN median $87,000
* **Programs:**
  + *University of Minnesota – Speech-Language-Hearing Sciences – MA in Speech-Language-Pathology* <https://cla.umn.edu/slhs/ma-speech-language-pathology>
    - Admission Requirements:
      * Bachelor’s degree with a minimum overall GPA of 3.0
      * GRE
      * TOEFL or IELTS for non-native English speakers
      * Prerequisites: (with no strict lab requirements)
        + Statistics (must include hypothesis testing) – at least 3 credits
        + Social/Behavioral Sciences (Psychology\*\*, Sociology\*\*, or Anthropology\*\*) – at least 2 credits
        + Biological Sciences (Human\*\* or Animal Sciences) – at least 2 credits
        + Physical Sciences (must be Physics\*\* or Chemistry\*\*) – at least 2 credits
    - Length: 2-year program
    - Cost:
      * Resident
        + Per credit: $1,598
        + 6-14 credits: $9,588
        + Each credit over 14: $1,598
      * Nonresident
        + Per credit: $2,447
        + 6-14 credits: $14,682
        + Each credit over 14: $1,598
  + *Vanderbilt University – Hearing and Speech Sciences – Master of Science in Speech-Language Pathology* <https://medschool.vanderbilt.edu/hearing-speech/msslp/>
    - Admission Requirements:
      * GRE (incoming students have an average score of 318 and average GPA of 3.9)
      * TOEFL for non-native English speakers
      * Prerequisites:
        + Biological Sciences – at least one course, example: Intro to Bio\*\*
        + Physics\*\* or Chemistry\*\* - applicable to a general science requirement
        + Statistics\*\*
        + Social/Behavioral Sciences – at least one course in Psychology\*\*, Sociology\*\*, Anthropology\*\*, or Public Health
    - Length: 2-year program
    - Cost: $13,600 per semester