Focus Areas:
Architecture,
Engineering,
Mathematics,
Engineering Technology,
Actuary Science

MATHEMATICS & ENGINEERING

Department Chair: Mark Whisler *mwhisler@cloud.edu* •• 243.1435, *ext.* 221

Employment: \$60,000-\$100,000 (with bachelor's degree)



Potential Careers:

- Data Analyst
- Civil Engineer
- Chemical Engineer
- Electrical or Mechanical Engineer
- Actuary
- Architect

Mathematics is the study of numbers, equations, functions, and geometric shapes and their relationships.

Engineering combines mathematical theory, practical design theory, and scientific computing to address today's technological challenges.

While there maybe some opportunities for employment after two years, many careers require a Bachelor of Science degree. Students planning to complete a four-year degree should enroll in the A.S. program.

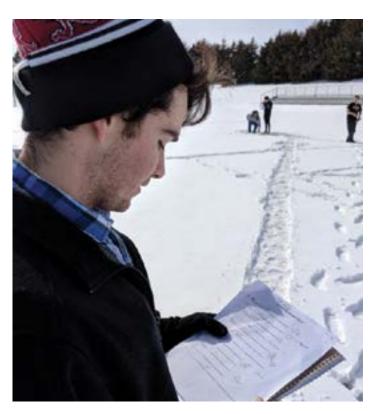
DEGREES & CERTIFICATES

Fields of Study

MATHEMATICS AND ENGINEERING

Associate of General Studies 62 Hours

Required General Edu	25 cr	
Communication Require CM101 English Compo CM115 Public Speaking CM240 Interpersonal	6	
Mathematics Requirement Mathematics General Ed MA110 Intermediate	3	
Humanities Requirement Art Music Theatre Foreign Language	Humanities Literature Philosophy History	3
Social/Behavioral Science Economics Psychology Sociology	3	
Humanities or Social Sci (Must be from second are	3	
Natural Science Requiren Physical Science w/lab G Biological Science w	4	
Open General Education	3	



Requir	ed Mathematics and Engineering	Courses	13 cr
MA112	Trigonometry	3	
MA120	Calculus I	5	
MA121	Calculus II	5	
Electiv	e Courses		18 cr
	Math		
MA122	Calculus III	5	
MA123	±	4	
MA220	Cooperative Education Internship	2	
	Science		
SC104	Geology	4	
SC107	Meteorology	4	
SC132	Chemistry II	5	
SC134	Organic Chemistry I	5	
SC135	Organic Chemistry II	5	
SC140	College Physics I	5	
SC141	College Physics II	5	
SC142	University Physics I	5	
SC143	University Physics II	5	
SC151	Principles of Biology II	5	
	Business		
BE100	Introduction to Business	3	
BE153	Personal Finance	3	
BE160	Business Accounting	3	
BE170	Business Statistics	3	
	Additional Electives		
CS108	Computer Applications	3	
CS155	Networking and Computer Technology	3	
CA221	Job Search	1	
SE100	Intro to Solar Energy	3	
UA100	Intro to UAV's	3	
WE100	Intro to Wind	3	
	Life Skills		
BE139	Basic Personal Finance	1	
BE210	Leadership Development	3	
MG102	Small Business Management	3	
PE250	Stress Management	3	
SS106	Marriage and Family	3	
Open I	Electives	60	er

Fields of Study

MATHEMATICS AND ENGINEERING

Associate of Science 62 Hours

cr

Required General Education Courses		33 cr	Elective Courses		10	
Communication Requireme		9		Math		
CM101 English Composition I (3 cr)			MA122	Calculus III	5	
CM102 English Composition II (3 cr)			MA123	Differential Equations	4	
CM115 Public Speaking (3 cr) or			MA220	Cooperative Education Internship	1-2	
CM240 Interpersonal C	ommunications (3 cr)					
Humanities Requirement (2 areas required)		6		Science		
Art	Humanities	U	SC104	Geology	4	
Music	Literature		SC107	Meteorology	4	
Theatre	Philosophy		SC132	Chemistry II	5	
Foreign Language History			SC134	Organic Chemistry I	5	
	•		SC135	Organic Chemistry II	5	
Mathematics Requirement Mathematics General Education Course		3	SC140	College Physics I	5	
			SC141	College Physics II	5	
Natural Science Requirement (2 areas required) SC131 Chemistry I (5 cr) *Biological Science (4 cr)		9	SC142	University Physics I	5	
			SC143	University Physics II	5	
			SC151	Principles of Biology II	5	
*(Physical Science majors should consult their advirsor about substitution of a physical science)		or about a		Business		
			BE100	Introduction to Business	3	
			BE153	Personal Finance	3	
0 . 1/0 1 10			BE160	Business Accounting	3	
Social/Behavioral Science Requirement		6	BE170	Business Statistics	3	
EC101 Principles of Macr						
(1 additional area required				Additional Electives		
Anthropology	Geography		CS108	Computer Applications	3	
Psychology Sociology	Political Science		CS155	Networking and Computer Technology	3	
			Open]	Electives	6 cr	

Required Mathematics and Engineering Courses 13 cr

 MA112
 Trigonometry
 3

 MA120
 Calculus I
 5

 MA121
 Calculus II
 5

