

According to the Bureau of Labor and Statistics,

engineering (as a general field) is expected to grow by **7%** 2020-2030



2 ENGINEERING (ASE) Associate of Science in Engineering **NMC CODE 735**

This intensive associate degree is intended to prepare students for **transfer to a four-year engineering program**. The NMC engineering curriculum parallels engineering programs offered during the first two years at other colleges and universities. Traditionally, these first two years emphasize the tools and theories that provide background for all engineering fields. Students are required to meet with an advisor for completion of this degree.

CORE REQUIREMENTS: 48 Credits

COURSE	TITLE	CREDITS
ENG 111	English Composition	4
ENG 112	English Composition	4
Humanities	Any Group One Course	3
Social Science	Any Group One Course	3
CHM 150/L/R	General Chemistry I	5
MTH 141	Calculus I	5
MTH 142	Calculus II	5
MTH 241	Calculus III	5
MTH 251	Differential Equations	4
PHY 221/L/R	Problems and Principles of Physics I	5
PHY 222/L/R	Problems and Principles of Physics II	5
DIRECTED ELECTIVES*:		25
BIO 227/L	Human Anatomy & Physiology I	4
BIO 228/L	Human Anatomy & Physiology II	4
CHM 151/L/R	General Chemistry II	5
CHM 250/L	Organic Chemistry I	5
CHM 251/L	Organic Chemistry II	5
CIT 110	Programming Logic and Design	3
EGR 101	Introduction to Engineering	1
EGR 111	Introduction to Computer Science	3
EGR 113	Engineering Graphics	3
EGR 131	Elementary Surveying	5
EGR 201	Statics	3
EGR 202	Mechanics of Materials	3
EGR 203	Dynamics	4
EGR 211	Electrical Circuits	3
EGR 220	Engineering Practice I	2
EGR 221	Material Science	3
EGR 232	Introductory Thermodynamics	3
ENV 111/L	Physical Geology	4

DEGREE TOTAL CREDITS 73

* Directed Electives will be determined by the type of engineering program the student is pursuing and the university to which they are transferring. See program advisor for Institution / program course information.

Michigan Tech articulation agreements

- Seven specialties including civil, mechanical and electrical. **100% transfer to Michigan Tech.**
- Start at Michigan Tech as a junior. Chosen specialty determines exact number of remaining credits.
- Up to **80 NMC** credits (mechanical engineering) accepted and counted.

Lake Superior State University also has an articulation agreement with NMC. nmc.edu/transfer-guides

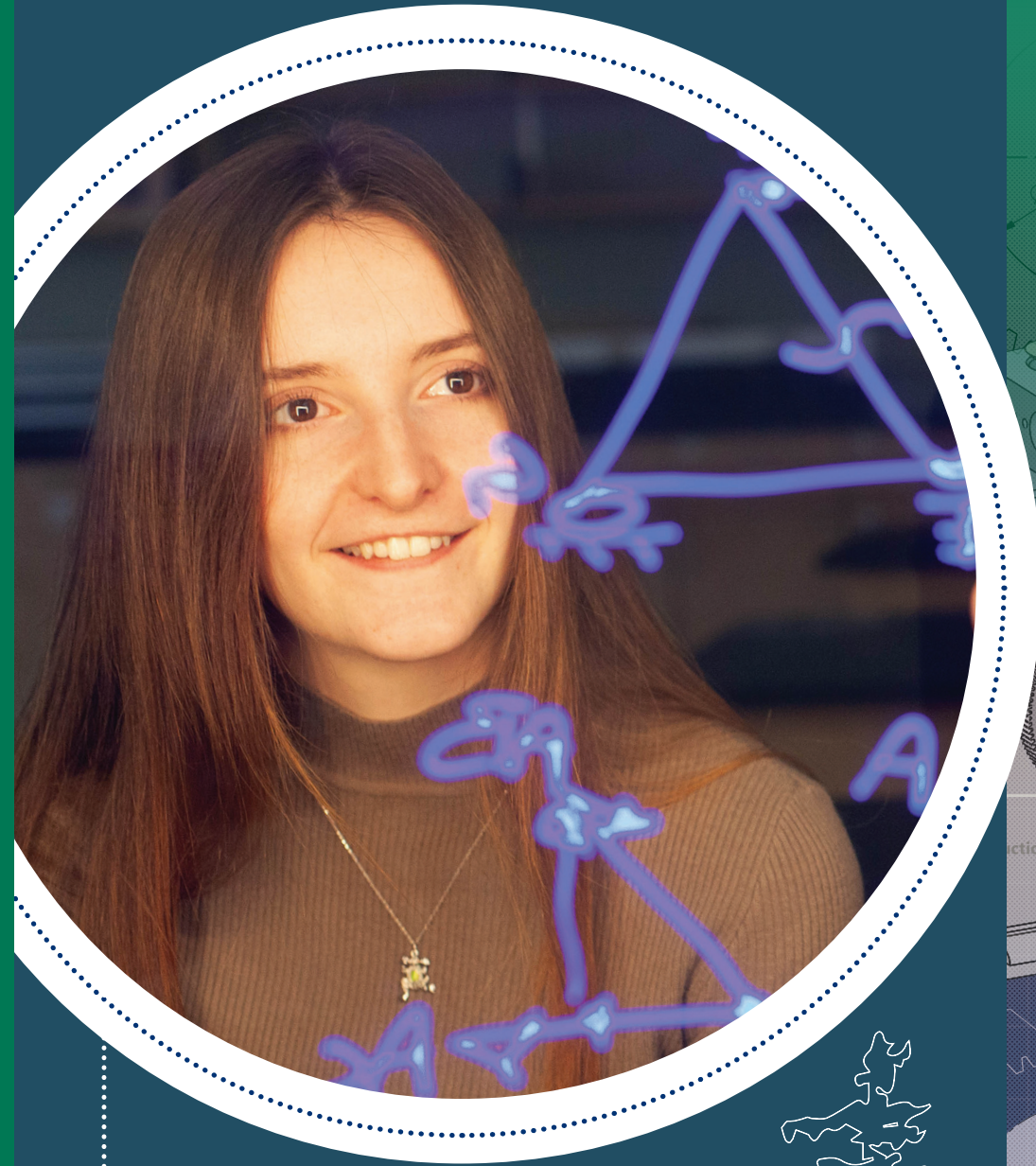
Connect with us

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 Admissions: (231) 995-1054
 Engineering: (231) 995-1270
 James Smith, Engineering Instructor
 jsmith@nmc.edu | nmc.edu/engineering

2 years at NMC
+ 2 years to earn bachelor's
= \$66,586
 AVERAGE STARTING SALARY FOR MECHANICAL ENGINEER

payscale.com, accessed May 2022

ENGINEERING

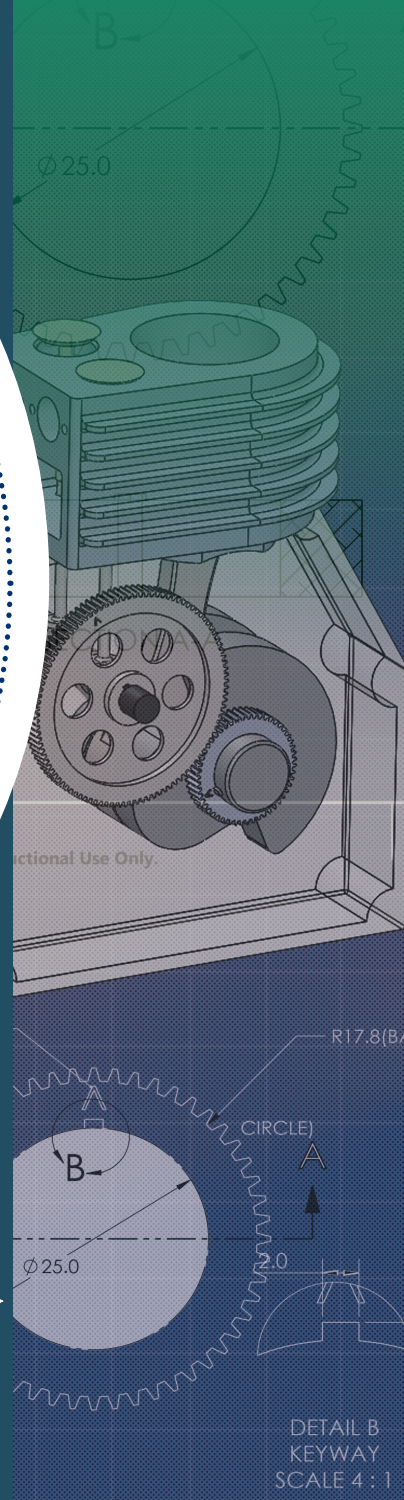


ASSOCIATE DEGREES (ASA) & (ASE)

NMC has the **most comprehensive** engineering transfer program of any Michigan community college.



Northwestern Michigan College



YOUR PATHWAY

Engineer a successful career.



Sound like you?

- > Like to problem solve
- > Think outside the box
- > Math is your thing
- > Details matter to you
- > Technology is your passion
- > Think analytically
- > Like to design and build
- > Group projects are the best

A professional career in engineering might be your thing.

NMC's personalized education

Small class sizes

Fundamental courses
all math courses & calculus-based science courses.

Virtual options

Student Support

- > Academic & Career Advising Center
- > Disability Support Services
- > Math Center
- > Tutoring Center
- > Writing and Reading Center
- > Student Success Center

Most individual classes/courses are approved for transfer to 4-year schools.
Options: Livestream or take online classes while attending a university.

Engineering specialties

- > Mechanical
- > Electrical
- > Civil
- > Robotics
- > Biomedical
- > Chemical
- > Computer
- > And others

10



ENGINEERING-specific scholarships

Gosling Czubak engineering scholarship

Arthur Moenkhaus engineering scholarship

Richard Redmond Jr. Legacy Pipeline engineering scholarship

For more info: nmc.edu/engineering



Start here. NMC makes it easy.

It's all about the math.

\$33,300 Tuition at U of M or MTU* (4-semesters/60 credits)
- \$7,280 Tuition at NMC* (4 semesters/65 contacts)
\$26,020 YOU CAN SAVE
 NMC can help you get ahead & save money. 2022 costs

Two degree pathways at NMC

to prepare you for the workforce or a bachelor's in engineering.

1 ENGINEERING (ASA) Associate in Science and Arts **NMC CODE 709**

The Associate in Science and Arts degree is generally pursued by students who are **planning to transfer** to a four-year college or university to complete a baccalaureate degree. Students who want to **explore** the curriculum also frequently pursue the ASA degree.

MAJOR REQUIREMENTS

COURSE	TITLE	CREDITS
CHM 150*	General Chemistry I	5
MTH 141**	Calculus I	5
MTH 142**	Calculus II	5
MTH 241**	Calculus III	5
MTH 251**	Differential Equations	4
PHY 221	Problems & Princ. of Physics I	5
PHY 222	Problems & Princ. Of Physics II	5
EGR 101	Introduction to Engineering	1
EGR 113	Engineering Graphics I	3
EGR 201	Statics	3
Based on program choice:		
EGR 131	Elementary Surveying	5
EGR 202	Mechanics of Materials	3
EGR 203	Dynamics	4
EGR 220	Engineering Practice I	2
EGR 232	Introductory Thermodynamics	3
Additional General Education Credits as required for the ASA degree		30-32
TOTAL DEGREE CREDITS		60

*, ** see website for more information at nmc.edu/programs/academic-programs/engineering

2 ENGINEERING (ASE)

Direct transfer
to a 4-year school.

We're here to support you:

- > Learn from industry experts
- > Enjoy beautiful Traverse City, MI
- > Live on campus
- > Experience hands-on learning opportunities

Get started today!



PREPARING YOU TO SUCCEED

ALL NMC INSTRUCTORS HAVE MASTER'S OR DOCTORAL DEGREES IN THEIR RESPECTIVE FIELDS