

# Exhibit A: Associate of Engineering Degree in Civil Engineering

Colorado State University, Fort Collins



CIVIL AND ENVIRONMENTAL  
ENGINEERING  
COLORADO STATE UNIVERSITY

Courses that Fulfill General Education Requirements				37 credit hours
Content Area	Credit Hours	Community College Course	Community College Course Title or Category	CSU Transfer Equivalent
Written Communication	6	<b>Any GT-CO1 AND Any GT-CO2</b>	English Composition I (GT-CO1) <b>OR</b> Technical Writing (GT-CO1) <b>AND</b> English Composition II (GT-CO2)	CO 150
Calculus I & II	10	MAT 2410 (5) <b>AND</b> MAT 2420 (5)	Calculus I (GT-MA1) <b>AND</b> Calculus II (GT-MA1)	MATH 160 MATH 161
Arts & Humanities	3	PHI 2018 <b>OR</b> <b>Any GT-AH</b>	One GT Pathways Arts & Humanities course (GT-AH1, GT-AH2, GT-AH3, GT-AH4)	AUCC 3B
Social & Behavioral Sciences	3	COM 2300 <b>OR</b> <b>Any GT-SS</b>	One GT Pathways Social & Behavioral Sciences course (GT-SS1, GT-SS2, GT-SS3)	AUCC 3C
Natural & Physical Sciences	15	CHE 1111 (5) <b>AND</b> CHE 1112 (5) <b>AND</b> PHY 2111 (5)	General College Chemistry I/Lab (GT-SC1) <b>AND</b> General College Chemistry II/Lab (GT-SC1) <b>AND</b> Calculus-based Physics I/Lab (GT-SC1)	CHEM 111 & 112 CHEM 113 & 114 PH 141
Additional Required Courses				27 credit hours
<i>Note:</i> If these credits are <i>not</i> required for the <i>major</i> at a receiving institution, they will be applied to the bachelor's degree as <i>elective credit</i> towards <i>graduation</i> . Check with the receiving institution to determine in which way these courses will be applied.				
Calculus III <sup>1</sup>	4 <sup>1</sup>	MAT 2430 (4) <b>OR</b> MAT 2431 (5)	Calculus III <sup>1</sup> (4) <b>OR</b> Calculus III with Engineering Applications <sup>1</sup> (5)	MATH 261
Differential Equations & Linear Algebra <sup>2</sup>	4 <sup>2</sup>	MAT 2561 (4) <b>AND</b> MAT 2540 (3) <b>OR</b> MAT 2560 (3) <b>AND</b> MAT 2540 (3) <b>OR</b> <b>MAT 2562 (4)</b>	Differential Equations with Engineering Applications <sup>2</sup> (4) <b>AND</b> Linear Algebra (3) <b>OR</b> Differential Equations <sup>2</sup> (3) <b>AND</b> Linear Algebra (3) <b>OR</b> Differential Equations with Linear Algebra <sup>2</sup> (4)	MATH 340
Engineering	9	EGG 2011 (3) EGG 2012 (3) EGG 1050 (1) <b>AND</b> EGG 1051 (2)	Engineering Mechanics I (Statics) Engineering Mechanics II (Dynamics) Engineering Data Analysis <b>AND</b> Experimental Design	CIVE 260 CIVE 261 CIVE 203
Engineering Projects	3	EGG 1040 (3) <b>OR</b> EGT 2200 (3)	Engineering Projects (3) <b>OR</b> Intro Design/Engineering Apps (3)	CIVE 103
Engineering Computing	4	EGG 1060 (4)	Engineering Computing	CIVE 202
Science/Technical Elective <sup>3</sup>	3 <sup>3</sup>	<b>EGG 2020</b> , GEY 1111, BIO 1111, BIO 2121, GEY 1135, HLT 2140	Thermodynamics (3), Physical Geography: Landforms w/Lab (4), Botany w/Lab (5), General College Biology w/Lab (5), Environmental Geology w/Lab (4), Introductory Soil Science (4)	
Total <sup>4</sup>				64 credit hours

**Notes:**

<sup>1</sup>**Calculus III.** Calculus III w/ Engineering Applications (MAT 2431) is preferred; However, additional credits over 64 may not transfer to CSU.

<sup>2</sup>**Differential Equations & Linear Algebra:** It is **recommended** for students **to complete MAT 2562. If a student completes MAT 2560 OR MAT 2561, they must also complete MAT 2540 Linear Algebra** along with MAT 2560 or MAT 2561. Credits for MAT 2540 will need to be completed in addition to the 64 credits. Additional credits over 64 may not transfer to CSU.

<sup>3</sup>Students take one course from the list of Science/Technical Electives and EGG 2020 Thermodynamics is preferred. Additional credits over 64 may not transfer to CSU.

<sup>4</sup>The Associate of Engineering Science Degree with a concentration in Civil Engineering requires a minimum of 64 credits.