

College of Eastern Idaho

AA/AS General Engineering Pathway



Name:

ID:

- A total of 60 credits are required for an AA or AS degree. For the graduation requirements, see below for a listing of courses offered that satisfy each Ways of Knowing area. Please see your faculty advisor for any questions relating to your progress and goals.
- For an **Associates of Arts (AA)** at least 2 additional courses must be from Humanistic and Artistic and/or Social and Behavioral Ways of Knowing
- For an **Associates of Science (AS)** at least 2 additional courses must be from Mathematical and/or Scientific Ways of Knowing

Written Communication			
ENGL 101	◇ Writing and Rhetoric I	Required	3
ENGL 102	◇ Writing and Rhetoric II *	Required	3

Oral Communication			
COMM 101	◇ Fundamentals of Oral Communication	Required	3

Mathematical Ways of Knowing			
<i>Choose 1 Course</i>			
MATH 123	◇ Math in Modern Society *		3
MATH 143	◇ College Algebra *		3
MATH 147	◇ College Algebra & Trigonometry *		5
MATH 153	◇ Statistical Reasoning *		3
MATH 170	◇ Calculus I *	Required	4
BSN 216	Business Statistics (<i>GEM Pending</i>) *		3

Humanistic and Artistic Ways of Knowing			
<i>Choose 2 from different disciplines</i>			
ART 101	◇ Art History I		3
ART 102	◇ Art History II		3
CUL 207	◇ Introduction to American Indian Literature		3
ENGL 175	◇ Literature and Ideas		3
ENGL 215	◇ Survey of World Mythology *		3
HUM 101	◇ Introduction to Humanities I		3
HUM 102	◇ Introduction to Humanities II		3
MUSI 108	◇ Survey of Jazz and Pop Music		3
PHIL 101	◇ Introduction to Philosophy		3
PHIL 103	◇ Introduction to Ethics		3
SPAN 101	Elementary Spanish I (<i>GEM Pending</i>)		4

Social and Behavioral Ways of Knowing			
<i>Choose 2 from different disciplines</i>			
ANTH 101	◇ Physical Anthropology		3
ANTH 102	◇ Cultural Anthropology		3
CRJ 103	◇ Introduction to Law and Justice		3
ECON 201	◇ Principles of Macroeconomics		3
ECON 202	◇ Principles of Microeconomics		3
HIST 101	◇ World History I		3
HIST 102	◇ World History II		3
HIST 111	◇ U.S. History I		3
HIST 112	◇ U.S. History II		3
POLS 101	◇ American National Government		3
POLS 102	◇ Introduction to Political Science		3
PSYC 101	◇ Introduction to Psychology		3
SOC 101	◇ Introduction to Sociology		3
SOC 102	◇ Social Problems		3

Scientific Ways of Knowing			
<i>Choose 2 from different disciplines (at least 1 must have a lab)</i>			
BIOL 100	◇ Concepts of Biology		4
BIOL 120	◇ Environmental Science		4
BIOL 201/L	◇ Biology 1 & Lab	<i>Optional</i>	4
BIOL 227/L	◇ Human Anatomy & Physiology & Lab I	<i>Optional</i>	4
BIOL 228/L	◇ Human Anatomy & Physiology & Lab II *		4
BIOL 250/L	◇ General Microbiology & Lab		4
CHEM 100	◇ Concepts of Chemistry		4
CHEM 101/L	◇ Introduction to Chemistry & Lab		4
CHEM 102/L	◇ Essentials of Organic & Biochemistry & Lab *		4
CHEM 111	◇ General Chemistry I with Lab *	Required	5
GEOL 101/L	◇ Physical Geology & Lab		4
NUTR 239	◇ Human Nutrition		3
PHYS 100/L	◇ Survey of Physics & Lab		4
PHYS 101/L	◇ Introduction to Physics & Lab		4
PHYS 111/L	◇ General Physics I & Lab *		4
PHYS 112/L	◇ General Physics II & Lab *		4

GEM Stamped Course			
Any GEM	◇		
Any GEM	◇		

Total General Education Credits **/36**

Degree GEM Courses			
<i>A minimum total of 6 GEM credits. Specific to AA or AS (see notes above):</i>			
Any GEM	◇		
Any GEM	◇		

Total Degree GEM Credits **/6**

See other side for list of Elective courses and requirements.

- **PHYS 211/L** Engineering Physics I & Lab and **PHYS 212/L** Engineering Physics II & Lab are not currently offered at CEI. Student may elect to take these courses with another institution and reverse transfer them to CEI. These courses are GEM at some Idaho institutions and may count toward GEM requirements at CEI.
- **PHYS 211/L** and **PHYS 212/L** are more preferred than **PHYS 111/L** and **PHYS 112/L**.
- Additional Engineering lower division courses not yet offered at CEI: Engineering Statics, Electrical Circuits, & Engineering Dynamics

◇ - Indicates GEM Stamped course. Any GEM stamped course is transferrable to any public institution in the state of Idaho.

* - Indicates Prerequisite or placement applies. See current CEI Catalog or Advisor for more information.

MATH 170's prerequisites can be bypassed should the student place into MATH 170 Calculus I via the ALEKS, ACT, or SAT tests

Electives

A total of approximately 18 credits are required for electives, (60 overall credits) Credits may also come from other objective areas.

ACC 201	Introduction to Financial Accounting		3
ACC 202	Introduction to Managerial Accounting *		3
ART 105	Design I		3
ART 109	Drawing I		3
ART 231	Introduction to Graphic Design		3
BIOL 202/L	Biology 2 & Lab *	Optional	4
BIOL 209/L	General Ecology & Lab		4
BSN 101	Introduction to Business		3
BSN 201	Business Communication *		3
BSN 215	Introduction to Information Science		3
BSN 217	Advanced Business Statistics *		3
BSN 250	Principles of Marketing		3
BSN 255	Leadership Development Skills		3
BSN 261	Legal Environments of Organizations		3
CHEM 112	General Chemistry with Organic Lab *	Optional	5
COMM 233	Interpersonal Communication		3
CPSC 181	Computer Science & Programming	Required	3
EAR 105	Early Childhood Environments		3
EDU 201	Foundations of Education		3
EDU 204	Families, Communities, Culture		3
EGR 105	Engineering Graphics *	Recommended	2
EGR 120	Introduction to Engineering *	Required	2
ENGL 203	Effective Technical Communication *	Recommended	3
ENGL 206	Introduction to Creative Writing *		3
ENGL 235	Introduction to Shakespeare *		2
GS 101	Academic & Career Exploration		1
GS 110	Biology Career Exploration		1
HCT 101	Medical Terminology		2
HIST 201	Women in U.S. History		3
HIST 291	Historians Craft		3
MATH 108	Intermediate Algebra		3
MATH 144	Trigonometry *		2
MATH 175	Calculus II *	Required	4
MATH 256	Arithmetic for Elementary Teachers *		3
MATH 257	Geometry & Probability for Elementary Teachers *		3
PHIL 201	Introduction to Logic		3
POLS 221	Introduction to International Relations		3
PSYC 120	Careers in Psychology *		1
PSYC 211	Psychology of Death and Dying *		3
PSYC 225	Child Development *		3
SOC 248	Critical Analysis of Social Diversity		3
SPAN 102	Elementary Spanish II *		4
SWK 271	Introduction to Social Work		3
SWK 272	Human Behavior and the Social Environment		3
ZOOL 280	Pathophysiology *		3

Other Courses

Course	Grade

Graduation Requirements

To graduate from CEI with your Associates Degree you must have:

- Cumulative GPA of 2.0
- Minimum grade of C- (70%) in all required courses
- At least 25% (15 credits) of your courses must come from CEI

Total General Education Credits (from above)	
Total Degree GEM Credits (from above)	
Total Elective Credits	

Total Associates Degree Credits	/60
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● **Comparable majors offered at:**

Boise State University, BYU-Idaho, Grand Canyon University, Idaho State University, Montana Tech, Northwest Nazarene University, University of Idaho, Utah State University, Utah Valley University, Washington State University, Weber State University

● **Comparable majors include, but not limited to:**

Aerospace, Biological Engineering, Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Environmental Engineering, Geological Engineering, Industrial Engineering, Material Science & Engineering, Mechanical Engineering, Metallurgical & Materials Engineering, Mining Engineering, Nuclear Engineering, Physics, Pre-Medical, Surveying & Geomatics

This list of courses is subject to change. Not all courses are provided every semester. Please see a current CEI Catalog or your Self-Service for most up to date list of courses.

Sample Schedule



Momentum Year

Semester 1		Credits	Notes
* ENGL 101	Writing & Rhetoric I	3	
* COMM 101	Fundamentals of Oral Communication	3	
MATH 143	College Algebra	3	<i>Recommended</i>
EGR 120	Introduction to Engineering	2	
* GEM 5		3	<i>Any H&A WoK</i>
Semester total		14	

Semester 2		Credits	Notes
* ENGL 102	Writing & Rhetoric II	3	<i>Prereq: ENGL 101</i>
* MATH 144	Trigonometry	2	<i>Recommended</i>
CHEM 111	General Chemistry I	5	<i>Prereq: MATH 143</i>
CPSC 181	Computer Science & Programming I	3	
* GEM 5		3	<i>H&A WoK of different prefix</i>
Semester total		16	

Summer Semester (Optional)		Credits	Notes
Semester total			

Transition Year

Semester 3		Credits	Notes
MATH 170	Calculus I	3	<i>Prereq: MATH 143 & 144 or placement</i>
PHYS 211/L	Engineering Physics I & Lab	4	<i>SEE NOTES</i>
EGR 105	Engineering Graphics	2	<i>Prereq: MATH 143 & 144</i>
* GEM 6	ECON 201 or 201	3	<i>Recommended</i>
* Any GEM		3	
Semester total		16	

Semester 4		Credits	Notes
MATH 175	Calculus II	4	<i>Prereq: MATH 170</i>
PHYS 212/L	Engineering Physics II & Lab	4	<i>SEE NOTES</i>
* GEM 6		3	<i>S&B WoK of different prefix</i>
* Any GEM		3	
Semester total		14	

Summer Semester (Optional)		Credits	Notes
Semester total			

* Indicates courses that may be offered as a Summer 8 week option

For specific selection and sequencing of courses, students are strongly encouraged to meet with an advisor