



## Launch Advising Worksheet

AP Exam Information		
AP Exam	Score	Mines Course
Macro AND Micro	4, 5	EBGN201
Calculus AB	4, 5	MATH111
Calculus BC	4	MATH111 (only if AB subscore is also a 4)
	5	MATH111 & MATH112 (MATH112 requires enrollment in MATH113- Short Form)
Comp Sci A	4, 5	CSCI261
Comp Sci Principles	4, 5	CSCI101
Biology	4	Invited to take Challenge Exam: CBEN110
	5	CBEN110 & CBEN120
Chemistry	4	CHGN121
	5	CHGN121 & CHGN122
Physics C: Electricity & Magnetism	4, 5	Invited to take Challenge Exam: PHGN200
Physics C: Mechanics	4	Invited to take Challenge Exam: PHGN100
	5	PHGN100
All AP exam information can be found at <a href="https://inside.mines.edu/Advanced-Placement-Credit">inside.mines.edu/Advanced-Placement-Credit</a>		

Sample Fall Semester- No Advanced Credit		
Class	Title	Credits
CSM101	Freshman Success Seminar	0.5
CHGN121	Principles of Chemistry I	4.0
MATH111	Calculus for Scientists and Engineers I	4.0
EBGN201	Principles of Economics	3.0
LAIS100	Nature and Human Values	4.0
PAGN Elective	Physical Activity Elective	0.5
<i>Total Credits</i>		<b>16.0</b>

Sample Fall Semester- With Advanced Credit		
Class	Title	Credits
CSM101	Freshman Success Seminar	0.5
CHGN122	Principles of Chemistry II	4.0
MATH112	Calculus for Scientists and Engineers II	4.0
LAIS100	Nature and Human Values	4.0
PHGN100	Physics I- Mechanics	4.5
PAGN Elective	Physical Activity Elective	0.5
<i>Total Credits</i>		<b>17.5</b>

Core Requirement Information					
<b>Math</b>					<b>My Preference</b>
AP/IB/TR	Calc I	Calc II	Calc III	DiffEQ	
<b>Physics</b>					<b>My Preference</b>
AP/IB/TR	Physics I	No Physics I			
<b>Chemistry</b>					<b>My Preference</b>
AP/IB/TR	CHEM I	CHEM II (major-specific)			
<b>Physical Activity (PA)</b>					<b>My Preference</b>
Varsity Athlete	Club Sport	PA			
<b>Humanities &amp; Social Science/Design</b>					<b>My Preference</b>
NHV (LAIS100)	ECON (EBGN201)	EPICS (EPIC151)			
<b>CSM101</b>					<b>My Preference</b>
CSM101					CSM101
<b>Distributed Science</b>					<b>My Preference</b>
Major-Dependent (see other side)					

Your responses will be emailed to your email address.  
 Visit [casa.mines.edu/first-year-info](https://casa.mines.edu/first-year-info) for more information.

# Core Course Requirements

*Does not include Engineering Requirements.*

2017-2018 Bulletin, subject to change. Visit [bulletin.mines.edu](http://bulletin.mines.edu) for more information.

## 1) The Core Curriculum

Core requirements are applicable to all undergraduate students:

In Mathematics and the Basic Sciences		
<a href="#">MATH111</a>	CALCULUS FOR SCIENTISTS AND ENGINEERS I	4.0
<a href="#">MATH112</a>	CALCULUS FOR SCIENTISTS AND ENGINEERS II	4.0
<a href="#">MATH213</a>	CALCULUS FOR SCIENTISTS AND ENGINEERS III	4.0
<a href="#">MATH225</a>	DIFFERENTIAL EQUATIONS	3.0
<a href="#">CHGN121</a>	PRINCIPLES OF CHEMISTRY I	4.0
<a href="#">PHGN100</a>	PHYSICS I - MECHANICS	4.5
In Design		
<a href="#">EPIC151</a>	DESIGN (EPICS) I	3.0
In Physical Activity (four separate semesters including the following)*		
PAGN Elective	PHYSICAL ACTIVITY COURSE	0.5
PAGN Elective	PHYSICAL ACTIVITY COURSE	0.5
PAGN Elective	PHYSICAL ACTIVITY COURSE	0.5
PAGN Elective	PHYSICAL ACTIVITY COURSE	0.5
In Freshman Orientation & Success		
<a href="#">CSM101</a>	FRESHMAN SUCCESS SEMINAR	0.5
Free Electives**		
Minimum of 9.0 Semester Hours		9.0
<b>Total Semester Hrs</b>		<b>38.0</b>

## 2) Humanities and Social Science Requirement

H&SS Requirements are applicable to all undergraduate students:

<a href="#">LAIS100</a>	NATURE AND HUMAN VALUES	4.0
<a href="#">LAIS200</a>	HUMAN SYSTEMS	3.0
<a href="#">EBGN201</a>	PRINCIPLES OF ECONOMICS	3.0
MID-LEVEL ELECTIVE	Two courses from the approved list of requirements <sup>†</sup>	6.0
400-LEVEL ELECTIVE	One course at the 400-level from the approved list of requirements <sup>†</sup>	3.0
<b>Total Semester Hrs</b>		<b>19.0</b>

## 3) Distributed Science Requirement

The Science Requirement is a minimum of three courses and is applicable to all undergraduate students as follows:

APPLIED MATH & STATISTICS		
<a href="#">MATH201</a>	PROBABILITY AND STATISTICS FOR ENGINEERS	
<a href="#">PHGN200</a>	PHYSICS II-ELECTROMAGNETISM AND OPTICS	
<a href="#">CSCI101</a>	INTRODUCTION TO COMPUTER SCIENCE	
or <a href="#">CBEN110</a>	FUNDAMENTALS OF BIOLOGY I	
or <a href="#">CHGN122</a>	PRINCIPLES OF CHEMISTRY II (SC1)	
or <a href="#">CHGN125</a>	MOLECULAR ENGINEERING & MATERIALS CHEMISTRY	
CHEMISTRY - See degree specialty listings to determine if <a href="#">CBEN110</a> or <a href="#">GEGN101</a> are required		
<a href="#">PHGN200</a>	PHYSICS II-ELECTROMAGNETISM AND OPTICS	
<a href="#">CHGN122</a>	PRINCIPLES OF CHEMISTRY II (SC1)	
<a href="#">CBEN110</a>	FUNDAMENTALS OF BIOLOGY I	
or <a href="#">GEGN101</a>	EARTH AND ENVIRONMENTAL SYSTEMS	
CHEMICAL ENGINEERING		
<a href="#">CBEN110</a>	FUNDAMENTALS OF BIOLOGY I	
<a href="#">PHGN200</a>	PHYSICS II-ELECTROMAGNETISM AND OPTICS	
<a href="#">CHGN122</a>	PRINCIPLES OF CHEMISTRY II (SC1)	
CHEMICAL & BIOCHEMICAL ENGINEERING		
<a href="#">CBEN110</a>	FUNDAMENTALS OF BIOLOGY I	
<a href="#">PHGN200</a>	PHYSICS II-ELECTROMAGNETISM AND OPTICS	
<a href="#">CHGN122</a>	PRINCIPLES OF CHEMISTRY II (SC1)	
CIVIL ENGINEERING		
FOUR COURSES REQUIRED		
<a href="#">CHGN122</a>	PRINCIPLES OF CHEMISTRY II (SC1)	
<a href="#">MATH201</a>	PROBABILITY AND STATISTICS FOR ENGINEERS	
<a href="#">PHGN200</a>	PHYSICS II-ELECTROMAGNETISM AND OPTICS	
<a href="#">GEGN101</a>	EARTH AND ENVIRONMENTAL SYSTEMS	
or <a href="#">CBEN110</a>	FUNDAMENTALS OF BIOLOGY I	

COMPUTER SCIENCE		
FOUR COURSES REQUIRED		
<a href="#">PHGN200</a>	PHYSICS II-ELECTROMAGNETISM AND OPTICS	
<a href="#">CSCI101</a>	INTRODUCTION TO COMPUTER SCIENCE	
<a href="#">MATH201</a>	PROBABILITY AND STATISTICS FOR ENGINEERS	
<a href="#">CBEN110</a>	FUNDAMENTALS OF BIOLOGY I	
or <a href="#">GEGN101</a>	EARTH AND ENVIRONMENTAL SYSTEMS	
or <a href="#">CHGN122</a>	PRINCIPLES OF CHEMISTRY II (SC1)	
or <a href="#">CHGN125</a>	MOLECULAR ENGINEERING & MATERIALS CHEMISTRY	
ECONOMICS		
<a href="#">CSCI101</a>	INTRODUCTION TO COMPUTER SCIENCE	
<a href="#">MATH201</a>	PROBABILITY AND STATISTICS FOR ENGINEERS	
<a href="#">CBEN110</a>	FUNDAMENTALS OF BIOLOGY I	
or <a href="#">GEGN101</a>	EARTH AND ENVIRONMENTAL SYSTEMS	
or <a href="#">PHGN200</a>	PHYSICS II-ELECTROMAGNETISM AND OPTICS	
or <a href="#">CHGN122</a>	PRINCIPLES OF CHEMISTRY II (SC1)	
or <a href="#">CHGN125</a>	MOLECULAR ENGINEERING & MATERIALS CHEMISTRY	
ELECTRICAL ENGINEERING		
<a href="#">PHGN200</a>	PHYSICS II-ELECTROMAGNETISM AND OPTICS	
CHOOSE TWO FROM BELOW		
<a href="#">CBEN110</a>	FUNDAMENTALS OF BIOLOGY I	
<a href="#">GEGN101</a>	EARTH AND ENVIRONMENTAL SYSTEMS	
<a href="#">CHGN122</a>	PRINCIPLES OF CHEMISTRY II (SC1)	
or <a href="#">CHGN125</a>	MOLECULAR ENGINEERING & MATERIALS CHEMISTRY	
<a href="#">CSCI101</a>	INTRODUCTION TO COMPUTER SCIENCE	
ENVIRONMENTAL ENGINEERING		
FOUR COURSES REQUIRED		
<a href="#">CHGN122</a>	PRINCIPLES OF CHEMISTRY II (SC1)	
<a href="#">GEGN101</a>	EARTH AND ENVIRONMENTAL SYSTEMS	
<a href="#">MATH201</a>	PROBABILITY AND STATISTICS FOR ENGINEERS	
<a href="#">PHGN200</a>	PHYSICS II-ELECTROMAGNETISM AND OPTICS	
GEOLOGICAL ENGINEERING		
<a href="#">GEGN101</a>	EARTH AND ENVIRONMENTAL SYSTEMS	
<a href="#">PHGN200</a>	PHYSICS II-ELECTROMAGNETISM AND OPTICS	
<a href="#">CHGN122</a>	PRINCIPLES OF CHEMISTRY II (SC1)	
or <a href="#">CHGN125</a>	MOLECULAR ENGINEERING & MATERIALS CHEMISTRY	

GEOPHYSICAL ENGINEERING		
<a href="#">GEGN101</a>	EARTH AND ENVIRONMENTAL SYSTEMS	
<a href="#">PHGN200</a>	PHYSICS II-ELECTROMAGNETISM AND OPTICS	
<a href="#">CBEN110</a>	FUNDAMENTALS OF BIOLOGY I	
or <a href="#">CHGN122</a>	PRINCIPLES OF CHEMISTRY II (SC1)	
or <a href="#">CHGN125</a>	MOLECULAR ENGINEERING & MATERIALS CHEMISTRY	
or <a href="#">CSCI101</a>	INTRODUCTION TO COMPUTER SCIENCE	
or <a href="#">MATH201</a>	PROBABILITY AND STATISTICS FOR ENGINEERS	
MECHANICAL ENGINEERING		
<a href="#">PHGN200</a>	PHYSICS II-ELECTROMAGNETISM AND OPTICS	
<a href="#">CHGN122</a>	PRINCIPLES OF CHEMISTRY II (SC1)	
or <a href="#">CHGN125</a>	MOLECULAR ENGINEERING & MATERIALS CHEMISTRY	
<a href="#">CBEN110</a>	FUNDAMENTALS OF BIOLOGY I	
or <a href="#">GEGN101</a>	EARTH AND ENVIRONMENTAL SYSTEMS	
METALLURGICAL & MATERIALS ENGINEERING		
<a href="#">PHGN200</a>	PHYSICS II-ELECTROMAGNETISM AND OPTICS	
<a href="#">CHGN122</a>	PRINCIPLES OF CHEMISTRY II (SC1)	
or <a href="#">CHGN125</a>	MOLECULAR ENGINEERING & MATERIALS CHEMISTRY	
<a href="#">CBEN110</a>	FUNDAMENTALS OF BIOLOGY I	
or <a href="#">GEGN101</a>	EARTH AND ENVIRONMENTAL SYSTEMS	
MINING ENGINEERING		
<a href="#">GEGN101</a>	EARTH AND ENVIRONMENTAL SYSTEMS	
<a href="#">PHGN200</a>	PHYSICS II-ELECTROMAGNETISM AND OPTICS	
<a href="#">CHGN122</a>	PRINCIPLES OF CHEMISTRY II (SC1)	
PETROLEUM ENGINEERING		
<a href="#">GEGN101</a>	EARTH AND ENVIRONMENTAL SYSTEMS	
<a href="#">PHGN200</a>	PHYSICS II-ELECTROMAGNETISM AND OPTICS	
<a href="#">CHGN122</a>	PRINCIPLES OF CHEMISTRY II (SC1)	
or <a href="#">CHGN125</a>	MOLECULAR ENGINEERING & MATERIALS CHEMISTRY	
ENGINEERING PHYSICS		
<a href="#">PHGN200</a>	PHYSICS II-ELECTROMAGNETISM AND OPTICS	
<a href="#">CHGN122</a>	PRINCIPLES OF CHEMISTRY II (SC1)	
or <a href="#">CHGN125</a>	MOLECULAR ENGINEERING & MATERIALS CHEMISTRY	
<a href="#">CBEN110</a>	FUNDAMENTALS OF BIOLOGY I	
or <a href="#">GEGN101</a>	EARTH AND ENVIRONMENTAL SYSTEMS	
or <a href="#">CSCI101</a>	INTRODUCTION TO COMPUTER SCIENCE	