

# GENETIC COUNSELING (M.S.)

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<https://genetics.wayne.edu/education/ms-genetic-counseling> (<https://genetics.wayne.edu/education/ms-genetic-counseling/>)

The graduate program in Genetic Counseling is located in the Center for Molecular Medicine and Genetics (CMMG) on the School of Medicine campus. Genetic counselors are medical professionals who help people understand and adapt to the medical, psychological and familial implications of genetic contributions to disease. This is achieved through the following: procuring and interpreting family and medical histories to assess the chance of disease occurrence or recurrence; educating about inheritance, testing, management, resources, and research; and providing counseling to promote informed decision-making and adaptation to genetic disease or risk. The practice of genetic counseling requires comprehensive knowledge of human and medical genetics, including genetic and genomic testing, in combination with an appreciation for the psychosocial, ethical, and social issues associated with genetic disorders. It also requires strong critical thinking, psychosocial assessment, and interpersonal communication skills. Genetic counselors generally work as part of a health care team in a variety of clinical settings such as pediatric genetics, reproductive genetics, cancer genetics, inherited metabolic disorders/newborn screening, cardiovascular genetics, and neurogenetics. Genetic counselors also work in many other settings including clinical laboratories, public health departments, universities, advocacy organizations, and public policy organizations. Genetic counseling services may be provided in person, by telemedicine (video-conferencing) or by telephone. In addition to providing genetic counseling services to patients, genetic counselors may have roles in research, genetic/genomic testing, sales and marketing, leadership, advocacy, public policy, and/or education.

The graduate program in genetic counseling is designed to prepare students with the appropriate knowledge base and practical experience to function competently as genetic counselors in a wide array of settings. The curriculum consists of course work in molecular biology, human and medical genetics, embryology, epidemiology, research methods and statistics, the principles, theory, and practice of genetic counseling, ethics, cultural competency, diversity, equity, inclusion, and justice, counseling, and interpersonal communication. In addition, students gain practical experience by doing supervised clinical internships in a broad range of genetics and specialty clinics as well as clinical genetics laboratories. Students are also required to conduct a research project on a relevant clinical or professional topic (modified Plan B). This program is accredited by the Accreditation Council of Genetic Counseling.

## Admission Requirements

Admission to the genetic counseling program is contingent upon admission to the Graduate School (<http://bulletins.wayne.edu/graduate/general-information/admission/>) and the graduate programs of the School of Medicine (<http://bulletins.wayne.edu/graduate/school-medicine/programs/>), respectively. Applicants must have a 4-year baccalaureate degree, typically with a grade point average of at least 3.0 or equivalent. Undergraduate course work in biology, biochemistry, chemistry, genetics, organic chemistry, statistics and psychology is required. Also required are three letters of recommendation, a written personal statement, transcripts, and a resume that includes information about efforts to explore the profession and counseling advocacy work. Prospective students are strongly encouraged to shadow and/or speak with a genetic counselor, attend a genetic counseling program open house, and/or do other activities that will familiarize them with the field

before applying. The genetic counseling program holds open houses 2-3 times per year where potential applicants can learn about the profession by interacting with and hearing presentations from practicing genetic counselors. Advocacy experience is also a prerequisite to admission. Counseling advocacy, which includes but is not limited to crisis counseling (including crisis text hotline), sexual assault or domestic violence counseling, serving as a resident assistant, or facilitating a grief and loss support group, is required. For questions about the suitability of an advocacy experience, please contact the program directors.

The genetic counseling program participates in the Association of Genetic Counseling Program Directors' Genetic Counseling Admissions Match, administrated by National Matching Services, Inc. Only applicants that register to take part in the admissions match are considered for admission.

The Master of Science in Genetic Counseling program is offered as a Master's Degree Plan B (<http://bulletins.wayne.edu/graduate/general-information/degree-certificate-requirements/#mastersdegreestext>), requiring a research project. The curriculum includes approximately forty-five credits: thirty-five credits in core course work, six credits in clinical internships, and four credits for the research project (coursework and independent study). Students should contact the Program Director ([%20geneticcounseling@med.wayne.edu](mailto:%20geneticcounseling@med.wayne.edu)) for more details about required courses

First Year		
Fall Semester		Credits
MGG 7010	Molecular Biology and Genetics	4
MGG 7640	Principles of Genetic Counseling	4
MGG 7730	Introduction to Promoting Health Equity in Genetic Counseling	1
MGG 7830	Human Development and Teratology Seminar	1
MGG 7999	Master's Research Project and Direction (Seminar course)	2
FPH 7240	Epidemiology	3
<b>Credits</b>		<b>15</b>

Winter Semester		
MGG 7660	Practical Applications of Genetic Counseling	3
MGG 7740	Theory and Practice of Genetic Counseling	3
MGG 7860	Evaluating the Health Care Literature	1
MGG 7880	Genetic Counseling Seminar	1
MGG 7600	Advanced Human Genetics	3
MGG 8998	Genetic Counseling Internship	1
MGG 7710	Introduction to Medical Genetics	2
<b>Credits</b>		<b>14</b>

Spring/Summer Semester		
MGG 8998	Genetic Counseling Internship (2 internships, 7 weeks each)	1
<b>Credits</b>		<b>1</b>

Second Year		
Fall Semester		Credits
MGG 7741	Advanced Genetic Counseling Theory and Practice	3
MGG 7800	Advanced Medical Genetics	3
MGG 7999	Master's Research Project and Direction (Independent study)	1
MGG 8998	Genetic Counseling Internship (Two 7-week internships)	2
<b>Credits</b>		<b>9</b>

Winter Semester		
MGG 7880	Genetic Counseling Seminar	1
MGG 7881	Senior Seminar in Genetic Counseling	2
MGG 7999	Master's Research Project and Direction	1

MGG 8998	Genetic Counseling Internship (Two 7 week internships)	2
	<b>Credits</b>	<b>6</b>
	<b>Total Credits</b>	<b>45</b>