

# Addendum

## ADDENDUM TO THE 2023-2024 NMC CATALOG

The information contained in this catalog addendum is provided as an update and in addition to the Academic Catalog effective April 2023.

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### ACADEMIC CALENDAR UPDATES:

#### Spring 2024

- Main Session Drop Date: Tuesday, January 23, 2024
- Enrollment Report Date: Wednesday, January 24, 2024

### COURSES NO LONGER OFFERED:

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#### WSI 105 - Intro to Freshwater Studies

This course is designed to provide an exploration to the field of water studies, with specific focus on freshwater. Students will discuss the impact of water related challenges and opportunities in the context of the great lakes of the world. Focus will be given to the new and emerging career and educational pathways associated with water resources and their management. In addition to regular class lectures, invited experts from business, education and community organizations will introduce relevant topics of local and global significance including policy, law, sustainable development, history, engineering, health, and commerce.

***Change: Course deleted, no longer offered effective Fall 2022.***

### MODIFIED AVIATION FEES:

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*Changes in red*

AVF 111:

A flight course structured to provide a minimum of 40 dual and solo flight hours to meet the aeronautical experience requirements for a private pilot. Upon completion of this course, the student will have attained the FAA Private Pilot Rating. Course requires 42.4 hours of flight time, 8.0 hours of pre/post, and 17.5 hours of ground instruction. Hourly rates effective **September 2023** are \$60/hour for ground instruction and **\$254/hour** for the aircraft and flight instructor. Group 2 course.

AVF 132:

A flight course designed to meet the aeronautical experience requirements for the FAA Instrument check ride. Upon completion of this course, the student will have attained the FAA Instrument Rating. Course requires 39.8 flight hours, 9.8 hours of pre/post, and 17.7 hours of ground instruction. Hourly rates effective **September 2023** are \$60/hour for ground instruction and **\$254/hour** for the aircraft and flight instructor. Group 2 course.

AVF 230:

The student will advance their skills required by the FAA to obtain a Commercial Pilot Certificate. They will gain experience in different aircraft with the opportunity to gain a Tailwheel Endorsement or Seaplane Rating. Students will increase their instrument proficiency while conducting cross country flights. Course requires 35 flight hours, 6 of pre/post, and 7 hours of ground instruction. Hourly rates effective **September 2023** are \$60/hour for ground instruction and **\$254/hour** for the aircraft and flight instructor. Group 2 course.

AVF 232:

A flight course structured to provide a dual and solo flight hours to partially fulfill the flight hour requirements for the FAA Commercial Pilot Certificate. This course will provide a review of VFR cross country navigation procedures and introduce the student to multi-engine flight. Course requires 35.4 flight hours, 3.0 hours of pre/post, and 27.8 hours of ground instruction. Hourly rates effective **September 2023** are \$60/hour for single engine ground instruction and \$70/hour for multi-engine flight instruction and **\$254/hour** for the single aircraft and flight instructor and **\$367/hour** for the multi-engine aircraft and instructor. Group 2 course.

AVF 234:

This course is the last of three flight courses required to obtain the FAA Commercial Pilot Certificate. This course consists of flight hours with an emphasis on commercial flight maneuvers in preparation for the Commercial Pilot FAA Practical Test. Upon completion of this course, the student will have attained the FAA Commercial Pilot Certificate. Course requires 24.6 flight hours, 3.6 hours of pre/post, and 8.0 hours of ground instruction. Hourly rates effective **September 2023** are \$60/hour for ground instruction and **\$254/hour** for the aircraft and flight instructor. Group 2 course.

AVF 271:

This flight course is designed to give the student the aeronautical knowledge, proficiency, and experience required to meet the FAA Practical Test Standards for the Private or Commercial Multi-engine rating. Upon completion of this course, the student will have attained the FAA Multi-engine Land Rating. Course requires 4 flight hours, 1 hour of pre/post, and 1 ground hour. Hourly rates effective **September 2023** are \$70/hour for ground instruction and **\$367/hour** for the aircraft and flight instructor. Group 2 course.

**AVF 272:**

In this course, the student will learn the skills to be a Certified Multi Engine Flight Instructor (MEI). They will master the skills of the Private and Commercial Pilot ratings. In addition, they will learn how to be an effective teacher and understand all FAA rules and regulations that accompany being an instructor. Course requires 5 flight hours, 1.3 hours of pre/post, and 5 hours of ground instruction. Hourly rates for effective **September 2023** are \$70/hour for ground instruction and **\$297/hour** for the aircraft and flight instructor. Group 2 course.

**AVF 274:**

This course is designed to provide the student with the skills, knowledge, and experience to receive a logbook endorsement to fly tailwheel aircraft. Course requires 4 flight hours, and 1 hour of pre/post. Hourly rate effective **September 2023** is **\$235/hour** for the aircraft and flight instructor. **Pilot weight restrictions may apply in this aircraft.** Group 2 course.

**AVF 275:**

In this course, the student will gain the skills, knowledge, and experience to receive endorsement for the FAA Practical Test. Students will learn in a Piper Super Cub on floats as they demonstrate maneuvers and landings. Course requires 5 flight hours, 1.2 hours of pre/post, and 1 hour of ground instruction. Hourly rates effective **September 2023** are \$60/hour for ground instruction and **\$235/hour** for the aircraft and flight instructor. **Pilot weight restrictions may apply in this aircraft.** Group 2 course.

**AVF 283:**

In this course, the student will learn the foundations to safely perform basic aerobatic maneuvers. Also, the student will gain confidence and skills necessary to recover from various unusual flight attitudes that will increase the students' overall flight safety. Course requires 6 flight hours, 1.5 hours of pre/post, and 2 hours of ground instruction. Hourly rates effective **September 2023** are \$60/hour for ground instruction and **\$235/hour** for the aircraft and flight instructor. **Pilot weight restrictions may apply in this aircraft.** Group 2 course.

**AVF 284:**

The student perfects both teaching and instrument flying skills while sitting in the right seat of the cockpit. The student develops the knowledge and ability to teach others instrument flying procedures. Course requires 6 flight hours, 1.2 hours of pre/post, and 8 hours of ground instruction. Hourly rates effective **September 2023** are \$60/hour for ground instruction and **\$254/hour** for the aircraft and flight instructor. Group 2 course.

**AVF 382:**

In this course the student will learn the skills to be a Certified Flight Instructor (CFI). They will master the skills of the Private and Commercial Pilot ratings. In addition, they will learn how to be an effective teacher and understand all FAA rules and regulations that accompany being an instructor. Course requires 18 flight hours, 4.5 hours of pre/post, and 20 hours of ground instruction. Hourly rates for effective **September 2023** are \$60/hour for ground instruction and **\$254/hour** for the aircraft and flight instructor. Group 2 course.

## **MODIFIED AVIATION RUBRIC:**

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*Changes in red*

| Northwestern Michigan College<br>Aviation Program Competitive Admissions Rubric |                 |                     |
|---|-----------------|---------------------|
| CRITERIA  | Possible Points | Max Points Possible |
| Previous Academic Degree  |                 | 5                   |
| Bachelors Degree  | 5               |                     |
| Associates Degree   | 3               |                     |
| Private Pilot License   | 3               | 3                   |
| Private Ground Complete   | 1               |                     |
| General Education credits earned toward Aviation Degree                         |                 | 3                   |
| 17 credits  | 3               |                     |
| 12 Credits  | 2               |                     |
| 4 credits   | 1               |                     |
| High School GPA   |                 | 4                   |
| 3.5 to 4.0  | 4               |                     |
| 3.0 to 3.49   | 3               |                     |
| 2.5 to 2.99   | 2               |                     |
| Other Requirements Completed  |                 |                     |
| First Class Medical   |                 |                     |
| Financial Plan Signed   |                 |                     |
|   |                 |                     |
|   |                 |                     |
| Total Max Points  |                 | 15                  |

**MODIFIED COURSES – COURSE DESCRIPTION, COURSE TITLE, CONTACTS, CREDITS OR REQUIRED PREREQUISITES:**

**CUL 293 – Culinary Study Abroad.....Credit Hours: 1, Contact Hours: 1**

In this class, students are provided the opportunity to travel to a specified destination affiliated with the corresponding culinary non-trip course. This course will serve to integrate the student learning experience and provide a sense of cultural perspective, diversity and regional awareness. The course is an opportunity for students to explore other areas around the world while applying discipline-specific course content. For a more specific course description, please review the course description of the associated non-trip course. Group 2 course.

Required Prerequisite(s): CUL 110, CUL 118, and CUL 219

**Change: Updated prerequisites**

**CUL 295 – Contemp Cuisine Kitchen Mngmt.....Credit Hours: 4, Contact Hours: 8**

This course focuses on practical hands-on training in kitchen production and management in a restaurant setting while practicing environmental stewardship and zero or reduced waste initiatives. Students rotate through restaurant kitchen stations in this intensive semester-long course. Menu merchandising is stressed throughout the course. Guest relations and timing of service are also emphasized as advanced students serve lunch to guests in Lobdell's, the Great Lakes Culinary Institute's teaching restaurant. Heart-of-the-house students learn classical food preparation preparing designated menu items. Other areas covered include recipe construction and costing, the use and care of equipment, the pressure of a la carte preparation and service, and the effective handling and use of supplies. Group 2 course.

Quantitative Reasoning.

Required Prerequisite(s): Department Signature Required

Recommended Prerequisite(s): Word processing and spreadsheet skills

Corequisites: CUL 296

**Change: Updated required prerequisite(s)**

**CUL 296 – Contemp Svc Dining Room Mngmt.....Credit Hours: 4, Contact Hours: 8**

This course focuses on practical hands-on training in dining room service and management in a live contemporary restaurant setting. Students rotate through dining room stations and management positions in this intensive semester-long course. Menu merchandising is stressed throughout the course. Guest relations and timing of service are also emphasized as advanced students serve lunch to guests in Lobdell's, the Great Lakes Culinary Institute's teaching restaurant. Other areas covered include beverage recipe construction and costing, the use and care of equipment, the pressure of a la carte service, and the effective handling and use of supplies. Group 2 course.

Communications - Direct, Quantitative Reasoning.

Required Prerequisite(s): Departmental Signature Required.

Recommended Prerequisite(s): Basic keyboarding and computer skills in word processing and spreadsheets

Corequisites: CUL 295

**Change: Updated required prerequisite(s)**

**ENG 221 – Creative Writing.....Credit Hours: 3, Contact Hours: 3**

Study and practice of the basic techniques of effective imaginative creative writing: concrete language, conflict, characterization, point of view, narrative, lyricism, pace, and setting. Course focuses on multiple genres of creative writing. Employs workshop format to develop reading and feedback skills. Skills developed include close reading, close observation, craft in above-described techniques, revision, discipline and practice, giving and receiving feedback, developing access to imaginative powers. Text is supplemented with additional examples of contemporary creative writing. Group 2 course.

Required Prerequisite(s): Placement into ENG 111 or ENG 111/11

**Change: Updated prerequisites**

**MNG 321 – Marine Boilers.....Credit Hours: 3.5, Contact Hours: 3.5**

This course is an intensive study of Marine Boilers and covers all types of Water Tube boilers. Emphasis is placed on construction, operation and maintenance of equipment. Sub systems such as fuel handling and combustion chemistry, air handling; water preparation and chemistry, automated combustion systems and water regulation systems are covered in detail. Special emphasis is placed on USCG regulations and STCW competencies. STCW.

Required Prerequisite(s): All prerequisites for all GLMA courses are satisfied by following the approved Course Sequence Guide and any deviation from this guide needs to be approved by the cadet's adviser.

**Change: Updated credit and contact hours**

**MNG 322 – Marine Turbines.....Credit Hours: 2.5, Contact Hours: 2.5**

This course is an in-depth study of marine turbine propulsion plants. It covers theory, construction, operation, maintenance and inspection procedures typically associated with marine use. Associated systems such as lubrication, exhaust and condensate systems are also covered. Drive trains, reduction gear, stern tubes shafting and propellers are also discussed. STCW.

Required Prerequisite(s): All prerequisites for all GLMA courses are satisfied by following the approved Course Sequence Guide and any deviation from this guide needs to be approved by the cadet's adviser.

**Change: Updated credit and contact hours**

**MODIFIED PROGRAMS:**

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Surveying, Associate in Applied Science Degree

| Occupational Specialty Requirements |   |              |
|-------------------------------------|---|--------------|
| <a href="#">MTH 131</a>             | Intro to Prob & Stats                       | 3            |
| <a href="#">MTH 122</a>             | Trigonometry                                | 3            |
| <a href="#">UAS 121</a>             | UAS Applications in Surveying (Spring only) | 3            |
| <a href="#">SVR 111</a>             | Intro to Field Surveying                    | 2            |
| <a href="#">SVR 112</a>             | Intro to Surveying Data Use                 | 3            |
| <a href="#">SVR 120</a>             | CAD for Surveying                           | 4            |
| <a href="#">SVR 150</a>             | Construction Survey App                     | 5            |
| <a href="#">SVR 160</a>             | Surveying Calculations                      | 3            |
| <a href="#">SVR 210</a>             | Surveying Positioning                       | 5            |
| <a href="#">SVR 220</a>             | Boundary Surveying                          | 3            |
| <a href="#">WSI 200</a>             | GL Research Technologies                    | 3            |
| <a href="#">WSI 300</a>             | Remote Sensing and Sensors                  | 3            |
| Approved Elective                   |   | 3-4          |
| <b>Total Credits</b>                |   | <b>63-64</b> |

<sup>1</sup> Placement into [MTH 141](#) Calculus I, or Completion of [MTH 122](#) Trigonometry

**Change: Deletion of SVR 110 - Fundamentals of Surveying. Addition of MTH 122 - Trigonometry, SVR 111 - Intro to Field Surveying, SVR 112 - Intro to Surveying Data Use**

## NEW COURSES:

### **AUD 293 - Audio Technology Study Abroad.....Credit Hours: 1, Contact Hours: 1**

*Required Prerequisite(s): AUD 100, or AUD 110, or AUD 120, or AUD 130*

In this class, students are provided the opportunity to travel to a specified destination affiliated with the corresponding audio technology non-trip course. This course will serve to integrate the student learning experience and provide a sense of cultural perspective, diversity and regional awareness. The course is an opportunity for students to explore other areas around the world while applying discipline-specific course content. For a more specific course description, please review the course description of the associated non-trip course.

### **CUL 191 - Culinary Maritime Internship.....Credit Hours: 2.5, Contact Hours: 2.5**

*Required Prerequisite(s): CUL 208 and CUL 211 and be in possession of a MMC, and completed Safety Colleges and EMBARK Training*

This culinary maritime internship integrates academics with professional maritime work experience. Students earn college credit while working on the water in a galley, gaining valuable hands-on experience. Students must meet with the culinary program director and internship coordinator at least one semester prior to requesting internship placement. Culinary maritime internships require a minimum of 320 hours of work during the enrolled summer semester.

### **HNR 293 - Nursing Study Abroad.....Credit Hours: 1, Contact Hours: 1**

*Required Prerequisite(s): BIO 228*

In this class, students are provided the opportunity to travel to a specified destination affiliated with the corresponding

nursing non-trip course. This course will serve to integrate the student learning experience and provide a sense of cultural perspective, diversity and regional awareness. The course is an opportunity for students to explore other areas around the world while applying discipline-specific course content. For a more specific course description, please review the course description of the associated non-trip course.

## **NEW CERTIFICATES:**

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### **Computer Information Technology – Cybersecurity Specialist (Level 1 certificate) NMC ID (097)**

New Certificate beginning Spring 2024 semester (202402)

This certificate consists of 25 credits that a student could complete in a single year. This certificate would allow a student to find entry level work as a Cybersecurity Specialist or Information Security Analyst. Courses making up this certificate include:

- CIT 135 Introduction to Python Programming (3 credits)
- CIT 213 Networking Technologies (4 credits)
- CIT 240 Network Security Management (3 credits)
- CIT 243 Cloud Technologies (3 credits)
- CIT 247 Windows Identity and Policy (3 credits)
- CIT 256 Linux Administration (3 credits)
- CIT 263 Cybersecurity Penetration Testing (3 credits)
- CIT 264 Cybersecurity Analytics and Threat Analysis (3 credits)

Total 25 credits

### **Computer Information Technology – Computer Support Specialist (Level I certificate) NMC ID (096)**

New Certificate beginning Spring 2024 semester (202402)

This certificate would consist of 16 credits that a student could complete in a single semester. The certificate would allow a student to find entry level work as a Computer/User support specialist. Courses making up this certificate include:

- CIT 156 CompTIA A+ Certification I (3 credits)
- CIT 157 CompTIA A+ Certification II (3 credits)
- CIT 213 Networking Technologies (4 credits)
- CIT Elective Any CIT Course (3 credits)
- PHL 105 Critical Thinking (3 credits)

Total 16 credits

### **Esports Management (Level 1 certificate) NMC ID (087)**

New Certificate beginning Spring 2024 semester (202402)

This certificate consists of 17 credits that a student could complete in a single year. The Esports Management certification program provides NMC students with experiential learning opportunities within the Esports varsity program that can be used for employment in the Esports industry or at an institution with an Esports program. For example, Ferris State University has launched a Bachelor of Science degree in Esports Production and through collaboration with the program director, students from NMC would have the opportunity to transfer into Ferris's program with their academic coursework at NMC would be applicable to their degree at FSU. Courses making up this certificate include:

- COM 111 Public Speaking (4 credits)
- ESP 100 Introduction to Esports (3 credits)
- ESP 201 Esports Casting and Streaming (1 credit)
- ESP 202 Esports Event Management (1 credit)
- ESP 203 Esports Security (1 credit)
- ESP 204 Esports Coaching (1 credit)
- MGT 241 Principles of Management (3 credits)
- VCA 127 Digital Imaging (3 credits)

Total 17 credits

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