

## **MASTER OF SCIENCE in CANCER BIOLOGY (DEPARTMENT OF ONCOLOGY)**

### Program Description

The M.S. program in Cancer Biology offers a strong didactic and laboratory curriculum in cancer biology with a major focus on molecular oncology. Our goal is to provide intensive research training for students who are interested in a career in academia, medicine, industry, or related careers in which first-hand research experience is an asset. Research interests in the Department of Oncology are diverse and dynamic, allowing students to choose from a broad spectrum of topics for their research thesis. Students are encouraged to attend weekly departmental, student seminars, journal club, and annual symposiums. These regular interactions between students and faculty help our students develop oral communication and collaboration skills for future success.

### Degree Requirements

The master's degree in Cancer Biology is offered under Plan A only. A minimum of 34 credits, eight of which must be from thesis research, and the completion of an original research project are required to receive a MS degree. The coursework includes 13 credits of compulsory courses and 13 credits of elective courses (listed below). A minimum GPA of 3.0 must be maintained throughout the MS program. Students should select an advisor and committee as early as possible in the second semester of year 1 to begin full time thesis research. Students should strive to publish one peer-reviewed paper as first or second author to demonstrate the quality of their research.

#### **Plan A Curriculum (Total 34 cr)**

##### *Required courses (13 cr):*

MBG 7010 Molecular Biology & Genetics (4 cr)  
BMB 7010 General Biochemistry (4 cr)  
CB 7210 Fundamentals of Cancer Biology (3 cr)  
CB 7800 Ethics (1 cr)  
CB 7700 Journal Club 1 cr

*CB 8999 Master's thesis research (8 cr)*

##### *Elective courses (13 cr):*

CB 7220 Molecular Biology of Cancer Development (3 cr)  
CB 7240 Cancer chemotherapy (2 cr)  
CB 7460 Mechanism of neoplasia: Cell signaling (3 cr)  
CB 7300 Special Topics (1-4 topics, 1 cr each)  
CB 7600 Applied Cancer Biostatistics (2 cr)  
CB 7430 Cancer epidemiology (2 cr)  
BMS 7115 Technology Commercialization (1 cr)

## Admission Requirements

Admission to the M.S. program is contingent upon admission to the Graduate School and the graduate programs of the School of Medicine. Qualified applicants must have a B.S. or B.A. degree from an accredited college or university, preferably with a major in biology, chemistry, physics, or a closely related discipline. A complete application includes the basic application form, personal statement, official transcripts from previous institutions, three letters of reference, and Graduate Record Examination (GRE) test scores. International students must be proficient in English as determined by satisfactory performance on the Test of English as a Foreign Language (TOEFL) examination. GRE and TOEFL scores should be reported to Wayne State University using institution code 1898. Applications must be submitted online by August 1st. Graduate School Admissions policies can be found at the [Office of Graduate Admissions](#).

## Contact Information

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