Anesthesia Program

PROSPECTIVE STUDENT GUIDE

Master of Science in Anesthesia
Doctor of Anesthesia Practice (DrAP)
Dual Program DrAP/MBA

Revised September 7, 2016
Dear Prospective Student,

Welcome to the University of Michigan-Flint/Hurley Medical Center Anesthesia Program. If you are interested in pursuing a degree in the field of anesthesia, this guide has been prepared expressly for you. While we have attempted to address the most frequently asked questions regarding our programs, we encourage you to contact our admissions coordinator, Dr. Jane Motz, at jamotz@umflint.edu with any remaining questions.

We look forward to hearing from you!

Shawn Fryzel, CRNA, DrAP
Program Director
University of Michigan-Flint Anesthesia Program

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Program Overview

INTRODUCTION

The University of Michigan-Flint Anesthesia Program is dedicated to providing the health care community with professional, competent nurse anesthetists at both clinical and administrative levels. The University of Michigan-Flint/Hurley Medical Center Master of Science in Anesthesia and Doctor of Anesthesia Practice curriculums are designed to educate qualified registered and advanced practice nurses at the graduate level in keeping with the standards and guidelines of the Council on Accreditation of Nurse Anesthesia Educational Programs.

ACCREDITATION

The University of Michigan-Flint is accredited by the Higher Learning Commission (HLC) of the North Central Association of Colleges and Schools. The next HLC PEAQ Comprehensive Evaluation is scheduled for 2019/2020. The University of Michigan-Flint Anesthesia Program is further accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs (COA), 222 S. Prospect Avenue, Park Ridge, IL 60068; ph. 847-655-1160. The next COA accreditation review will occur in 2024. Visit COA online: COA Accredited Anesthesia Programs

PROGRAM HISTORY

In May of 1950, the Hurley Hospital School of Anesthesia Diploma Program was established to alleviate a shortage of trained anesthesia personnel. The program’s twelve-month course of study received full accreditation by the American Association of Nurse Anesthetists thanks to the dedication and determination of the program director, Helen Vos, CRNA. The curriculum expanded to 18 months in the sixties and to 24 months in the seventies, at which time it was renamed the Hurley Medical Center School of Anesthesia. When Hurley Medical Center joined forces with the University of Michigan-Flint in March of 1981, the program advanced to the Bachelor of Science level. Though financial constraints resulted in the school’s closure in 1988, the entity re-emerged in 1991 as the University of Michigan-Flint/Hurley Medical Center Master of Science in Anesthesia. Recognizing the need to prepare current CRNAs for expanding leadership roles in education and healthcare administration, the University of Michigan-Flint opened Michigan’s first fully accredited clinical doctorate nurse anesthesia completion program in 2011, and awarded the state’s first Doctor of Anesthesia Practice degrees in 2013.

EQUAL OPPORTUNITY

The Anesthesia Program fully supports the Americans with Disabilities Act of 1990 and Section 504 of the 1973 Rehabilitation Act. With adequate notice, reasonable accommodations will be made for applicants and students with disabilities or accessibility limitations. The University of Michigan Non-Discrimination Policy states that as an equal opportunity/affirmative action employer, the University of Michigan complies with all applicable federal and state laws regarding nondiscrimination and affirmative action. The University of Michigan is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, national origin, age, marital status, sex, sexual orientation, gender identity, gender expression, disability, religion, height, weight or veteran status in employment, educational programs and activities, and admissions. Inquiries or complaints may be addressed to the Senior Director for Institutional Equity and Title IX/Section 504/ADA Coordinator, Office of Institutional Equity, 2072 Administrative Services Building, Ann Arbor, Michigan 48109-1432, 734-763-0235, TTY 734-647-1388.
University of Michigan-Flint/Hurley Medical Center

Master of Science in Anesthesia

MISSION STATEMENT

The mission of the Anesthesia Program is to support the graduate education of nurse anesthetists and ensure our graduates have the knowledge, skills and abilities to provide quality anesthesia care and service. The mission is predicated on the common goals of the University of Michigan-Flint and Hurley Medical Center to provide quality education, research and clinical service to the community.

CURRICULUM OVERVIEW

The UM-Flint/Hurley Medical Center Master of Science in Anesthesia curriculum exceeds clinical and didactic requirements set by the Council on Accreditation of Nurse Anesthesia Educational Programs. The 24-month integrated curriculum consists of 63 graduate-level credit hours combining intensive didactic instruction with concurrent clinical experiences. Students perform supervised anesthetic care at Hurley Medical Center and a number of other affiliate facilities in the greater mid-Michigan area. Anesthesia Program faculty strive to provide a positive, interactive learning environment by building on previous nursing experience and education as well as by encouraging investigation, experimentation and clinical application. Students acquire the knowledge and skill sets necessary for successful entry into nurse anesthesia practice under close clinical and didactic supervision. The Master of Science in Anesthesia Plan of Study outlines the course requirements for this two-year curriculum. Course descriptions are available online from the UM-Flint Course Catalog.

CLASSROOM LOCATION

Classes meet primarily in the Anesthesia Program classroom within the Phillip Dutcher Education Center at 801 Tuuri Place in Flint, Michigan. The Dutcher building is located one block southwest of Hurley Medical Center, between Patrick and Prospect streets. The building entrance is directly across from the main entrance of Mott Children’s Health Center.

MAILING ADDRESS

UM-Flint/Hurley Anesthesia Program
One Hurley Plaza/Dutcher Center
Flint, MI 48503

GOOGLE MAPS & GPS

801 Tuuri Place, Flint, MI 48503

CLINICAL AFFILIATES

Ambulatory Surgery
St. Mary’s Towne Centre

Cardiothoracic
Genesys Regional Medical Center
MidMichigan Medical Center
McLaren Port Huron

General Rotations
Covenant HealthCare
Genesys Regional Medical Center
Hurley Medical Center
McLaren Bay Region
McLaren Flint
McLaren Lapeer Region
McLaren Port Huron
Memorial Healthcare
MidMichigan Midland
St. Mary’s of Michigan
U of M University Hospital

Neurovascular
Genesys Regional Medical Center
McLaren Bay Region
McLaren Flint

Obstetrics
Covenant HealthCare
Genesys Regional Medical Center

Pediatrics
C. S. Mott Children’s Hospital

Regional Anesthesia
MidMichigan Clare
MidMichigan Gladwin
VA Medical Center Detroit
and other affiliates

Solo Practice
Hills & Dales General Hospital
McKenzie Hospital
MidMichigan Clare
MidMichigan Gladwin
DRUG-FREE ENVIRONMENT

The unlawful manufacture, distribution, dispensation, possession and/or use of illegal or controlled substances and alcoholic beverages is strictly prohibited. The University of Michigan-Flint/Hurley Medical Center Master of Science in Anesthesia program follows Hurley Medical Center protocols regarding drug and alcohol screening procedures. Prior to program entry, incoming students are required to submit to a drug/alcohol screening test as part of the Hurley Medical Center physical examination. A subsequent drug/alcohol screening test may be requested from an enrolled student at any time. Impairment of any kind is considered grounds for dismissal from the program. Students who fail a drug/alcohol screening test will be referred to the Michigan Health Professional Recovery Program.

The HPRP is administered by a private contractor under the direction of the Health Professional Recovery Committee (a multi-disciplinary committee) and the Bureau of Health Professions within the Michigan Department of Licensing and Regulatory Affairs. Additionally, the University of Michigan-Flint/Hurley Medical Center Anesthesia Program recommends the counseling, rehabilitation and referral services offered by both Hurley Medical Center and University of Michigan-Flint.

APPLICANT CHARACTERISTICS

Because Anesthesia is one of the most mentally, physically and emotionally challenging of the advanced practice nursing fields, the educational process is intense. Strong student candidates are geared for excellence professionally, clinically and academically. Applicants should be goal-oriented, well organized and highly motivated. The best-prepared students do not simply meet or exceed established program prerequisites; the best-prepared students seek knowledge beyond the presented content, seek solutions before asking questions, and set high personal standards for themselves and others. In addition, safe, competent anesthetic care demands practitioners who 1) assess patients quickly and insightfully; and 2) communicate efficiently and effectively to the members of their health care team. Anesthesia students must possess a variety of personal attributes to succeed in a demanding graduate program and challenging profession. The following skills and traits are essential to the successful completion of the anesthesia program:

Behavior
- Self-disciplined, self-controlled and self-aware, personally and professionally
- Compassionate, sensitive, tactful and empathetic during interactions with others
- Positive in response to criticism; exhibits appropriate, reflective behavior modifications
- Efficient and effective in a stressful, rapidly changing health care environment
- Cooperative with health care team; provides a safe, therapeutic setting for patient care
- Respectful of property, both public and private
- Cognition
- Possess analytical, critical and evaluative problem-solving skills
- Comprehend, acquire and synthesize complex concepts
- Accurately interpret audio/visual data when determining anesthetic management plans
- Apply current theoretical knowledge and evidenced-based practices to anesthetic care

Communication
- Communicate in English clearly and effectively, orally and in writing
- Comprehend English quickly and correctly, both orally and in writing
- Accurately perceive all aspects of communication, verbal and non-verbal
- Communicate appropriately in a precise, professional and positive manner
Sensory/Motor
- Detect variations in response to disease w/visual, auditory, tactile, other sensory cues
- Detect visual and auditory changes in monitoring devices and alarms
- Demonstrate physical strength sufficient to transport/position patients and equipment
- Possess sufficient stamina to stand/sit for prolonged periods of time
- Safely maneuver in work spaces with space limitations and physical obstructions
- Respond appropriately to alarms and conditions requiring physical intervention
- Demonstrate fine, gross, and sensory/motor skills necessary for physical assessment, intravascular access, regional anesthetic administration, and airway management

RIGHTS AND RESPONSIBILITIES

Applicants are expected to provide truthful, accurate application materials and communicate with the program in a timely manner. Applicants may expect timely communication, nondiscriminatory treatment, and fair, consistent evaluation.

Students are expected to comply with program and clinical site policies and procedures, behave in a professional manner reflective of CRNA standards, and put forth their best efforts at all times. Students may expect reasonable access to academic and clinical transcripts, fair evaluation, timely communication regarding academic and clinical progress, and freedom from exploitation for pay or profit.

Graduates are expected to lead by example as well as advocate for excellence in patient care, maintain current knowledge and skill sets, support the CRNA educational experience for future students, participate in CRNA professional organizations, and professionally represent CRNA credentials and the UM-Flint/Hurley Anesthesia Program. Graduates may expect timely forwarding of student transcripts to the Council on Certification of Nurse Anesthetists as well as accurate and timely responses to current and future program completion verification requests.

ADMISSION CRITERIA

Admission to the Master of Science in Anesthesia program is highly selective and very competitive. Preference is given to applicants best qualified to succeed in this intensive program of study. The following criteria establishes the baseline for competitiveness:

Professional Requirements
- Current, unrestricted licensure as a MI registered nurse (or other United States state/protectorate)
- Current Advanced Cardiac Life Support (ACLS) provider certification
- Current Pediatric Advanced Life Support (PALS) provider certification
- At least one year of experience as a registered nurse in a critical care nursing area such as SICU, MICU, CCU, or ICU within the last five years. NICU (neonatal) & Emergency Department experience may be accepted if the applicant has a working knowledge of pulmonary artery and other advanced monitoring modalities and is proficient in vasopressor titration

Educational Requirements
- Graduate Record Examination (GRE) general test scores
- Bachelor of Science in nursing or appropriate biological science from an accredited institution
- Overall undergraduate grade point average (GPA) of at least 3.0 (on a 4.0 scale) from an accredited institution for the most recent 120 credit hours
- Cumulative GPA of at least 3.0 (on a 4.0 scale) from an accredited institution for the following required courses:
  - College Algebra (MTH 111) or demonstrated competence on math placement test
  - Statistics, graduate or undergraduate level
- General Chemistry for Health Sciences (CHM 150) or Principles of Chemistry I (CHM 260)
- General Chemistry for Health Sciences Lab (CHM 151) or General Chemistry Lab (CHM 261), (strongly recommended)
- Fundamentals of Organic Chemistry (CHM 220) or Biologic Chemistry CHM 252
- Microbiology Basics (BIO 135), Human Anatomy & Physiology I* (BIO 167), and Human Anatomy & Physiology II* (BIO 168) or Organismal Biology (BIO 111), Cell Biology (BIO 326), and Mammalogy (BIO 421)

*Single-semester Anatomy & Physiology courses must be five or more credit hours.

- If science credits are ten years old or older, recent repeats are required for:
  - Fundamentals of Organic Chemistry (CHM 220) or Biologic Chemistry (CHM 252)
  - Human Anatomy & Physiology I (BIO 167) or Human Anatomy & Physiology II (BIO 168)

Applicants presently enrolled in their final prerequisite course may apply for admission consideration if all other prerequisites have been met. Files otherwise incomplete will not be reviewed.

For more information, see the UM-Flint Course Catalog. A Transfer Equivalency Guide is available for non-UM courses.

TRANSFER STUDENTS

Because each nurse anesthesia curriculum is unique, students previously enrolled in other anesthesia programs cannot be accepted as transfer students and must apply through the standard application process. Anesthesia program transcripts, clinical evaluations, and a recommendation from the program director must be included with the application. Credit may be given for previous graduate coursework at the discretion of program administration and according to University policy. Please refer to the Transfer Students section of the UM-Flint website for more information. Transfer requests are initiated by submitting a petition to the program director.

STUDENT INSURANCE

Hurley Medical Center offers health insurance to students enrolled in the MS Anesthesia program for a nominal fee. Coverage is limited to the enrolled student only; spouses and dependents are not covered. Students becoming ill or suffering an injury while at Hurley Medical Center shall be assessed by Hurley Occupational Health personnel to determine whether referral for further treatment is warranted.

COMMUNICATION

Program administration maintains open lines of communication and is generally available to the student body on a daily basis. Enrolled students are expected to provide program administration with a personal cell phone number with text services, as texting is an important means of program communication.

The formal line of student communication begins with elected class officers and proceeds to clinical and didactic faculty members, Educational Coordinator, Assistant Director, Program Director, Department Director, and Dean of the School of Health Professions and Studies. Special circumstances may warrant bypassing segments of the formal line of communication.

STUDENT SCHEDULE

In addition to mandatory activities and professional meetings, anesthesia students are required to attend classes and clinical assignments five days per week for 24 months with few exceptions. Students are assigned clinical shifts during spring break and other times when university classes are not in ses-
sion. Clinical assignments include day, evening, night, Saturday, Sunday, and holiday weekend shifts. Schedules are determined administratively based on facility availability and student clinical needs. They are revised frequently and must be checked regularly. Current schedules are posted in the Anesthesia Program suite and on Blackboard, the university’s web-based learning management system. Currently posted schedules supersede all previous versions.

Student schedules include a reasonable amount of class/clinical time as well as two days off each calendar week. Although students are not scheduled on Labor Day, Thanksgiving Day, Christmas Day, New Year’s Day, Memorial Day or Independence Day, they may be scheduled for holiday weekends. A student may request to work a on particular holiday in exchange for a different holiday “off” date. Students are also assigned four days off between fall semester and winter semester.

<table>
<thead>
<tr>
<th>Student Time Off</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holidays (6 per year)</td>
<td>12</td>
</tr>
<tr>
<td>Assigned Days (4 per year)</td>
<td>8</td>
</tr>
<tr>
<td>Combined Leave Time</td>
<td>15</td>
</tr>
<tr>
<td><strong>Program Total</strong></td>
<td>35</td>
</tr>
</tbody>
</table>

**Combined Leave Time (CLT)**

Every student receives a Combined Leave Time balance of 15 days upon beginning the program. This time is available for use as vacation or sick time at the discretion of the student throughout the 24-month program. CLT must be scheduled in advance except in cases of illness or emergency.

**PROGRAM COMPLETION**

**Outcome Criteria**

Graduates of the University of Michigan-Flint/Hurley Medical Center Master of Science in Anesthesia Program are well-prepared to fulfill professional responsibilities. Each graduate meets the outcome criteria standards as required by the COA pertaining to knowledge, skills and competencies in patient safety, perianesthetic management, critical thinking, communication, and overall responsibility.

I. **Patient Safety**
   Patient Safety is demonstrated by the ability of the graduate to:
   A. Protect patients from iatrogenic complications
   B. Participate in the positioning of patients to prevent injury
   C. Conduct a comprehensive and appropriate equipment check
   D. Utilize standard precautions and appropriate infection control measures

II. **Perianesthetic Management**
   Individualized perianesthetic management is demonstrated by the ability of the graduate to:
   A. Provide care throughout the perianesthetic continuum
   B. Utilize a variety of current techniques, agents, adjunctive drugs, and equipment
   C. Administer general anesthesia to patients of all ages and physical conditions for a variety of surgical and medically related procedures
   D. Provide anesthesia services to all patients, including trauma and emergency cases.
   E. Administer and manage a variety of regional anesthetics
   F. Function as a resource person for airway and ventilatory management of patients
   G. Possess current advanced cardiac life support (ACLS) recognition
   H. Possess current pediatric advanced life support (PALS) recognition
   I. Deliver culturally competent perianesthetic care throughout the anesthesia experience

III. **Critical Thinking**
   Critical Thinking is demonstrated by the graduate’s ability to:
   A. Apply knowledge to practice in decision-making and problem solving
   B. Provide nurse anesthesia care based on sound principles and research evidence
   C. Perform a preanesthetic assessment and formulate an anesthesia care plan for patients
D. Identify and take appropriate action when faced with anesthetic equipment malfunctions
E. Interpret and utilize data obtained from noninvasive and invasive monitoring modalities
F. Calculate, initiate, and manage fluid and blood component therapy
G. Recognize/appropriately respond to anesthetic complications during perianesthesia
H. Pass the Council on Certification of Nurse Anesthetists’ (CCNA) certification examination in accordance with CCNA policies and procedures

IV. Communication
Communication skills are demonstrated by the graduate’s ability to:
A. Effectively communicate with individuals influencing patient care
B. Utilize appropriate verbal/nonverbal/written communication during perianesthetic care

V. Professional Responsibility
Professional responsibility is demonstrated by the graduate’s ability to:
A. Participate in activities that improve anesthesia care
B. Function within appropriate legal requirements as a registered professional nurse, accepting responsibility and accountability for his or her practice
C. Interact and teach professionally and with integrity
D. Participate in continuing education to acquire knowledge and improve practice
E. Demonstrate knowledge of wellness and chemical dependency in the anesthesia profession through completion of content in wellness and chemical dependency

GRADUATION CRITERIA

Students are eligible to take the certification examination administered by the Council on Certification of Nurse Anesthetists only after they have met the following graduation criteria:

- Completion of all courses with a "B" or better
- Successful completion of all research requirements
- Achievement of all program outcome criteria as defined above
- Successful completion of all clinical internships
- Successful completion of minimum case experiences as determined by the Council on Accreditation of Nurse Anesthesia Educational Programs (COA)
- Current, unrestricted, licensure as a registered nurse in Michigan
- Current Advanced Cardiac Life Support (ACLS) provider certification
- Current Pediatric Advanced Life Support (PALS) provider certification
- Final review and correction of documents as required by the Council on Certification of Nurse Anesthetists prior to scheduling the certification exam

CERTIFICATION EXAM

A portion of the NBCRNA National Certification Examination (NCE) application fee may be covered with proceeds generated from the UM-Flint/Hurley Anesthesia Conference organized and hosted annually by Anesthesia Program senior students. The NCE application process requires disclosure of any action taken against them as a result of an ethical violation, as such conduct may impede or prevent the student from taking the examination.

TUITION, FEES AND EXPENSES

The following table is provided as a guideline only and is not a comprehensive list of expenses. Actual costs are difficult to estimate and vary widely from student to student. University tuition and fees are subject to change at the discretion of the Regents of the University of Michigan. Current rates are available online at UM-Flint Tuition and Fees. All estimates are subject to change.
APPLICATION

A new cohort begins the Master of Science in Anesthesia program every fall semester. Applications completed by October 1 are considered for early admission into the fall cohort of the following calendar year. Applications completed by February 1 are considered for admission into the fall cohort of the current calendar year. Incomplete applications are not reviewed.

To be considered complete, the application must include:

- **Application for Graduate Admission**
- **Anesthesia Supplemental Application**
- Official transcripts from all colleges and universities attended
- Three letters of recommendation, including one from each of the following:
  - The student’s nursing program dean, director or faculty member
  - The student’s present immediate supervisor
  - A practicing colleague familiar with the student’s work as a registered nurse
- Autobiographical essay (500-1000 words) describing:
  - Health care experience
  - Reason for selecting anesthesia
  - Professional goals and career expectations
- **GRE** General Test scores (GRE Institution Code for UM-Flint is 1853)
- Copy of military discharge DD Form 214 (if applicable)
- Copy of current Registered Nursing License from Michigan or other U.S. state/protectorate
- Copy of current Advanced Cardiac Life Support (ACLS) provider certificate
- Copy of current Pediatric Advanced Life Support (PALS) provider certificate

Admission is selective and enrollment is limited. Applicants selected for interviews must complete the interview process to retain eligibility for admission into the relevant cohort. Incoming students are expected to attend a mandatory two-week orientation in August prior to fall semester. International applicants are encouraged to visit UM-Flint International for additional information. Applications with pending United States nursing licensure status will not be reviewed.

### Estimated Expenses

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Fee</td>
<td>$55</td>
</tr>
<tr>
<td>2016-2017 Graduate Tuition / Resident</td>
<td>$34,854.75</td>
</tr>
<tr>
<td>2016-2017 Graduate Tuition / Nonresident</td>
<td>$52,227</td>
</tr>
<tr>
<td>Registration, Activity, Recreation,</td>
<td>$1296</td>
</tr>
<tr>
<td>Technology Fees</td>
<td>$3000</td>
</tr>
<tr>
<td>Course Fee / ANE 551</td>
<td>$30</td>
</tr>
<tr>
<td>AANA Associate Membership</td>
<td>$200</td>
</tr>
<tr>
<td>MANA Student Meetings</td>
<td>$300</td>
</tr>
<tr>
<td>NBCRNA Self-Evaluation Examinations (SEE)</td>
<td>$320</td>
</tr>
<tr>
<td>Medtrax Case Record Management</td>
<td>$120</td>
</tr>
<tr>
<td>APEX Anesthesia Review / 2-year subscription</td>
<td>(varies)</td>
</tr>
<tr>
<td>Textbooks, reference materials, software,</td>
<td>(varies)</td>
</tr>
<tr>
<td>electronics, etc.</td>
<td>(varies)</td>
</tr>
<tr>
<td>Lab coats, shoes, precordial stethoscope/</td>
<td>(varies)</td>
</tr>
<tr>
<td>earpieces, equipment, etc.</td>
<td>(varies)</td>
</tr>
<tr>
<td>Transportation -- Classes, clinical</td>
<td>(varies)</td>
</tr>
<tr>
<td>assignments, meetings, activities,</td>
<td>(varies)</td>
</tr>
<tr>
<td>conferences, etc.</td>
<td>(varies)</td>
</tr>
<tr>
<td>Lodging -- Clinical rotations, professional meetings, etc.</td>
<td>(varies)</td>
</tr>
<tr>
<td>Optional -- AANA Annual Congress</td>
<td>(varies)</td>
</tr>
<tr>
<td>registration, airfare, food, lodging, etc.</td>
<td>(varies)</td>
</tr>
<tr>
<td>Commencement cap, gown, etc.</td>
<td>(varies)</td>
</tr>
<tr>
<td>NBCRNA National Certification Examination</td>
<td>$725</td>
</tr>
</tbody>
</table>

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**Prospective Student Guide**

Master of Science in Anesthesia
# PLAN OF STUDY

**University of Michigan-Flint/Hurley Medical Center Master of Science in Anesthesia**

## Year I - Fall
- 2 CR ANE 510 Pharmacology I
- 3 CR ANE 515 Principles of Anesthesia I
- 1 CR ANE 530 Advanced Assessment & Pt. Evaluation
- 2 CR ANE 540 Anatomy and Physiology I
- 1 CR ANE 542 Endocrine Physiology
- 2 CR ANE 550 Applied Chemistry & Physics
- 2 CR ANE 551 Biochemistry for Anesthetists

13 CR

## Year I - Winter
- 2 CR ANE 511 Pharmacology II
- 4 CR ANE 516 Principles of Anesthesia II
- 3 CR ANE 533 Regional Human Anatomy
- 2 CR ANE 543 Anatomy and Physiology II
- 1 CR ANE 590 Clinical Practicum II

12 CR

## Year I - Spring/Summer
- 3 CR ANE 517 Principles of Anesthesia III
- 2 CR ANE 520 Regional Anesthesia
- 1 CR ANE 541 Renal Physiology
- 3 CR ANE 560 Introduction to Research
- 1 CR ANE 580 Pharmacology III
- 2 CR ANE 591 Clinical Practicum III

12 CR

## Year II - Fall
- 2 CR ANE 512 Advanced Pharmacology
- 2 CR ANE 545 Advanced Pathophysiology I
- 1 CR ANE 581 Seminar I
- 1 CR ANE 585 Thesis Development
- 2 CR ANE 592 Clinical Practicum IV

8 CR

## Year II - Winter
- 3 CR ANE 544 Neuroanatomy & Physiology
- 2 CR ANE 546 Advanced Pathophysiology II
- 1 CR ANE 582 Seminar II
- 1 CR ANE 586 Thesis Development II
- 2 CR ANE 593 Clinical Practicum V

9 CR

## Year II - Spring/Summer
- 3 CR ANE 500 Professional Components
- 1 CR ANE 583 Seminar III
- 3 CR ANE 587 Masters Thesis
- 2 CR ANE 594 Clinical Practicum VI

9 CR

Total credit hours: 63
Doctor of Anesthesia Practice

MISSION STATEMENT

The mission of the Doctor of Anesthesia Practice completion program is to prepare the CRNA for expanded and/or specialized leadership roles within the complex field of health care.

OVERVIEW

The Doctor of Anesthesia Practice (DrAP) program expands CRNA understanding of our current healthcare infrastructure in keeping with the standards and guidelines set forth by the Council on Accreditation of Nurse Anesthesia Educational Programs. The DrAP curriculum prepares the masters-educated Certified Registered Nurse Anesthetist (CRNA) for leadership positions in and surrounding the field of nurse anesthesia. Designed to broaden the student’s perspective of an increasingly complex healthcare system, the program encourages further development of today’s expanding CRNA role. A combination of online courses and ongoing individualized attention allows the DrAP program to foster a flexible and innovative learning environment that promotes, supports and enhances CRNA completion opportunities. Whether enrolled from across town or across the country, the DrAP curriculum can be completed in just a few years with minimal or no campus visits.

DrAP graduates will have completed 32 credit hours of core, cognate and capstone coursework. Correlating cognate selections to capstone projects allows students to direct their own educational course into a healthcare specialty field such as administration, information systems, higher education, advanced pathology/pathophysiology or other approved area. The program culminates with a three-course capstone sequence integrating accumulated knowledge into capstone project design, implementation, analysis, and dissemination.

CURRICULUM

The Doctor of Anesthesia Practice degree is awarded after successfully completing 32 doctoral-level credit hours from three categories: Core Courses, Cognates, and the Capstone Sequence.

UM-Flint Course Catalog: DrAP Plan of Study

Core Courses | 16 credit hours
1. Practice inquiry (3 credits).
   ANE 730 - Evidenced-Based Practice of Nurse Anesthesia
2. Professional Role/Leadership (3 credits). One from:
   NUR 840 - Organizational and Administrative Theory
   PUB 501/ANE 601 Administrative Organization and Behavior
   MGT 541 - Organizational Behavior
3. Healthcare Improvement, Public and Social Policy (3 credits). One from:
   HCR 505/ANE 605 - Health Policy
   HCR 587/ANE 687 - Legal Issues in Health Care
   NUR 820 - Health Policy and Economics
4. Technology and Informatics (2 credits). One from:
   ANE 710 - Technology and Informatics for CRNA
   NUR 607 - Informatics
5. Health Systems Management (3 credits). One from:
   HCR 511/ANE 611 - Economic Applications in Health Administration
   HCR 525/ANE 625 - Contemporary Issues in Health Care Management
   HCR 577/ANE 677 - Financial Management in Health Care
6. Ethics (2 credits).
   ANE 720 - Ethical Issues in Nurse Anesthesia
Cognates | 9 credit hours
In consultation with a faculty advisor, (3) three-credit cognates are selected from areas related to the capstone project. Courses at the 500 level may have additional requirements and require program director approval. ANE 799 Special Topics in Anesthesia Practice is a cognate option worth 1-3 credits, depending on course content. Students not earning a "B" or better in a graduate-level general research methods course within the three years prior to program enrollment must complete a methods-based research course as one of the three cognates. The research course should be completed prior to beginning the capstone sequence and correlate with the student’s capstone project. For example, a student conducting a survey would take a qualitative research methods course; a student developing an educational unit would take a teaching methodology course.

Capstone Sequence | 7 credit hours
ANE 801 - Capstone Project Design (3)
ANE 802 - Capstone Project Implementation (2)
ANE 803 - Capstone Analysis and Dissemination (2)
Capstone coursework incorporates the design, research and implementation of the student’s capstone project, as well as the dissemination and presentation of project results. Students will demonstrate their acquisition of advanced knowledge as they progress through the capstone sequence. Projects are tailored to reflect scholarship in core or elective areas. The nature of the project is determined by the student in consultation with a faculty advisor and subject to the approval of the capstone committee. Distance learners as well as students with families and careers will appreciate the convenience of managing the capstone process online, via email, and over the telephone.

ONLINE COURSES
Primarily an online curriculum, many DrAP courses are taught via Blackboard, a web-based student-faculty interface accessible from umflint.edu. Students access currently enrolled courses using a university-assigned uniqname and LAN password. Instructors and course coordinators are able to utilize a variety of educational resources within Blackboard, including (but not limited to) the following:

- Announcements
- Assignments
- Live Chat Rooms
- Discussion Boards
- Interactive Lectures
- Prerecorded Lectures
- Course Email
- File Sharing
- Learning Modules
- Reading Materials
- Internet/Video Links
- Quizzes, Tests, Exams

Blackboard also allows students to download/upload assignments, share course-related materials, and initiate correspondence with instructors and other enrolled students from any internet connection.
PLAN OF STUDY

While highly motivated individuals may complete degree requirements in as few as two years, DrAP students may take up to six consecutive years to complete the DrAP Plan of Study. Extensions are granted at the discretion of the program director in consultation with program faculty. The following tables illustrate possible two- and three-year plans of study. See Course Catalog for course details.

### TWO-YEAR PLAN OF STUDY

<table>
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<th>FALL</th>
<th>WINTER</th>
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<tbody>
<tr>
<td>Year I</td>
<td>ANE 730 Evidence-Based Practice (3)</td>
<td>ANE 601 Administrative Organization and Behavior (3) or MGT 541 or NUR 840</td>
<td>ANE 710 Technology and Informatics (2) or NUR 607</td>
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<tr>
<td></td>
<td>ANE 677 Financial Management in Healthcare (3) or ANE 611 or ANE 625</td>
<td>Cognate I (3)</td>
<td>Cognate II (3)</td>
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<td>Obtain Capstone Project &amp; Cognate Approval</td>
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</tr>
<tr>
<td>Year II</td>
<td>ANE 801 Capstone Project Design (3)</td>
<td>ANE 802 Capstone Project Implementation (2)</td>
<td>ANE 803 Capstone Analysis and Dissemination (2)</td>
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<td></td>
<td>Cognate III (3) or Research Methods if needed</td>
<td>ANE 720 Ethical Issues in Nurse Anesthesia (2)</td>
<td>ANE 687 Legal Issues in Healthcare (3) or ANE 605 or NUR 820</td>
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<td><strong>CREDITS</strong> 32</td>
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### THREE-YEAR PLAN OF STUDY

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<td>Cognate II (3)</td>
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<tr>
<td>Year III</td>
<td>ANE 801 Capstone Project Design (3)</td>
<td>ANE 802 Capstone Project Implementation (2)</td>
<td>ANE 803 Capstone Analysis and Dissemination (2)</td>
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<td>Cognate III (3) or Research Methods if needed</td>
<td>ANE 677 Financial Management in Healthcare (3) or ANE 611 or ANE 625</td>
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<td><strong>CREDITS</strong> 32</td>
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</table>

**Credits:** 32
UNIVERSITY RESOURCES

Campus Map
UM-Flint Interactive Campus Map

Frances Willson Thompson Library
Library Website
Library Building Hours
Phone: 810-762-3408
Email: library-reference@umflint.edu
UM-Flint Resources via VPN
Off-Campus Access to Library Databases
The Frances Willson Thompson Library offers an impressive range of student resources, many of which are available to distance students via VPN (virtual private network) internet connection.

Office of Extended Learning
OEL Website
Student Resources/Blackboard Help Guides
Phone: 810-237-6691
Blackboard Assistance: 810-237-6691
Email: olhelp@umflint.edu
The Office of Extended Learning facilitates off-campus learning opportunities and offers assistance to distance learners regarding Blackboard and other learning applications. The OEL website also provides off-campus exam proctoring and access to student forms and applications.

Information Technology Services
ITS Website
Help Desk
Phone: 810-762-3123
Email: itshelpdesk@umflint.edu
ITS provides assistance with UM-Flint uniqname, password, email, software and technology issues.

Department of Public Safety
DPS Website
Parking and Transportation
Phone: 810-762-3333
Please call 911 for on-campus emergencies.

GRADUATION CRITERIA

- Completion of at least 32 approved credit hours; cumulative grade point average of 3.0 or higher
- Grade of B or above in each approved course (grades lower than B do not meet requirements)
- Ongoing and current licensure as a registered nurse (RN) in at least one state
- Current certification or recertification as a Certified Registered Nurse Anesthetist (CRNA)
- Dissemination of capstone project results using one of the following methods:
  - Submission as a poster presentation for national or state-level professional association meeting
  - Submission as a manuscript for publication in a peer-reviewed professional journal
  - Oral presentation in a research or professional symposium
  - Any other method approved by the program director and the capstone committee
TUITION AND FEES

In addition to standard student fees, DrAP students pay a $50 active status fee each semester for which they are registered for approved DrAP coursework, and a $250 active status fee each semester for which they are not registered for approved DrAP coursework. The active status fee begins with the student’s initial enrollment and continues until program completion.

The following tables outline DrAP tuition and fees for the 2016-2017 academic year. These figures are provided to serve as a guideline only and are subject to change at any time by the Regents of the University of Michigan. Current tuition information is available online at UM-Flint Tuition and Fees.

<table>
<thead>
<tr>
<th>DrAP Tuition &amp; Fees Per Semester</th>
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<td>CREDITS</td>
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<td>PER SEMESTER</td>
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<tr>
<th>DrAP Completion Scenarios</th>
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<td>PROGRAM</td>
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<td>YEARS</td>
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<tr>
<th>DrAP University Fees Per Semester</th>
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<tr>
<td>STUDENT STATUS</td>
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<tr>
<td>CREDITS</td>
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<tr>
<td>REGISTRATION FEE</td>
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<tr>
<td>STUDENT ACTIVITY FEE</td>
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<tr>
<td>RECREATION FEE</td>
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<td>TECHNOLOGY FEE</td>
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<td>ACTIVE STATUS FEE</td>
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<tr>
<td>TOTALS</td>
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APPLICATION

Doctoral curriculums require extensive independent study. Applicants should be self-directed, able to discuss ideas in an organized, logical sequence, and present a rationale based on careful scientific investigation. Preference is given to applicants best qualified to undertake the program curriculum.

<table>
<thead>
<tr>
<th>DrAP Application Deadline</th>
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<tr>
<td>Fall Semester - May 1</td>
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Applicant Requirements

- Master’s degree (Science, Biology, or Nursing) with focus a on nurse anesthesia (or) post-master’s certificate from a program accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs
- Minimum overall Masters’ degree GPA of 3.0 on a 4.0 scale (or a 5.0 on the U-M 9.0 scale)
- Current, unrestricted licensure as a Registered Nurse
- Current, unrestricted certification or recertification as a CRNA
- Graduate-level Research Methods course (may be taken as a cognate after program enrollment)
Application Requirements

Applications are available from the Graduate Programs section of the UM-Flint website. For admission consideration, completed applications must include the following items and be submitted to Graduate Programs by August 1. Incomplete applications are not reviewed.

- Application fee of $55 (nonrefundable)
- Official transcripts from all colleges and universities where Nursing degree, Nurse Anesthesia degree and any other graduate level coursework has been completed
- Self-authored electronic manuscript demonstrating your ability to research and write in a scholarly manner. The paper should be fully referenced and utilize AMA or APA formatting
- Three letters of recommendation including one from a supervisor/employer who can speak to your practice as a CRNA and one from someone qualified to comment on your academic abilities
- Copy of valid, unrestricted RN license
- Copy of valid, unrestricted CRNA (or APRN if applicable) license or state specialty certification (as appropriate for your state of residence or employment)
- Copy of current Certification or Recertification certificate from the appropriate Council

A capstone-relevant research methods course must be taken as one of three required cognates if a "B" or better was not earned in a graduate-level research methods course within three years of program admission. International students must submit additional documentation. The application deadline for international students and those interested in scholarships, grants or research assistantships is May 1.

TRANSFER STUDENTS

Up to nine semester credit hours may be credited for previous graduate coursework at the discretion of program administration and in accordance with the University's Transfer Student policy. Transfer credit requests are initiated by submitting a petition to the program director.
Dual Program DrAP/MBA

OVERVIEW

A completed dual degree program earns two diplomas and two transcript degree citations. Dual degree programs enable students to undertake complementary curriculums simultaneously through a streamlined curricular arrangement within which certain courses may count towards both programs.

DUAL DEGREE DrAP/MBA

The Dual Degree Doctor of Anesthesia Practice/Master of Business Administration Program is available to the Certified Registered Nurse Anesthetist (CRNA) interested in Business/Healthcare Administration. The CRNA applies for admission into each program independently and each degree is awarded independently. Up to 21 designated credits are applicable toward the second degree once the first degree is earned. The MBA is awarded with a concentration in Health Care Management.

PLAN OF STUDY

Graduation from the DrAP/MBA dual degree program requires 48-57 credit hours of coursework. The exact number of credits required depends on course selection, as several DrAP courses also fulfill MBA program requirements. The DrAP curriculum can be entirely completed online; MBA courses may be offered on online, on campus, or as NetPlus! - a mixed-mode format combining online coursework with two campus weekends.

UM-Flint Course Catalog: Dual Degree Program DrAP/MBA Plan of Study

Dual Degree Program DrAP/MBA Plan of Study

A. DrAP Core Courses (17 credits)
   1. Practice Inquiry (3 credits).
      ANE 730 Evidenced-Based Practice of Nurse Anesthesia
   2. Professional Role/Leadership (3 credits).
      MGT 541 Organizational Behavior
      HCR 505 Health Policy
      HCR 587 Legal Issues in Health Care
   4. Technology and Informatics (2 credits). Select one.
      ANE 710 Technology and Informatics for CRNA
      NUR 607 Informatics
   5. Health Systems Management (3 credits). Select one.
      HCR 511 Economic Applications in Health Administration
      HCR 525 Contemporary Issues in Health Care Management
      HCR 577 Financial Management in Health Care
   6. Ethics (3 credits).
      ANE 720 Ethical Issues in Nurse Anesthesia

B. DrAP Cognates (9 credits).
   These fulfill DrAP cognate requirements when taken as MBA program core courses.
   MKT 531 Marketing Management
   FIN 561 Financial Management
   MGT 571 Operations Management

C. DrAP Capstone Sequence (7 credits).
   ANE 801 Capstone Project Design
   ANE 802 Capstone Project Implementation
   ANE 803 Capstone Analysis and Dissemination
D. MBA Foundation Courses (3-12 credits).
   ACC 521 Accounting for Managers 4
   MGT 512 Applied Quantitative Analysis 4
   MGT 541 Organizational Behavior 3
   FIN 551 Business Economics 4

E. MBA Core Courses (24 credits).
   MGT 501 Organizational Communication and Negotiation
   MKT 531 Marketing Management 3
   MGT 552 Business and Society
   FIN 561 Financial Management 3
   MGT 571 Operations Management 3
   MGT 581 Management Information Systems
   INB 585 Global Dimensions of Management
   MGT 589 Strategic Management

F. MBA Health Care Management Concentration Courses (9 credits). Select three.
   ANE 720 Ethical Issues in Nurse Anesthesia 3
   HCR 505 Health Policy 3
   HCR 509 Healthcare Strategic Planning
   HCR 511 Economic Applications in Health Administration 3
   HCR 525 Contemporary Issues in Health Care Management 3
   HCR 577 Financial Management in Health Care 3
   HCR 587 Legal Issues in Health Care 3

1 Fulfill one foundation course requirement for the MBA program.
2 Fulfill concentration requirements.
3 May fulfill requirements in both the DrAP and MBA programs.
4 Can be waived if equivalent or similar undergraduate or graduate coursework has been completed.

APPLICATION

New Students
To be considered for dual DrAP/MBA program admission, a separate graduate application and requisite documentation must be submitted for each program. The university recommends submitting the DrAP program application first and submitting the MBA application after acceptance to the DrAP program. The GRE requirement for MBA admission is waived for dual program DrAP/MBA applicants. Please refer to each degree for program-specific admission and application criteria:

- Graduate Application for Admission
- Doctor of Anesthesia Practice
- Master of Business Administration

Alumni
Dual program applicants with a UM-Flint graduate degree or who are currently enrolled in a UM-Flint graduate program should submit the following to the Graduate Programs office:

- Application for Dual Degree or Change of Program
- New "Statement of Purpose" as required by proposed program of study
- Academic transcripts from institutions attended since first UM-Flint graduate admission
- Additional requisite documentation as necessary for each program

Additional information is available online: Applying for a Dual Degree Program