# ENGINEERING - ASSOCIATE OF ENGINEERING DEGREE (AE)

Explore More About This Program: https://cwi.edu/program/engineering

### **Degree Quick Facts**

- Instructional School: Industry, Engineering, and Trades
- Department: Engineering
- · Program Code: ENGR.AE
- Program Type: Academic Transfer
- · Available Fully Online: No
- Eligible for Federal Financial Aid: Yes

NOTE: Courses required for this program *may* have an additional fee; more information can be found on the <u>Special Course Fees</u> web page.

## **Degree Requirements**

Course	Course Title	Min Credits
General Education Requirements <sup>1</sup>		
CWI 101	Connecting With Ideas	3
ENGL 101	Writing and Rhetoric I (GEM 1)	3
ENGL 102	Writing and Rhetoric II (GEM 1)	3
COMM 101	Fundamentals of Oral Communication (GEM 2)	3
MATH 170	Calculus I (GEM 3)	5
CHEM 111	General Chemistry I (GEM 4)	3
CHEM 111L	General Chemistry I Lab (GEM 4)	1
PHYS 211	Physics for Scientists and Engineers I (GEM 4)	4
PHYS 211L	Physics for Scientists and Engineers I Lab (GEM 4)	1
<u>GE Elective course</u> <sup>2</sup>		3
<u>GE Elective course</u> <sup>2</sup>		3
Major Requirements		
ENGR 120	Introduction to Engineering	3
ENGR 290	Engineering Capstone	2
MATH 175	Calculus II	4
Select credits from the Engineering Technical Electives list below to bring the total credits earned to a minimum of 60 $^3$		19
Minimum Credit Hours Required		60

<sup>1</sup> Students who complete the Engineering program should note that the general education (GE) requirements for this program will <u>NOT</u> result in GE core completion with regard to transfer. However, the program was specifically created to help make transferring into a four-year Engineering program easier and will result in students being better prepared to transfer at a junior class level.

<sup>2</sup> It is recommended that students select a Humanistic and Artistic Ways of Knowing (<u>GEM 5</u>) course and a Social and Behavioral Ways of Knowing (<u>GEM 6</u>) course to fulfill this requirement.

<sup>3</sup> To determine which courses from the Engineering Technical Electives are most appropriate, consult your advisor and refer to the applicable 2+2 guide.

#### **Engineering Technical Electives**

Course	Course Title	Min Credits
CHEM 112	General Chemistry II	3
CHEM 112L	General Chemistry II Lab	2
CPSC 121	Computer Science I	4
CPSC 221	Computer Science II	3
ENGR 205	Engineering Graphics	2
ENGR 210	Engineering Mechanics: Statics	3
ENGR 220	Engineering Mechanics: Dynamics	3
ENGR 240	Introduction to Electrical Circuits	3
MATH 153	Statistical Reasoning	3
MATH 230	Introduction to Linear Algebra	3

#### Engineering - Associate of Engineering Degree (AE)

1

MATH 275	Calculus III	4
MATH 285	Differential Equations with Matrix Theory <sup>1</sup>	4
PHYS 212	Physics for Scientists and Engineers II	4
PHYS 212L	Physics for Scientists and Engineers II Lab	1

MATH 285 Differential Equations with Matrix Theory is required within the first two years by a majority of four-year Engineering programs at Idaho colleges/universities. It is strongly recommended that students complete it as part of their elective requirement for this program.