

# Century College

## Three Year Aerospace Engineering Program

Year One		Year Two		Year Three	
Fall :	Spring :	Fall :	Spring :	Fall :	Spring :
Math 1061 (4) <i>College Algebra I</i>	Math 1062 (5) <i>College Alg II w Trig</i>	Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable Calculus</i>	Math 2082 (5) <i>Lin. Alg. Diff. Eq.</i>
Chem 1041 (5) <i>Chemistry I</i>	CSci 1081 (4) <i>Programming Fund</i>	Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	Engr 2080 (3) <i>Dynamics</i>	Engr 2085 (3) <i>Deform. Body Mech</i>
Engr 1020 (4) <i>Intro to Engineering</i>	Engl 1021 (4) <i>Composition 1</i>	<i>Liberal education elective (goal 5)</i>	Engr 1080 (3) <i>Statics</i>	Engr 2091 (4) <i>Circuits I</i>	Physics 2081 (4) <i>Modern Physics</i>
<i>Liberal education elective</i>	<i>Liberal education Elective (goal 6)</i>	<i>Liberal education elective</i>	<i>Liberal education elective</i>	<i>Liberal education elective</i>	Engr 2094 (2) <i>Digital Fundamentals</i>

## Two Year Aerospace Engineering Program

Year One			Year Two	
Fall :	Spring :	Summer:	Fall :	Spring :
Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	<i>Liberal education (3) elective (goal 5)</i>	Math 2081 (5) <i>Multivariable Calculus</i>	Math 2082 (5) <i>Lin Alg Diff. Eq</i>
Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	<i>Liberal education (3) Elective (goal 6)</i>	Engr 2080 (3) <i>Dynamics</i>	Engr 2085 (3) <i>Deform Body Mech</i>
Engr 1020 (4) <i>Intro to Engineering</i>	Engr 1080 (3) <i>Statics</i>		Chem. 1041 (5) <i>Chemistry I</i>	Physics 2081 (4) <i>Modern Physics</i>
Engl 1021 (4) <i>Composition 1</i>	CSci 1081 (4) <i>Programming Fund</i>		Engr 2091 (4) <i>Circuits I</i>	Engr 2094 (2) <i>Digital Fundamentals</i>

### Notes:

- Students should consult with an advisor or transfer specialist for courses that transfer to their selected university program
- Engr 1020 is not required but can be used to meet a liberal education requirement at the U of M.
- \*Liberal eds must cover Engl 1021, goals 5 and 6 and two theme goals to complete the AS in Broad Field Engineering

# Century College

## Three Year Biomedical Engineering Program

Year One		Year Two		Year Three	
Fall :	Spring :	Fall :	Spring :	Fall :	Spring :
Math 1061 (4) <i>College Algebra I</i>	Math 1062 (5) <i>College Alg II w Trig</i>	Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable Calculus</i>	Math 2082 (5) <i>Lin. Alg. Diff. Eq.</i>
Chem 1041 (5) <i>Chemistry I</i>	Chem 1042 (5) <i>Chemistry II</i>	Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	<i>Liberal education (3) elective (goal 5)</i>	<i>Liberal education elective</i>
Engr 1020 (4) <i>Intro to Engineering</i>	Engl 1021 (4) <i>Composition 1</i>	Chem 2041 (5) <i>Organic Chemistry</i>	<i>Liberal education (3) Elective (goal 6)</i>	CSci 1081 (4) <i>Programming Fund</i>	Math 2025 (4) <i>Prob and Statistics</i>
<i>Liberal education elective</i>	<i>Liberal education elective</i>	<i>Liberal education elective</i>	<i>Liberal education elective</i>	<i>Liberal education elective</i>	

## Two Year Biomedical Engineering Program

Year One		Year Two	
Fall :	Spring :	Fall :	Spring :
Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable Calculus</i>	Math 2082 (5) <i>Lin Alg Diff. Eq</i>
Engr 1020 (4) <i>Intro to Engineering</i>	Engl 1021 (4) <i>Composition 1</i>	Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>
Chem 1041 (5) <i>Chemistry I</i>	Chem 1042 (5) <i>Chemistry II</i>	Chem 2041 (5) <i>Organic Chemistry I</i>	Math 2025 (4) <i>Prob and Statistics</i>
<i>Liberal education elective</i>	<i>Liberal education (3) Elective (goal 6)</i>	<i>Liberal education (3) elective (goal 5)</i>	CSci 1081 (4) <i>Programming Fund</i>

### Notes:

- Students should consult with an advisor or transfer specialist for courses that transfer to their selected university program
- Engr 1020 is not required but can be used to meet a liberal education requirement at the U of M.
- \*Liberal eds must cover Engl 1021, goals 5 and 6 and two theme goals to complete the AS in Broad Field Engineering

# Century College

## Three Year Bioproducts and Biosystems Engineering Program

Year One		Year Two		Year Three	
Fall :	Spring :	Fall :	Spring :	Fall :	Spring :
Math 1061 (4) <i>College Algebra I</i>	Math 1062 (5) <i>College Alg II w Trig</i>	Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable Calculus</i>	Math 2082 (5) <i>Lin. Alg. Diff. Eq.</i>
Chem 1041 (5) <i>Chemistry I</i>	Chem 1042 (5) <i>Chemistry II</i>	Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	Engr 2080 (3) <i>Dynamics</i>	<i>Liberal education elective*</i>
Engr 1020 (4) <i>Intro to Engineering</i>	Engl 1021 (4) <i>Composition I</i>	Biol 1041 (5) <i>Principles of Biology 1</i>	Engr 1080 (3) <i>Statics</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>
<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>

## Two Year Bioproducts and Biosystems Engineering Program

Year One		Year Two	
Fall :	Spring :	Fall :	Spring :
Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable Calculus</i>	Math 2082 (5) <i>Lin Alg Diff. Eq</i>
Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	Engr 2080 (3) <i>Dynamics</i>	Biol 1041 (5) <i>Principles of Biology 1</i>
Engr 1020 (4) <i>Intro to Engineering</i>	Engr 1080 (3) <i>Statics</i>	Chem. 1041 (5) <i>Chemistry I</i>	Chem 1042 (5) <i>Chemistry II</i>
<i>Liberal education elective*</i>	Engl 1021 (4) <i>Composition I</i>	<i>Liberal education Elective*</i>	<i>Liberal education elective*</i>

Notes:

- Students should consult with an advisor or transfer specialist for courses that transfer to their selected university program
- Engr 1020 is not required but can be used as a liberal education elective for the U of M.
- Add Chem 2041 for Bioproducts and Bioprocessing & Food Engineering Emphasis
- \*Liberal eds must cover Engl 1021, goals 5 and 6 and two theme goals to complete the AS in Broad Field Engineering

# Century College

## Three Year Chemical Engineering Program

Year One		Year Two		Year Three	
Fall :	Spring :	Fall :	Spring :	Fall :	Spring :
Math 1061 (4) <i>College Algebra I</i>	Math 1062 (5) <i>College Alg II w Trig</i>	Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable-Calculus</i>	Math 2082 (5) <i>Lin. Alg. Diff. Eq.</i>
Chem 1041 (5) <i>Chemistry I</i>	Chem 1042 (5) <i>Chemistry II</i>	Chem 2041 (5) <i>Organic Chemistry I</i>	Chem 2042 (5) <i>Organic Chemistry II</i>	Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>
Engr 1020 (4) <i>Intro to Engineering</i>	Engl 1021 (4) <i>Composition I</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>
<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>

## Two Year Chemical Engineering Program

Year One		Year Two	
Fall :	Spring :	Fall :	Spring :
Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable Calculus</i>	Math 2082 (5) <i>Lin Alg Diff. Eq</i>
Chem. 1041 (5) <i>Chemistry I</i>	Chem 1042 (5) <i>Chemistry II</i>	Chem 2041 (5) <i>Organic Chemistry I</i>	Chem 2042 (5) <i>Organic Chemistry II</i>
Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	Engl 1021 (4) <i>Composition I</i>	<i>Liberal education elective*</i>
Engr 1020 (4) <i>Intro to Engineering</i>	<i>Liberal education elective*</i>	<i>Liberal education Elective*</i>	<i>Liberal education elective*</i>

### Notes:

- Students should consult with an advisor or transfer specialist for courses that transfer to their selected university program
- Engr 1020 is not required but strongly recommended by Century College and the University of Minnesota.
- CHEN 2001 – Material and Energy Balances is now a fall semester class at the U of M and it is a prerequisite class for the junior sequence. If a student transfers to the U of M after the freshman year, they will take the same classes as sophomores and the students should graduate in 3 years. A student transferring after 2 years will take Physical Chemistry, CHEN 2001, and a few other classes.
- \*Liberal eds must cover Engl 1021, goals 5 and 6 and two theme goals to complete the AS in Broad Field Engineering

# Century College

## Three Year Civil Engineering Program

Year One		Year Two		Year Three	
Fall :	Spring :	Fall :	Spring :	Fall :	Spring :
Math 1061 (4) <i>College Algebra I</i>	Math 1062 (5) <i>College Alg II w Trig</i>	Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable Calculus</i>	Math 2082 (5) <i>Lin. Alg. Diff. Eq.</i>
Chem 1041 (5) <i>Chemistry I</i>	Chem 1042 (5) <i>Chemistry II</i>	Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	Engr 2080 (3) <i>Dynamics</i>	Engr 2085 (3) <i>Deform. Body Mech</i>
Engr 1020 (4) <i>Intro to Engineering</i>	Engl 1021 (4) <i>Composition I</i>	<i>Liberal education elective*</i>	Engr 1080 (3) <i>Statics</i>	<i>Liberal education elective*</i>	Math 2025 (4) <i>Prob and Statistics</i>
<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>

## Two Year Civil Engineering Program

Year One		Year Two	
Fall :	Spring :	Fall :	Spring :
Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable Calculus</i>	Math 2082 (5) <i>Lin Alg Diff. Eq</i>
Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	Engr 2080 (3) <i>Dynamics</i>	Engr 2085 (3) <i>Deform Body Mech</i>
Engr 1020 (4) <i>Intro to Engineering</i>	Engr 1080 (3) <i>Statics</i>	Chem. 1041 (5) <i>Chemistry I</i>	Chem 1042 (5) <i>Chemistry II</i>
<i>Liberal education elective*</i>	Engl 1021 (4) <i>Composition I</i>	<i>Liberal education Elective*</i>	Math 2025 (4) <i>Prob and Statistics</i>

### Notes:

- Students should consult with an advisor or transfer specialist for courses that transfer to their selected university program
- Engr 1020 is not required but can be used as a liberal ed elective for the U of M.
- Chem 2041 for environmental emphasis.
- Engr 2070 should be taken instead of Math 2025 if not transferring to the U of M.
- \*Liberal eds must cover Engl 1021, goals 5 and 6 and two theme goals to complete the AS in Broad Field Engineering

# Century College

## Three Year Composite Engineering Program

Year One		Year Two		Year Three	
Fall :	Spring :	Fall :	Spring :	Fall :	Spring :
Math 1061 (4) <i>College Algebra I</i>	Math 1062 (5) <i>College Alg II w Trig</i>	Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable Calculus</i>	Math 2082 (5) <i>Lin. Alg. Diff. Eq.</i>
Engr 1020 (4) <i>Intro to Engineering</i>	Engl 1021 (4) <i>Composition I</i>	Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	Engr 2091 (4) <i>Circuits I</i>	Engr 2070 (3) <i>Thermodynamics</i>
Chem. 1041 (5) <i>Chemistry I</i>	Chem 1042 (5) <i>Chemistry II</i>	CSCI 1081 (4) <i>Programming Fund</i>	Engr 1080 (3) <i>Statics</i>	Engr 2080 (3) <i>Dynamics</i>	Engr 2085 (3) <i>Deform Body Mech</i>
<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	Chem 2041 (5) <i>Organic Chemistry I</i>	Chem 2042 (5) <i>Organic Chemistry II</i>	<i>Liberal education elective*</i>	Engr 2095 (4) <i>Intro to Digital DesignI</i>

## Two Year Composite Engineering Program

Year One		Year Two	
Fall :	Spring :	Fall :	Spring :
Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable Calculus</i>	Math 2082 (5) <i>Lin Alg Diff. Eq</i>
Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	Engr 2091 (4) <i>Circuits I</i>	Engr 2070 (3) <i>Thermodynamics</i>
CSCI 1081 (4) <i>Programming Fund</i>	Engr 1080 (3) <i>Statics</i>	Engr 2080 (3) <i>Dynamics</i>	Engr 2085 (3) <i>Deform Body Mech</i>
Engr 1020 (4) <i>Intro to Engineering</i>	Engl 1021 (4) <i>Composition I</i>	Chem. 1041 (5) <i>Chemistry I</i>	Chem 1042 (5) <i>Chemistry II</i>

### Notes:

- Students should consult with an advisor or transfer specialist for courses that transfer to their selected university program
- Organic Chem I and II are required and will need to be taken at Winona State Univ. if the student wants to transfer in 2 yrs.
- \*Liberal eds must cover Engl 1021, goals 5 and 6 and two theme goals to complete the AS in Broad Field Engineering

# Century College

## Three Year Computer Engineering Program

Year One		Year Two		Year Three	
Fall :	Spring :	Fall :	Spring :	Fall :	Spring :
Math 1061 (4) <i>College Algebra I</i>	Math 1062 (5) <i>College Alg II w Trig</i>	Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable Calculus</i>	Math 2082 (5) <i>Lin. Alg. Diff. Eq.</i>
Engr 1020 (4) <i>Intro to Engineering</i>	Engl 1021 (4) <i>Composition I</i>	Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	Engr 2091 (4) <i>Circuits I</i>	Engr 2092 (4) <i>Circuits II</i>
<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	CSCI 1081 (4) <i>Programming Fund</i>	CSCI 1082 (3) <i>Program. Fund II</i>	CSCI 2082 (3) <i>Data Structures &amp; Agl.</i>	CSCI 2014 (4) <i>Discrete Structures</i>
<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	Engr 2095 (4) <i>Intro to Digital DesignI</i>

## Two Year Computer Engineering Program

Year One		Year Two	
Fall :	Spring :	Fall :	Spring :
Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable Calculus</i>	Math 2082 (5) <i>Lin Alg Diff. Eq</i>
Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	Engr 2091 (4) <i>Circuits I</i>	Engr 2092 (4) <i>Circuits II</i>
CSCI 1081 (4) <i>Programming Fund</i>	CSCI 1082 (3) <i>Program. Fund II</i>	CSCI 2082 (3) <i>Data Structures &amp; Agl.</i>	CSCI 2014 (4) <i>Discrete Structures</i>
<i>Liberal education Elective*</i>	Engl 1021 (4) <i>Composition I</i>	<i>Liberal education Elective*</i>	Engr 2095 (4) <i>Intro to Digital Design</i>

### Notes:

- Students should consult with an advisor or transfer specialist for courses that transfer to their selected university program
- Engr 1020 is not required but can be used as a liberal ed elective for the U of M.
- Engr 2070 will be accepted as a technical elective. This may be approved by petition.
- \*Liberal eds must cover Engl 1021, goals 5 and 6 and two theme goals to complete the AS in Broad Field Engineering

# Century College

## Three Year Electrical Engineering Program

Year One		Year Two		Year Three	
Fall :	Spring :	Fall :	Spring :	Fall :	Spring :
Math 1061 (4) <i>College Algebra I</i>	Math 1062 (5) <i>College Alg II w Trig</i>	Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable-Calculus</i>	Math 2082 (5) <i>Lin. Alg. Diff. Eq.</i>
Chem 1041 (5) <i>Chemistry I</i>	Chem 1042 (5) <i>Chemistry II</i>	Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	Engr 2091 (4) <i>Circuits I</i>	Engr 2092 (4) <i>Circuits II</i>
Engr 1020 (4) <i>Intro to Engineering</i>	Engl 1021 (4) <i>Composition I</i>	CSci 1081 (4) <i>Programming Fund</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	Engr 2095 (4) <i>Digital Design</i>
<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>

## Two Year Electrical Engineering Program

Year One		Year Two	
Fall :	Spring :	Fall :	Spring :
Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable Calculus</i>	Math 2082 (5) <i>Lin Alg Diff. Eq</i>
Chem. 1041 (5) <i>Chemistry I</i>	Chem 1042 (5) <i>Chemistry II</i>	Engr 2091 (4) <i>Circuits I</i>	Engr 2092 (4) <i>Circuits II</i>
Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	CSci 1081 (4) <i>Programming Fund</i>	Engr 2095 (4) <i>Digital Design</i>
Engr 1020 (4) <i>Intro to Engineering</i>	<i>Liberal education elective*</i>	Engl 1021 (4) <i>Composition I</i>	<i>Liberal education elective*</i>

### Notes:

- Students should consult with an advisor or transfer specialist for courses that transfer to their selected university program
- Engr 1020 is not required but may be used as a liberal ed elective for the U of M.
- Phys 2081 can be taken instead of Chem 1042. However, Physics 2081 is only offered even numbered summers.
- \*Liberal eds must cover Engl 1021, goals 5 and 6 and two theme goals to complete the AS in Broad Field Engineering



# Century College

## Three Year Environmental Engineering Program

Year One		Year Two		Year Three	
Fall :	Spring :	Fall :	Spring :	Fall :	Spring :
Math 1061 (4) <i>College Algebra I</i>	Math 1062 (5) <i>College Alg II w Trig</i>	Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable-Calculus</i>	Math 2082 (5) <i>Lin. Alg. Diff. Eq.</i>
Chem 1041 (5) <i>Chemistry I</i>	Chem 1042 (5) <i>Chemistry II</i>	Chem 2041 (5) <i>Organic Chemistry I</i>	Engr 1080 (3) <i>Statics</i>	Biol 1041 (5) <i>Principles of Biology I</i>	<i>Liberal education elective*</i>
Engr 1020 (4) <i>Intro to Engineering</i>	Engl 1021 (4) <i>Composition I</i>	Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	ESCI 1030 (4) <i>Physical Geology</i>	Engr 2085 (3) <i>Deform. Body Mech</i>
<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	Math 2025 (4) <i>Prob and Statistics</i>

## Two Year Environmental Engineering Program

Year One		Year Two	
Fall :	Spring :	Fall :	Spring :
Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable Calculus</i>	Math 2082 (5) <i>Lin Alg Diff. Eq</i>
Chem. 1041 (5) <i>Chemistry I</i>	Chem 1042 (5) <i>Chemistry II</i>	Chem 2041 (5) <i>Organic Chemistry I</i>	Engr 2085 (3) <i>Deform. Body Mech</i>
Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	Biol 1041 (5) <i>Principles of Biology I</i>	Math 2025 (4) <i>Prob and Statistics</i>
<i>Liberal education Elective*</i>	Engr 1080 (3) <i>Statics</i>	<i>Liberal education Elective*</i>	ESCI 1030 (4) <i>Physical Geology</i>

### Notes:

- Students should consult with an advisor or transfer specialist for courses that transfer to their selected university program
- Engr 1020 is not required but may be used as a liberal ed elective for the U of M.
- Engl 1021 will need to be completed during the summer to finish the AS Broad Field Engineering degree in two years.
- \*Liberal eds must cover Engl 1021, goals 5 and 6 and two theme goals to complete the AS in Broad Field Engineering

# Century College

## Three Year General Engineering Program

Year One		Year Two		Year Three	
Fall :	Spring :	Fall :	Spring :	Fall :	Spring :
Math 1061 (4) <i>College Algebra I</i>	Math 1062 (5) <i>College Alg II w Trig</i>	Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable-Calculus</i>	Math 2082 (5) <i>Lin. Alg. Diff. Eq.</i>
Chem 1041 (5) <i>Chemistry I</i>	CSci 1081 (4) <i>Programming Fund</i>	Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	Engr 2080 (3) <i>Dynamics</i>	Engr 2085 (3) <i>Deform. Body Mech</i>
Engr 1020 (4) <i>Intro to Engineering</i>	Engl 1021 (4) <i>Composition I</i>	<i>Liberal education elective*</i>	Engr 1080 (3) <i>Statics</i>	Engr 2091 (4) <i>Circuits I</i>	Biol 1041 (5) <i>Principles of Biology I</i>
<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>

## Two Year General Engineering Program

Year One		Year Two	
Fall :	Spring :	Fall :	Spring :
Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable Calculus</i>	Math 2082 (5) <i>Lin Alg Diff. Eq</i>
Chem. 1041 (5) <i>Chemistry I</i>	Engr 1020 (4) <i>Intro to Engineering</i>	Engr 2080 (3) <i>Dynamics</i>	Engr 2085 (3) <i>Deform. Body Mech</i>
Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	Engr 2091 (4) <i>Circuits I</i>	Biol 1041 (5) <i>Principles of Biology II</i>
<i>Liberal education elective*</i>	Engr 1080 (3) <i>Statics</i>	CSci 1081 (4) <i>Programming Fund</i>	<i>Liberal education elective*</i>

### Notes:

- Students should consult with an advisor or transfer specialist for courses that transfer to their selected university program
- Engl 1021 will need to be completed during the summer to finish the AS Engineering degree in 2 years.
- \*Liberal eds must cover Engl 1021, goals 5 and 6 and two theme goals to complete the AS in Broad Field Engineering

# Century College

## Three Year Geoengineering Program

Year One		Year Two		Year Three	
Fall :	Spring :	Fall :	Spring :	Fall :	Spring :
Math 1061 (4) <i>College Algebra I</i>	Math 1062 (5) <i>College Alg II w Trig</i>	Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable-Calculus</i>	Math 2082 (5) <i>Lin. Alg. Diff. Eq.</i>
Chem 1041 (5) <i>Chemistry I</i>	Chem 1042 (5) <i>Chemistry II</i>	ESCI 1030 (4) <i>Physical Geology</i>	Engr 1080 (3) <i>Statics</i>	Engr 2080 (3) <i>Dynamics</i>	Engr 2085 (3) <i>Deform. Body Mech</i>
Engr 1020 (4) <i>Intro to Engineering</i>	Engl 1021 (4) <i>Composition I</i>	Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>
<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	Math 2025 (4) <i>Prob and Statistics</i>

## Two Year Geoengineering Program

Year One		Year Two	
Fall :	Spring :	Fall :	Spring :
Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable Calculus</i>	Math 2082 (5) <i>Lin Alg Diff. Eq</i>
Chem. 1041 (5) <i>Chemistry I</i>	Chem 1042 (5) <i>Chemistry II</i>	Engr 2080 (3) <i>Dynamics</i>	Engr 2085 (3) <i>Deform. Body Mech</i>
Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	Engl 1021 (4) <i>Composition I</i>	Math 2025 (4) <i>Prob and Statistics</i>
<i>Liberal education elective *</i>	Engr 1080 (3) <i>Statics</i>	ESCI 1030 (4) <i>Physical Geology</i>	<i>Liberal education elective*</i>

### Notes:

- Students should consult with an advisor or transfer specialist for courses that transfer to their selected university program
- Engr 1020 is not required but may be used as a liberal ed elective for the U of M.
- \*Liberal eds must cover Engl 1021, goals 5 and 6 and two theme goals to complete the AS in Broad Field Engineering

# Century College

## Three Year Industrial and Systems Engineering Program

Year One		Year Two		Year Three	
Fall :	Spring :	Fall :	Spring :	Fall :	Spring :
Math 1061 (4) <i>College Algebra I</i>	Math 1062 (5) <i>College Alg II w Trig</i>	Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable-Calculus</i>	Math 2082 (5) <i>Lin. Alg. Diff. Eq.</i>
Chem 1041 (5) <i>Chemistry I</i>	CSci 1081 (4) <i>Programming Fund</i>	Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	Biol 1041 (5) <i>Principles of Biology I</i>	Econ 1023 (3) <i>Microeconomics</i>
Engr 1020 (4) <i>Intro to Engineering</i>	Engl 1021 (4) <i>Composition I</i>	CSci 2061 (1) <i>Python for Programmers</i>	Mktg 2050 (3) <i>Principles of Mktg</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>
<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>

## Two Year Industrial and Systems Engineering Program

Year One		Year Two	
Fall :	Spring :	Fall :	Spring :
Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable Calculus</i>	Math 2082 (5) <i>Lin Alg Diff. Eq</i>
Engr 1020 (4) <i>Intro to Engineering</i>	CSci 1081 (4) <i>Programming Fund</i>	Biol 1041 (5) <i>Principles of Biology I</i>	Econ 1023 (3) <i>Microeconomics</i>
Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	Engl 1021 (4) <i>Composition I</i>	Mktg 2050 (3) <i>Principles of Mktg</i>
<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	CSci 1081 (2) <i>Python for Programmers</i>	Chem. 1041 (5) <i>Chemistry I</i>

### Notes:

- Students should consult with an advisor or transfer specialist for courses that transfer to their selected university program
- Biol 1041 is strongly recommended
- If a student transfers to the U of M after the freshman year, they will take the same classes as a sophomore and the student should graduate in three years. A student transferring after two years will take IE 1101, 2021 and perhaps a few other classes. It will take the student three years to graduate after transferring.
- \*Liberal eds must cover Engl 1021, goals 5 and 6 and two theme goals to complete the AS in Broad Field Engineering

# Century College

## Three Year Material Science Engineering Program

Year One		Year Two		Year Three	
Fall :	Spring :	Fall :	Spring :	Fall :	Spring :
Math 1061 (4) <i>College Algebra I</i>	Math 1062 (5) <i>College Alg II w Trig</i>	Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable-Calculus</i>	Math 2082 (5) <i>Lin. Alg. Diff. Eq.</i>
Chem 1041 (5) <i>Chemistry I</i>	Chem 1042 (5) <i>Chemistry II</i>	Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	<i>Liberal education elective*</i>	Engr 2085 (3) <i>Deform. Body Mech</i>
Engl 1021 (4) <i>Composition I</i>	Engr 1020 (4) <i>Intro to Engineering</i>	Chem 2041 (5) <i>Organic Chemistry</i>	Engr 1080 (3) <i>Statics</i>	<i>Liberal education elective*</i>	Phys 2081 (5) <i>Modern Physics</i>
<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>

## Two Year Material Science Engineering Program

Year One		Year Two	
Fall :	Spring :	Fall :	Spring :
Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable Calculus</i>	Math 2082 (5) <i>Lin Alg Diff. Eq</i>
Chem. 1041 (5) <i>Chemistry I</i>	Chem 1042 (5) <i>Chemistry II</i>	Chem 2041 (5) <i>Organic Chemistry</i>	Engr 2085 (3) <i>Deform. Body Mech</i>
Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	<i>Liberal education elective*</i>	Phys 2081 (5) <i>Modern Physics</i>
Engl 1021 (4) <i>Composition I</i>	Engr 1080 (3) <i>Statics</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>

Notes:

- Students should consult with an advisor or transfer specialist for courses that transfer to their selected university program
- Engr 1020 is not required but may be used as a liberal ed elective for the U of M.
- \*Liberal eds must cover Engl 1021, goals 5 and 6 and two theme goals to complete the AS in Broad Field Engineering

# Century College

## Three Year Mechanical Engineering Program

Year One		Year Two		Year Three	
Fall :	Spring :	Fall :	Spring :	Fall :	Spring :
Math 1061 (4) <i>College Algebra I</i>	Math 1062 (5) <i>College Alg II w Trig</i>	Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable-Calculus</i>	Math 2082 (5) <i>Lin. Alg. Diff. Eq.</i>
Chem 1041 (5) <i>Chemistry I</i>	CSci 1081 (4) <i>Programming Fund</i>	Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	Engr 2080 (3) <i>Dynamics</i>	Engr 2085 (3) <i>Deform. Body Mech</i>
Engr 1020 (4) <i>Intro to Engineering</i>	Engl 1021 (4) <i>Composition I</i>	<i>Liberal education elective*</i>	Engr 1080 (3) <i>Statics</i>	Engr 2091 (4) <i>Circuits I</i>	Engr 2094 (2) <i>Digital Fundamentals</i>
<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	<i>Liberal education elective*</i>	Engr 2070 (3) <i>Thermodynamics</i>

## Two Year Mechanical Engineering Program

Year One		Year Two	
Fall :	Spring :	Fall :	Spring :
Math 1081 (5) <i>Calculus I</i>	Math 1082 (5) <i>Calculus II</i>	Math 2081 (5) <i>Multivariable Calculus</i>	Math 2082 (5) <i>Lin Alg Diff. Eq</i>
Chem. 1041 (5) <i>Chemistry I</i>	Engr 1020 (4) <i>Intro to Engineering</i>	Engr 2080 (3) <i>Dynamics</i>	Engr 2085 (3) <i>Deform. Body Mech</i>
Phys 1081 (5) <i>Physics I</i>	Phys 1082 (5) <i>Physics II</i>	Engr 2091 (4) <i>Circuits I</i>	Engr 2094 (2) <i>Digital Fundamentals</i>
<i>Liberal education elective*</i>	Engr 1080 (3) <i>Statics</i>	CSci 1081 (4) <i>Programming Fund</i>	Engr 2070 (3) <i>Thermodynamics</i>

### Notes:

- Students should consult with an advisor or transfer specialist for courses that transfer to their selected university program
- Engl 1021 and a lib. ed course will need to be completed during the summer to finish the AS Engineering degree in 2 years.
- \*Liberal eds must cover Engl 1021, goals 5 and 6 and two theme goals to complete the AS in Broad Field Engineering
- Biol 1041 strongly recommended