GENETIC COUNSELING

https://www.cgm.northwestern.edu/education/graduate-genetic-medicine/index.html

Degree Types: MS

The Graduate Program in Genetic Counseling (https://www.cgm.northwestern.edu/education/graduate-genetic-medicine) is a six-quarter (18-month) program leading to a master’s in Genetic Counseling and accredited by the Accreditation Council for Genetic Counseling (ACGC). The curriculum is designed to emphasize the scientific and medical aspects of the profession, along with the counseling and psychosocial aspects. Students have extensive coursework their first year and also begin their clinical rotations during the winter quarter. Early clinical placements allow the students to quickly apply and reinforce the concepts they learn in the classroom. In addition, Northwestern has a strong research component, requiring a written thesis and oral defense (https://www.cgm.northwestern.edu/education/graduate-genetic-medicine/program-description/thesis-project.html).

Graduates are prepared for employment as genetic counselors in multiple settings including:

- Multidisciplinary medical settings including pediatrics, prenatal, adult, cancer and other subspecialties.
- Laboratories, government agencies, research, public health and industry.

Students are prepared for the ABGC certification examination through coursework, thesis and clinical experiences supervised by certified genetic counselors and clinical geneticists.

Degrees Offered

- Genetic Counseling MS (https://catalogs.northwestern.edu/tgs/genetic-counseling/genetic-counseling-ms)

Genetic Counseling Courses

GENET_CN 401-0 Introduction to Genetic Counseling (1 Unit)
History of genetic counseling and clinical genetics, genetic counseling skills and process, eliciting patient histories, prenatal diagnosis counseling, introduction to diagnostic obstetric ultrasound, teratology, and high-risk obstetrics.

GENET_CN 403-0 Professional Issues in Genetic Counseling (1 Unit)
This course will examine legal, ethical, ethnocultural and other timely professional issues.

GENET_CN 411-0 Psychosocial Aspects of Genetic Counseling I (1 Unit)
An introductory course to human psychological development and counseling/interviewing skills as applied to genetic counseling.

GENET_CN 412-0 Psychosocial Aspects of Genetic Counseling II (1 Unit)
Builds on more theoretical coursework from earlier classes and examines normal and abnormal processes of pregnancy, prenatal diagnosis, birth of a child, and genetic disease for adolescents/adults.

GENET_CN 413-0 Advanced Genetic Counseling (1 Unit)
Second-year seminar focusing on advanced counseling principles and skills.

GENET_CN 420-1 Principles of Medical Genetics I (1 Unit)
Basic and complex principles of human heredity, including an introduction to cytogenetics, molecular technique and mathematical genetics.

GENET_CN 420-2 Principles of Medical Genetics II (1 Unit)
Approaches to clinical genetics, dysmorphology, and a variety of genetic diseases; application of medical and genetic information to genetic counseling of families.

GENET_CN 420-3 Principles of Medical Genetics III (1 Unit)
Biochemical genetics, immunology, pharmacogenetics, common adult genetic conditions and treatment of genetic disease.

GENET_CN 421-0 Research Methods (1 Unit)
Planning research projects, questionnaire development, research design, and approaches to clinical research.

GENET_CN 422-0 Genetics Journal Club (0 Unit)
Regular meetings to review current genetics journals and present articles of interest relevant to clinical genetics.

GENET_CN 425-0 Adult Genetics (1 Unit)
This class will consider the various adult onset complex disorders, ways to obtain and interpret family history for complex adult conditions, specific genetic risk assessment approaches, and ways to communicate risk to families.

GENET_CN 499-0 Research Project (1 Unit)
Development and presentation of a research project or case report in consultation with an advisory committee. Students will present a seminar on the project and prepare a paper that is expected to be submitted for publication and for presentation at a professional meeting.

GENET_CN 525-0 Clinical Rotations (1 Unit)
Rotations through the Genetic Counseling Clinic at local hospitals during the winter and spring quarters of the first year and the fall quarter of the second year.

GENET_CN 530-0 Summer Clinical Rotation (3 Units)
Two six-week, full-time summer rotations at clinical genetics centers in the Chicago metropolitan area.