

**Graduation Checksheet for the Bachelor of Science Degree in Mining Engineering**  
**Department of Mining and Minerals Engineering**  
**College of Engineering**

**Class of 2009**

**Freshman**

CHEM 1035: General Chemistry	3	
CHEM 1045: General Chemistry Laboratory	1	
ENGE 1024: Engineering Exploration	2	
ENGE 1114 or ENGE 1104: Exploration of Engineering Design or Exploration of Digital Future		2
ENGL 1105-1106: Freshman English (Area 1)	3	3
MATH 1205-1206: Calculus (Area 5)	3	3
MATH 1114, 1224: Elementary Linear Algebra, Vector Geometry	2	2
PHYS 2305: Foundations of Physics I (Area 4)		4
Free Elective _____, _____	2	3

33 hrs.

**Sophomore**

ENGE 2824: Civil Engineering Drawings and CAD	1	
ESM 2104, 2204: Statics, Mechanics of Deformable Bodies	3	3
MATH 2224, 2214: Multivariable Calculus, Introduction to Differential Equations	3	3
GEOS 1004: Physical Geology (Area 4)	3	
GEOS 1104: Physical Geology Laboratory (Area 4)	1	
MINE 2504: Introduction to Mining Engineering	3	
MINE 2514: Mining Surveying		1
MINE 2524: Elements of Mine Design		3
ESM 2304: Dynamics of Particles and Rigid Bodies		3
Core Area 2 Elective _____	3	
Core Area 6 Elective _____		1
Core Area 7 Elective _____		3

34 hrs.

**Junior**

ESM 3024: Introduction to Fluid Mechanics	3	
ME 3114: Engineering Thermodynamics	3	
MINE 3504: Rock Mechanics and Ground Control	3	
MINE 3514: Rock Mechanics Laboratory (Area 1, WI)	1	
MINE 3524: Excavation Engineering	3	
MINE 3534: Mineral Processing	2	
GEOS 3104 or GEOS 3404: Elementary Geophysics or Elements of Structural Geology		3
MINE 3544: Mineral Processing Laboratory (Area 1, WI)		1
MINE 3554: Resource Recovery		2
MINE 3564: Underground Mine Design		3
MINE 3574: Surface Mine and Quarry Design		3
MINE 3584: Ventilation Engineering		3

30 hrs.

**Senior**

ECE 3054: Electrical Theory	3	
MINE 4504: Materials Handling and Power Systems	3	
MINE 4514: Health, Safety and Risk Management	3	
MINE 4524: Project Engineering and Mine Management	3	
MINE 4535-4536: Senior Design Project (Area 1, WI)	1	2
MINE 4544: Mine Reclamation and Environmental Management		3
MINE 4554: Mining Engineering Leadership Seminar		1
GEOS 4624: Mineral Deposits		3
Core Area 2 Elective _____		3
Core Area 3 Elective _____, _____	3	3

31 hrs.

**A TOTAL OF 128 SEMESTER CREDITS AND AN IN-MAJOR (all MINE classes) AND OVERALL GPA OF 2.0 ARE REQUIRED FOR GRADUATION.**

*Foreign Language Requirement:* Students who did not complete 2 units of a foreign language in high school must earn 6 credit hours of a college level foreign language, such credits to be in addition to those normally required for graduation.

*Eligibility for Continued Enrollment:* Upon having attempted 72 hours (including transfer, advanced placement, advanced standing, and credit by examination), "satisfactory progress" toward a B.S. degree will include the following minimum criteria:

1. a grade point average of at least 2.0, and
2. passing grades in MINE 2504, MATH 2214 and MATH 2224.

*Area 7 Elective:* If the Area 7 requirement is fulfilled with a course which double counts with another course on this checksheet, an additional three credit hour free elective must be completed.

*Statement on Hidden Prerequisites:* There are no hidden prerequisites for any course on this checksheet.