

Addendum to 2019-2020 NMC Catalog

The information contained in this catalog addendum is provided as an update and in addition to the Academic Catalog effective April 2019.

Student Rights and Responsibilities Academic Policies Effective

Northwestern Michigan College operates under a semester credit hour system. The credit hour policy applies equally to courses of varying credits, duration, and modes of instruction, and applies to all credits granted by the college.

Credits are 0 or 2 (f) 2 (f) 3 (0) or 4.

In addition, students are expected to engage in a minimum of two hours of independent learning activities (e.g., reading, research, homework, studying) for every credit hour of direct instruction provided. Further information is posted on [NMC's Credit Hour Policy webpage](#)

Veterans Affairs Delayed Payment Policy

In compliance with the Veterans Benefits and Transition Act of 2018, Northwestern Michigan College will not impose any penalty upon eligible students if they are unable to meet their financial obligations due to delayed payment of benefits from the Department of Veterans Affairs. Prohibited policies would include but are not limited to, the assessment of late fees, the denial of access to classes, institutional facilities and resources, or requirement of eligible students to borrow additional funds to cover outstanding balances that will be covered by payments from the Department of Veterans Affairs.

Program Updates:

Aviation – Associate in Applied Science Degree NMC Code 562

The following courses have been removed from the available Directed Electives for the Aviation Associate in Applied Science Degree:

AVF 141- Remote Pilot Flight.....3.0 (4)

AVF 211- Commercial Drone Operations.....0.4 (4) at 2 Tc -0.008 Tw 0 -2.111 TD5... -8.2 (t)-9 (iat)7.9 (e)-9

SVR 150 Construction Survey App.....5.0 (8)

Students perform design surveys and conduct construction layout for infrastructure. Major topics include using horizontal and vertical control, establishing alignment, obtaining topographic information, determining grades, horizontal and vertical curves, completion of construction plans, computation of earthwork quantities, and field stakeout. Students will use this knowledge in both field and office environments. Group 2 course.

SVR 160 Surveying Calculations.....3.0 (4)

Students will investigate and apply a number of mathematical principles common to plane surveying applications focusing on Cartesian geometry and coordinate systems using hand calculations, CAD programs, and programable spreadsheets. Areas of study include direct and inverse problems, intersection problems, horizontal and vertical curves, volume computations, area partitions, coordinate transformations, resections and an introduction to spherical trigonometry. Group 2 course.

VCA 293 Visual Communication Study Abroad.....1.0 (1)

In this class, students are provided the opportunity to travel to a specified destination and complete the corresponding visual communication 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 trip course. Group 2 course.

Course Changes Credits, Contacts or Required Prerequisites

AVG 381 Instructor Ground School.....5.0 (5)

A course of study that will provide basic education principles and a review of the aeronautical knowledge required for the flight instructor (airplane single engine) certificate and prepare the student to take the FAA Fundamentals of Instruction (FOI) and the Flight Instructor Airplane Single Engine written examinations. Through classroom presentations and one-on-one student teaching, students will gain practical teaching experience. Group 2 course.

Change: added to required prerequisites of AVF 230 and VCA 251, "both with a 2.0 or higher" (effective Fall 2018)

AVG 251 Commercial Ground School.....4.0 (4)

This course is an advanced study of aviation topics including: GPS, meteorology, radio communications, airspace, and Federal Aviation Regulations. In addition, aircraft systems, career opportunities, aviation safety, aircraft weight and balance, performance charts, and aerodynamics are reviewed with emphasis on commercial pilot operations. Group 2 course.

Change added to required prerequisite of AVG 252, "with a 2.0 or higher" (effective Fall 2018)

AVG 252 Instrument

CIT 246 ~~Windows Server Infrastructure~~.....0.(4)..3

Students taking this course will learn how to setup, configure, and maintain a Windows Server Infrastructure. Topics covered include Dynamic Host Configuration Protocol (DHCP), Domain Name Systems (DNS), Distributed File System (DFS), and Virtual Private Networks. This course maps to the 70-742 Networking with Windows Server 2016 certification exam. Group 2 course.

Change Removed required prerequisite of CIT 215 and added a required prerequisite of "CIT 213 or instructor permission". (effective Spring 2020)

CIT 247 ~~Enterprise Solutions~~.....0.(4)..3

In this course students will gain practical experience building enterprise systems using Identity solutions. Students will study Active Directory, Group Policy, Certificate Services and Federation and access solutions. This course maps to the 70-742 Identity with Windows Server 2016 certification exam. Group 2 course.

Change Removed required prerequisite of CIT 246 and added a required prerequisite of "CIT 213 or instructor permission". (effective Spring 2020)

MNG 314 ~~Diesel Engineering~~.....).7.0 (10

A comprehensive course dealing with the development of the diesel engine as it applies to marine propulsion. This course is designed to cover the construction, operation, and maintenance of the marine diesel engine and its support systems. Lecture is reinforced with extensive use of hand labs and computerized simulations. STCW Group 2 course.

Change: increased course contacts from 7 to 10. (effective Spring 2018)

MTH 131 ~~Intro to Prob & Stats~~.....).3.0 (3

Descriptive statistics, experimental design, an introduction to probability concepts and inferential statistics are included in the course. Descriptive statistics includes graphs of both numerical and categorical data, measures of central tendency, and measures of variation. The normal density function, linear regression, and the binomial model are included. One and two sample problems involving confidence intervals and significance tests are studied for the sample mean and the sample proportion. Group 1 course.

Change: removed MTH 120 exclusion from required prerequisites (effective Spring 2020)

WPT 260 ~~Introduction to Welding Automation~~.....).3.0 (5

This course provides students an opportunity to learn the theory behind common forms of automation utilized throughout the welding industry. Lab assignments will focus on equipment use and operations along with analysis of results. Group 2 course.

Change removed MFG 111 and WPT 142, and added WPT 113 and WPT 114 required prerequisites. (effective Fall 2018)

Course Changes Descriptions and Title (effective Fall 2019 unless otherwise noted)

AVF 132- Instrument Flight.....)4.0 (4

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 hours of ground instruction. Hourly rates effective March 2018 are \$59/hour for ground instruction and \$230/hour for the aircraft and flight instructor. Group 2 course.

Change: Course Description.

AVF 230 Td ()Tj EMC /P </MCID 2 >>BDC 0.004 Tc -0.002ic.7 (ar)11mtu4G9-3 (ru)2.1-9.8 (.)-9.7 (4)-8.9 (r8ti7)9.7

WPT 130- SMAW (ARC) Welding I.....)....3.0 (5

This course is designed for students pursuing job skills or transfer into a Welding degree program. Students learn the theory and application of safe Shielded Metal Arc Welding (SMAW) in the flat and horizontal positions. They develop skills with "fast freeze" and "low hydrogen" type electrodes. Topics include welding terminology, electrical theory as it relates to SMAW, weld defects and quality, and the American Welding Society SMAW filter material numbering system. Group 2 course.

Change: course deleted, no longer offered.

WPT 140- GMAW (MIG) Welding I.....).2.0 (3

This course provides the student an opportunity to learn the theory and application of basic Gas Metal Arc Welding (GMAW) techniques on ferrous metals. Group 2 course.

Change: course deleted, no longer offered.
