

SURGICAL AND INTERVENTIONAL SCIENCES (NON-THESIS): ONCOLOGY (M.SC.) (45 CREDITS)

Offered by: Surgery (Faculty of Medicine and Health Sciences)

Degree: Master of Science

Program credit weight: 45

Program Description

The M.Sc. in Surgical and Interventional Sciences; Non#Thesis - Oncology program offers training in surgical research related to oncology and examines the broad range of disciplines in cancer research and care. In addition to an oncology practicum that focuses on a research project in a chosen cancer research discipline, there also will be a surgery research project with a focus on cancer.

Note: For information about Fall 2025 and Winter 2026 course offerings, please check back on May 8, 2025. Until then, the "Terms offered" field will appear blank for most courses while the class schedule is being finalized.

Required Courses (24 credits)

Expand allContract all

Course	Title	Credits
EXSU 500	Artificial Intelligence in Medicine .	3
EXSU 602	Knowledge Management 2.	3
EXSU 623	Surgery Research Project 2.	6
ONCO 610D1	Fundamentals of Oncology and Cancer Research.	3
ONCO 610D2	Fundamentals of Oncology and Cancer Research.	3
ONCO 620	Best Practices in Biomedical Research.	3
ONCO 630	Oncology Practicum.	3

Complementary Courses (6 credits)

3 credits selected from:

Expand allContract all

Course	Title	Credits
EDPE 575	Statistics for Practitioners.	3
EPIB 507	Biostats for Health Sciences.	3
EXSU 606	Statistics for Surgical Research.	3

Or a 3 credits of a research design or statistics course at the 500 level or higher.

3 credits selected from:

Expand allContract all

Course	Title	Credits
BMDE 653	Patents in Biomedical Engineering.	3
BMDE 654	Biomedical Regulatory Affairs - Medical Devices.	3
BMDE 655	Biomedical Clinical Trials - Medical Devices.	3
EDPE 637	Issues in Health Professions Education.	3
EDPE 687	Qualitative Methods in Educational Psychology.	3
EDPH 689	Teaching and Learning in Higher Education.	3
EPIB 521	Regression Analysis for Health Sciences.	3
EPIB 681	Global Health: Epidemiological Research.	3
EXMD 609	Cellular Methods in Medical Research.	3
EXMD 610	Molecular Methods in Medical Research.	3
EXSU 505	Trends in Precision Oncology.	3
EXSU 601	Knowledge Management 1.	3
EXSU 603	Surgical Education Foundations.	3
EXSU 605	Biomedical Research Innovation.	3
EXSU 620	Surgical Innovation 1.	3
EXSU 684	Signal Transduction.	3
FMED 525	Foundations of Translational Science.	3
FMED 619	Program Management in Global Health and Primary Health Care.	3
ONCO 611	Proteomics for Precision Medicine.	3
ONCO 615	Principles and Practice of Clinical Trials.	3
ONCO 625	Quality Improvement Principles and Methods.	3
ONCO 635	Qualitative and Psychosocial Health Research.	3
ONCO 645	Seminars in Global Oncology.	3
PHGY 518	Artificial Cells.	3
PHGY 550	Molecular Physiology of Bone.	3
PPHS 511	Fundamentals of Global Health.	3
PPHS 528	Economic Evaluation of Health Programs.	3
PPHS 529	Global Environmental Health and Burden of Disease.	3

Electives (15 credits)

15 credits at the 500 level or higher may be chosen from the course list above or from other courses. The courses should have a surgery or oncology related theme. Selections to be approved by the director of the program or advisor.