

Five-Year Capital Outlay Instructional Programming for FY 2022-2026

- A. *Description of existing academic programs and projected programming changes during the next 5 years, in so far as academic programs are affected by specific structural considerations (i.e., laboratories, classrooms, current and future distance learning initiatives).*

The College offers 46 programs of study at the Associate Degree level and 23 certificate programs. See **Exhibit 1 - Registrar's Official Program Major Listing**.

Existing Academic Programs

The College's credit academic programs are organized under three instructional divisions (Arts and Sciences Education, Career and Workforce Education, and Health Sciences Education) that serve campuses in Benton Harbor, Niles, and South Haven. The South Haven and Niles campuses are approximately a half hour drive from the Benton Harbor Campus and serve the northern and southern portions of LMC's district, respectively.

The **Arts and Sciences Education** Division consists of seven departments, with courses and programs in the following disciplines:

Mathematics and Physical Education and Wellness

Natural Sciences

Biology, Chemistry, Engineering/Manufacturing Engineering, Natural Science, Physics, and Physical Science

Rhetoric, Communication, and Foreign Language

Communications, English, and Foreign Language

Social Sciences, Humanities, and Education

Child Development, Geography, History, Honors, Humanities, Philosophy, Political Science, Psychology, Sociology, and Teacher Education

Visual and Performing Arts

Art, Dance, Music, and Theater/ Drama

Transitional Studies (Developmental Education)

Transitional Studies Math, Transitional Studies English, Transitional Studies Reading, English as a Second Language, and College Life Studies

Wine and Viticulture Technology

The **Career and Workforce Education** Division is comprised of two departments, with courses and programs in the following disciplines:

Advanced Manufacturing and Energy

Automation Engineering, Electrical Distribution, Engineering Technology, General Technology, Machine Tool, Mechatronics, Skilled Trades, Welding, and Apprenticeship

Business, CIS, Culinary, and Hospitality

Accounting; Business Administration; Business with tracks in Computer Information Systems, Sales and Customer Service, Small Business Management, and Supervisory Skills; Casino Management; Computer Information Systems with tracks in Applications Development, Geospatial Information Science & Technology, Networking, and Web Development; Criminal Justice; Culinary Management; Graphic Design; and Hospitality Management

The **Health Sciences Education** Division is comprised of four departments, with courses and programs in the following disciplines:

Allied Health

Certified Nurse Assistant (non-credit), EKG Technician, Emergency Medical Technician, First Aid/CPR (non-credit), Medical Assisting, Pharmacy Technician, and Phlebotomy Technician

Dental Assisting

Medical Imaging

Computerized Tomography (CT), Diagnostic Medical Sonography, and Radiologic Technology

Nursing

Projected Programming Needs for Next 5 Years

The need for new programs and academic support services are identified in a variety of ways. In addition to labor market analyses and environmental scanning conducted during the College's regular strategic planning activities, advisory committees routinely assist the College in identifying regional employment needs and trends. Academic Deans and Faculty also play a key role in proposing new programming by staying abreast of developments in their fields of expertise, helping to assure that LMC students are prepared for employment and transfer opportunities.

The Academic Affairs Division offers courses via a variety of delivery modalities—including traditional face-to-face, hybrid, online, Flexible Learning Environments (FLE), Virtual Reality (VR), and Augmented Reality (AR)—to enhance learning and provide flexible access to higher education for all those who seek it. Utilizing Flexible Learning Environment (FLE) delivery methods allow for significantly increased accessibility and convenience for students. FLE mitigates the impact of scheduling conflicts and travel expenses—while increasing access to instructional materials through both live and recorded classroom lectures—which can be viewed remotely. Virtual Reality (VR) provides a multitude of opportunities for learning that would otherwise require cost-prohibitive travel or consumable resources. VR also allows students to practice safety procedures, such as those required in nursing or manufacturing fields, without risking any real physical injury. VR and AR are emerging technologies that are still cost-prohibitive for many students. It is vital that we provide students exposure to these emerging technologies as they become more prevalent in our communities and workplaces.

Emerging and Projected Programming

The following academic and support programs are emerging, proposed, or expected to undergo feasibility studies within the next five years at LMC:

Academic Program	Requires Structural Needs	Distance Learning Component Included
Automotive Technology	X	X
Biotechnology/Food Safety	X	X
Brewing	X	X
Cyber Security	X	X
Drone Piloting	X	X
Truck Driving	X	X
Marine Technician	X	X

Physical Therapy Assistant	X	X
Public Health	X	X
Sterile Processor Technician	X	X
Virtual and Augmented Learning	X	X

B. Unique characteristics of each institution's academic mission

- The College district consists of Berrien County and contiguous Covert Township and South Haven in neighboring Van Buren County. Located in the southwest corner of the State, Berrien County has a population of 153,401 and a workforce of 73,454. The three largest cities include Benton Harbor, Niles, and St. Joseph.
- Lake Michigan College's primary educational sites include the Benton Harbor Campus and branch campuses in Niles and South Haven. At the current time, the Benton Harbor Campus is the only campus where full degrees can be earned. However, plans are in place to offer unique programming in Niles and South Haven to meet the needs of those regions. Niles and South Haven are staffed with a Director, as well as Student Services personnel. Each of these sites provides convenient access to higher education with a wide variety of programming options. Total Fall 2020 unduplicated headcount, including Early College students is 2,831.
- In addition, the College has extended its programming into two unserved counties— Allegan and Van Buren, at their request. Through the Allegan and Van Buren Tech Centers, LMC delivers high quality, career-focused programming through its Early College program. Allegan County signed a formal agreement with LMC in 2013 that acknowledges this on-going relationship and the benefits it provides for its rural communities. The Allegan agreement also provides adult credit classes supported by advising and other student services provided by the South Haven Campus.
- LMC operates a robust and well-established Early College program which accounts for approximately 30% of its total enrollment. For qualified high school students, college credit can be earned by enrolling in direct credit courses (taught by credentialed high school teachers at high school sites) or by enrolling in dual enrollment courses (taught by LMC faculty at a LMC location). LMC also has 5th year middle college programs in Berrien, Van Buren, and Allegan counties, which provide opportunities for high school students to defer their high school graduation for one

year so they can earn both a high school diploma and an associate's degree or certificate at the conclusion of their 5th year of high school. On average, LMC serves over 1,000 early college students annually in partnership with over 40 K-12 districts and regional ISDs.

- Located on-site at the Benton Harbor Campus, Siena Heights University (SHU) has partnered with Lake Michigan College for over thirty years to offer degree completion programs on the Benton Harbor Campus. The LMC/SHU partnership was the first of its kind in Michigan when it started in 1982. Currently six bachelor's degree programs and four online master's degree programs are available to LMC students and area residents. A unique "3 + 1" academic model allows students to transfer up to 90 semester hours from LMC into their baccalaureate degree with SHU, saving students significant tuition expense. With a focus on meeting the needs of the adult learner, Siena Heights University is an important and valuable partner in raising college education attainment rates in southwest Michigan.
- The College recently expanded our university partnerships through an on-campus University Center that has increased baccalaureate completion program options for students. We have new partnership agreements with Ferris State University and Davenport University and are considering additional partnerships that meet the needs of our students and the communities we serve.
- LMC is an active participant in the MiTransfer Pathways project. Led by the Michigan Center for Student Success, this statewide initiative aims to build multi-institutional associate to bachelor's degree transfer pathways in some of the largest majors in Michigan. This work began in 2018 and will continue through 2020 in three phases across 12 programs.
- A large part of LMC's service area is comprised of a rural and economically disadvantaged population. The Educational Opportunity Center (EOC) at Lake Michigan College serves a minimum of 1,105 participants each year. The EOC receives funding from the U.S. Department of Education, and serves individuals in the Michigan counties of Berrien, Cass, Van Buren, and Allegan, and the Indiana counties of La Porte and St. Joseph. The EOC provides information and assistance to adults (19 years and above) who are interested in furthering their education. Services to eligible participants include academic tutoring (in preparation for GED or college assessment testing), career assessment, assistance completing applications toward college

entrance, referrals to appropriate adult education centers, and/or community assistance agencies. The goal of the EOC program is to increase the number of adult participants who enroll in postsecondary education institutions.

- The Hanson Technology Center, located on the Benton Harbor campus, opened in August 2016 and houses the Advanced Manufacturing programs. The building is designed with new, sustainable energy-efficient systems and is used as a learning tool for students, demonstrating the use of natural building materials and sustainable methods. The building has five classrooms attached to four labs (a Fab Lab, welding lab, and two advanced manufacturing labs), collaboration spaces, and a simulation classroom. The simulation classroom is a state-of-the-art classroom complete with 6'9" x 16' touchscreen and the ability to seat 46 students.
- The Fab Lab -- which is available to students, employees, and the community -- is equipped with laser cutters, vinyl cutters, 3D printers, sewing machines, a woodshop with a CNC router, and various pieces of portable equipment to handle a variety of projects. A design center is available to encourage creativity, entrepreneurship, and collaboration.
- The Start-to-Finish program, which launched in 2012, provides intensive support services for Benton Harbor High School students, including advising, mentoring, supplemental instruction, life barrier problem-solving, and study skill development.
- The Student Support Services program, made possible through a five-year U.S. Department of Education grant, was designed to help 200 students overcome class, social, academic, and cultural barriers to higher education. The program serves first generation, low income students and students with a disability and helps ensure that they earn a certificate or associate degree; or earn a certificate or associate degree and transfer to a four-year institution to complete a baccalaureate degree or higher.
- The College partners with Benton Harbor Area Schools to serve 78 high school students in the Upward Bound Program. The Upward Bound Program focuses on preparing high school students to graduate from high school, enroll in, and complete a postsecondary credential.
- In 2015, Lake Michigan College joined the Guided Pathways Institute offered by the Michigan Center for Student Success. The Guided Pathways initiative helps

community colleges create clearer pathways for students from the beginning of their educational journey to degree completion and/or transfer.

- In 2017, the College was awarded a Title III Grant to continue and support our Guided Pathways work. This five-year, \$3 million grant is a pivotal opportunity for the College to focus efforts on improving student success. The primary goal of the grant is to increase the fall-to-fall, 5-year average retention rate from 49% to 63% by fall of 2022.
- The new Welch Center opened August 2019 to support our Wine and Viticulture Technology Program, which is the only teaching winery in the Midwest.

C. Planned initiatives which may impact facilities usage

Three recent initiatives are having a major impact on use of College facilities and property. The initiatives include:

- Renovation and upgrade of the Benton Harbor Main Building, completed August 2020.
- Renovation and upgrade of the Hanson Theatre, primarily used to support student productions, completed February 2019.
- Renovation and upgrade of the Grand Upton Hall in the Mendel Center, along with a complete upgrade of the Mendel Center's heating and cooling system and auxiliary energy improvements, completed August 2020.

Future programming at our Niles and South Haven campuses will require significant facility alterations. At the Niles campus, upgrades to teaching technology and the infrastructure to support that technology are needed. In addition, classrooms will be renovated to support new Career Technical Education (CTE) programs, (e.g. Medical Assisting, Welding). Similarly, instructional technology at the South Haven campus will be upgraded and classrooms renovated. Initiatives will include updating the science lab and renovating classrooms to support new programs in Brewing, Physical Therapy Assistant, Drone Piloting, and Truck Driving. Deferred maintenance for both campuses will be addressed as a part of those future capital projects.

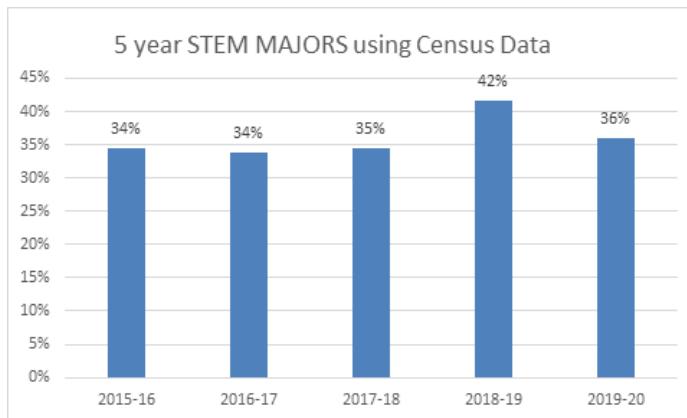
The Dental Assisting program currently operates out of the Benton Harbor and Niles campuses. As of Fall 2021, the program will run exclusively from the Niles campus. The

space vacated by the Dental Assisting program at the Benton Harbor campus will be renovated to serve the needs of a new Sterile Processor Technician program.

D. Demonstration of economic development impact of current/future programs

The economic impact of current and projected academic programming at Lake Michigan College is substantial and critical to the growth of southwest Michigan's regional economy.

- Current and projected programming described in this document is designed to create a workforce prepared to meet the needs of the existing employers as well as to attract new jobs, businesses, and industries to our area. Studies have repeatedly revealed the availability of an educated workforce as a primary factor in the decisions of employers to create jobs or to relocate and/or expand their business or service organizations. Highly qualified graduates in manufacturing, computer information systems, wine and viticulture, hospitality and culinary, health sciences, and STEM fields are critically needed to expand the economic base of southwest Michigan.



- Updated science and health sciences labs and facilities, made possible by a federal Title III grant and substantial College capital investments, have provided state-of-the-art science facilities for LMC students. As a result, the College has seen an increase in the number of STEM majors. As the number of students who successfully complete rigorous science and math courses increase, LMC's service region will greatly benefit from a steady stream of qualified and skilled workers able to contribute to new emerging technologies.
- New advanced manufacturing technology facilities support programs in Advanced

Manufacturing and Engineering Technology. Manufacturing growth has been identified as one of the key factors to economic recovery in Michigan. Creation of well-equipped and safe learning environments for students engaged in these programs supports manufacturing growth in our region.

Exhibit 1
Lake Michigan College
Registrar's Official Program Major Listing
Academic Year 2020-2021
Updated 10-01-2020

Associate Degrees

1. Associate in Business Administration
2. Associate in General Studies

Associate in Arts

3. Art
4. Communication
5. English
6. Foreign Language
7. History
8. Music
9. Political Science
10. Psychology
11. Sociology
12. Theatre

Associate in Applied Science

13. Accounting
14. Applied Science - General
15. Applications Development
16. Automation Engineering
17. Business
18. Casino Management - Four Winds
19. Child Development
20. Criminal Justice
21. Culinary Management
22. Dental Assisting
23. Diagnostic Medical Sonography
24. Electrical Distribution
25. Engineering Technology
26. General Technology
27. Hospitality Management
28. Machine Tool Technology
29. Mechatronics Technology
30. Medical Assisting

31. Music
32. Networking
33. Nursing
34. Pharmacy Technician
35. Radiologic Technology
36. Skilled Trades Technology
37. Teacher Education
38. Welding Production Technology
39. Wine and Viticulture Technology

Associate in Science

40. Biology
41. Chemistry
42. Health Science
43. Mathematics
44. Physical Education & Wellness
45. Physical Science
46. Physics

Advanced Certificate

1. Casino Management – Four Winds
2. Child Development
3. Cisco
4. Dental Assisting
5. General Education Transfer
6. Hospitality Management
7. Machine Tool Technology
8. Medical Assisting
9. Pharmacy Technician
10. Skilled Trades Technology

Certificate of Achievement

11. Geospatial Information Science and Technology
12. Graphic Design
13. Information Technology

- 14. Machine Tool
- 15. Manufacturing Production
- 16. Mechatronics Technology
- 17. Phlebotomy Technician
- 18. Sales & Customer Service
- 19. Small Business Management
- 20. Spanish Certification
- 21. Supervisory Skills
- 22. Web Development
- 23. Welding Technology

Totals:

Associates 46

Certificates 23