

GLE Group Advising



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GRAB A SANDWICH!

Group Activity



- Icebreaker

GLE Degree Requirements



PROF. BENSON

Dual Degree in Geoscience



- How to apply for Geoscience
- Office
- Forms

General College Requirements



- Communication A
- EMA 201 or Physics 201
- Chem 103/104 or Chem 109
- Intro to Engineering (GLE 171) – not required for transfer students
- Math 221 & Math 222

Math Requirement



Course Number	Course Title	Prerequisites	Degree Credits
Math 234	Calculus and Analytical Geometry	Math 222	3

Engineering Principles & Professional Issues

Course Number	Course Title	Prerequisites	Credits
<i>One of the following Statistics Courses:</i>			
Stat 324	Introductory Applied Statistics for Engineers	--	3
Stat 311	Introduction to Mathematical Statistics	Math 222 or con reg	4
<i>The following Computer-Based Problem Solving course:</i>			
GLE 291	Problem Solving Using Computer Tools	EMA 202 or 304	3
<i>The following Engineering Economics course:</i>			
ISYE 313	Engineering Economics Analysis	Sophomore Status	3
<i>One of the following courses in Professionalism, Ethics, and Sustainability:</i>			
InterEGR 102	Intro to Society's Engineering Challenges	Fr. or Soph. status or cons inst	2
InterEGR 250	Fundamentals of Engineering Ethics	--	
InterEGR 251	Topics in Engineering Ethics	--	
EPD 690	Core Competencies of Sustainability	--	1
EnvrSt 339	Environmental Conservation	Sophomore Standing	4
EnvrSt 441	Environmental Ethics	3 cr. of Philos or Enviro Studies	4
EnvrSt 250	Introduction to Sustainability Science	Semester of Calculus	3

Geoscience Core (22 cr)



Course Number	Course Title	Prerequisites	Credits
<i>The following Geology courses:</i>			
★ Geoscience 100, 106, or 109	Introductory course in Geoscience	--	3
★ Geoscience 202	Introduction to Geologic Structures	Geo 100/101/106/109 or cons inst	4
Geoscience 204	Geologic Evolution of Earth	Geo 100/101/106/109 or cons inst	4
★ Geoscience 360	Mineralogy	1 semester college chemistry or con reg	3
Geoscience 370	Petrology	Geoscience 360	4
★ Geoscience 431	Field Sedimentary Processes & Stratigraphy		1
Geoscience 455	Structural Geology	Geo 202/204, 1 semester Physics	3

Physics & Engineering Sciences



Course Number	Course Title	Prerequisites	Degree Credits
<i>One of the following Physics courses:</i>			
Physics 202	General Physics	Physics 201 or equivalent	5
<i>The following Mechanics courses:</i>			
EMA 202	Dynamics	EMA 210 or 214; and Math 222	3
EMA 303	Mechanics of Materials	EMA 201 & Math 222	3
CEE 310	Fluid Mechanics	Math 234 & EMA 202 or equiv	3

Geological Engineering Requirement



Course Number	Course Title	Prerequisites	Degree Credits
<i>The following Geophysics courses:</i>			
★ GLE 594	Introduction to Applied Geophysics	1 yr. of both college Calculus & Physics	3
★ GLE 595	Field Methods: Applied Geophysics	--	1
<i>The following Soil, Rock, & Groundwater courses:</i>			
★ GLE 330	Soil Mechanics	EMA 303 or 304 or con reg	4
GLE 474	Rock Mechanics		3
★ GLE 627	Hydrogeology	Intro course in Geology, Jr. status & Math 221	4
<i>The following Analysis & Design courses:</i>			
GLE 479	Geological Engineering Design	Senior standing in GLE and cons inst	3

Technical Electives



- Students must take at least 15 credits in the Technical Electives category.
- All students must complete at least two designated design courses (noted as D in this handbook).
- Students may take up to 6 credits of GLE 489, Honors in Research, as technical electives.
- The technical electives are organized into 6 different tracks.

Technical Electives



- **Possible Tracks**
 - Energy, Minerals & Mining
 - Sustainability & Environment
 - Geohazards
 - Water
 - Infrastructure

Technical Electives for Fall 2011



- See blackboard

New Course: GLE 477



- Will be a course in Geological & Geotechnical design

Communication Skills Requirement



Course Number	Course Title	Prerequisites	Degree Credits
EPD 275	Technical Presentations	Sophomore status	2
EPD 397	Technical Writing	Jr. status	3

Liberal Studies Requirement



- **16 credits total**
 - Minimum of six Humanities (H, L, or Z) credits
 - Minimum of three credits in Social Science (S or Z)
 - One ethnic studies course
 - Two courses from one department, one of these classes must be of intermediate or advanced level

Certificate in Business



- GLE students with an interest in business and entrepreneurship are encouraged to obtain the Certificate in Business (CIB). The CIB program is specifically for *non-business* majors that have an interest in business. Students must apply to the CIB program. An application and other information regarding the CIB can be found at:
- <http://www.bus.wisc.edu/undergrad/certificate/>

CIB Requirements



- Must have junior standing
- Must have 2.75 cumulative GPA (generally a 3.4 is needed for admission)
- Tuition differential (\$150/semester)
- 18 credits total
 - Can count one 300-level course towards the Technical Electives requirement
 - 4 core courses (ACCT 300, Finance 300, Marketing 300, MHR 300)
 - 2 elective courses

Certificate in Energy Sustainability



- This certificate is offered through the Energy Institute and students must apply to the certificate program. An application and other information regarding the certificate can be found at:
- http://www.energy.wisc.edu/?page_id=1077

Certificate in Energy Sustainability



- **Requirements:**
 - 18 credits in three areas (Liberal Studies, Engineering, Capstone/seminar)
 - GLE 411: Energy Resources
 - Econ 343: Environmental Economics
 - CBE 511: Energy & Sustainability
 - BSE 367: Renewable Energy Systems
 - GLE 410: Wind Energy Design
 - GLE 479: Capstone Design
 - CBE 555: Energy Seminar
 - Students must incorporate a sustainability element into their GLE Capstone Design project

Certificate in Integrated Studies in Science, Engineering and Society (ISSuES)



- The Certificate in Integrated Studies in Science, Engineering, and Society (ISSuES) is designed to aid engineering students in fulfilling their liberal studies requirements while providing coherent exposure to the social sciences and humanities that emphasizes the relationship between science, technology, engineering, and society

Certificate in Integrated Studies in Science, Engineering and Society (ISSuES)



- All students must take Science & Technology Studies (STS) 201: Where Science Meets Society (3 cr)
- 12 additional credits are chosen from four focus clusters:
 - Ethics
 - Leadership
 - Design
 - General

Graduate School



- What classes should I take to help prepare?
- In what other activities should I be involved to help prepare?
- Requirements for admission into UW-Madison's program
- Senior-Grad Status