

<b>CONCRETE TECHNOLOGY</b>	<b>Minimum Credits: 62.0</b>
<b>Associate in Applied Science (AAS) Degree</b>	<b>Contact Hours: 75.0</b>

**INTRODUCTION:** Alpena Community College's Concrete Technology Associate in Applied Science (AAS) program is the only one of its kind in the nation. Students in this two-year program learn about all aspects of the concrete industry through a specialized curriculum featuring hands-on experience in material sciences, communications, computation, computer use, and a summer construction internship. Students use state-of-the-art equipment housed in the World Center for Concrete Technology, one of the premier facilities in the world. The successful Concrete Tech student is prepared for a variety of career opportunities throughout the concrete industry and receives a number of job offers upon graduation. The Concrete Technology program was developed in the late 1960s as one of the original associate degree curriculums offered by the Portland Cement Association. Since then, hundreds of men and women have gone through the program and currently fill many diverse positions throughout the global industry. This program also allows students to continue their higher education endeavors at various universities.

GENERAL EDUCATION COURSES	( MEETS GRADUATION REQUIREMENTS AND MTA )			
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COURSE	TITLE	CREDITS	CONTACT HOURS
ENG 111 or ENG 120	English or Applied Communications	3.0	3.0
ENG 112 or ENG 123	English or Technical Communications	3.0	3.0
PLS 221	American Government & Politics	3.0	3.0
PHY 111	Applied Physics	<u>3.0</u>	<u>4.0</u>
<b>GENERAL EDUCATION CREDITS/CONTACT HOURS:</b>		<b>12.0</b>	<b>13.0</b>

CORE PROGRAM COURSES	( MEET WITH ACADEMIC ADVISOR TO DETERMINE CORE PROGRAM COURSES FOR CONCENTRATION AND TRANSFER )			
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COURSE	TITLE	CREDITS	CONTACT HOURS
CON 110	Introduction to Concrete Technology <sup>A</sup>	1.0	1.0
CON 121	Aggregates <sup>A</sup>	3.5	4.9
CON 122	Concrete Admixtures <sup>A</sup>	1.0	1.0
CON 123	Cementitious Materials <sup>A</sup>	1.5	2.1
CON 124	Concrete Mix Proportioning <sup>A</sup>	4.0	6.0
CON 221	Placed Concrete I <sup>A</sup>	4.0	6.0
CON 222	Placed Concrete II <sup>A</sup>	4.0	6.0
CON 223	Concrete Masonry Production <sup>A</sup>	4.0	6.0
CON 224	Prestress/Precast Concrete	3.0	5.0
CON 226	Concrete Troubleshooting & Repair <sup>A</sup>	2.0	2.0
CON 227	Construction Inspection <sup>A</sup>	3.0	3.0
CON 231	Concrete Project Lab <sup>A</sup>	1.0	1.0
CON 232	Project Lab <sup>A</sup>	2.0	2.0
CST 112	Building Construction <sup>A</sup>	3.0	3.0
CST 151	Construction Summer Co-Op	6.0	6.0
MTH 115 or MTH 113	Applied Algebra & Trigonometry or Intermediate Algebra	5.0-4.0	6.0-4.0
MTH 116 or MTH 122	Applied Algebra & Trigonometry II or Plane Trigonometry	5.0-3.0	6.0-3.0
SDE 201	Job Search Strategies	<u>1.0</u>	<u>1.0</u>
<b>CORE PROGRAM CREDITS/CONTACT HOURS:</b>		<b>51.0-54.0</b>	<b>63.0-68.0</b>

SUGGESTED ELECTIVES	( MEET WITH ACADEMIC ADVISOR TO DETERMINE ELECTIVES FOR CONCENTRATION AND TRANSFER )			
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	Computer Elective	3.0	3.0
	Program Elective <sup>B</sup>	<u>3.0</u>	<u>3.0</u>
<b>ELECTIVE CREDITS/CONTACT HOURS:</b>		<b><u>6.0</u></b>	<b><u>6.0</u></b>
<b>TOTAL MINIMUM PROGRAM CREDITS/CONTACT HOURS:</b>		<b>62.0</b>	<b>75.0</b>

SUGGESTED SEQUENCING OF COURSES:					
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YEAR 1 (FALL SEMESTER) <u>16.0-17.0</u> CREDITS	CREDITS	CONTACT HRS	YEAR 1 (SPRING SEMESTER) <u>15.0-17.0</u> CREDITS	CREDITS	CONTACT HRS
CON 110 Intro to Concrete Technology	1.0	1.0	CON 122 Concrete Admixtures	1.0	1.0
CON 121 Aggregates	3.5	4.9	CON 124 Concrete Mix Proportioning	4.0	6.0
CON 123 Cementitious Materials	1.5	2.1	CST 112 Building Construction	3.0	3.0
ENG 111 or ENG 120 English or Appl Comm	3.0	3.0	ENG 112 or ENG 123 English or Tech Comm	3.0	3.0
MTH 115 or MTH 113 Appl Algebra & Trig or Intermediate Algebra	5.0-4.0	6.0-4.0	MTH 116 or MTH 122 Appl Algebra & Trig II or Plane Trigonometry	5.0-3.0	6.0-3.0
Computer Elective	<u>3.0</u>	<u>3.0</u>	SDE 201 Job Search Strategies	<u>1.0</u>	<u>1.0</u>
<b>TOTAL</b>	<b>16.0-17.0</b>	<b>18.0-20.0</b>	<b>TOTAL</b>	<b>15.0-17.00</b>	<b>17.0-20.0</b>
YEAR 1 (SUMMER SEMESTER) <u>6.0</u> CREDITS					
CST 151 Construction Summer Co-Op			6.0	6.0	
YEAR 2 (FALL SEMESTER) <u>17.0</u> CREDITS	CREDITS	CONTACT HRS	YEAR 2 (SPRING SEMESTER) <u>14.0</u> CREDITS	CREDITS	CONTACT HRS
CON 221 Placed Concrete I	4.0	6.0	CON 222 Placed Concrete II	4.0	6.0
CON 223 Concrete Masonry Production	4.0	6.0	CON 224 Prestress/Precast Concrete	3.0	5.0
CON 227 Construction Inspection	2.0	2.0	CON 226 Concrete Troubleshooting & Rep	2.0	2.0
Concrete Project Lab	1.0	1.0	CON 232 Project Lab	2.0	2.0
PLS 221 American Government & Politics	3.0	3.0	Program Elective	<u>3.0</u>	<u>3.0</u>
PHY 111 Applied Physics	<u>3.0</u>	<u>4.0</u>	<b>TOTAL</b>	<b>14.0</b>	<b>18.0</b>
<b>TOTAL</b>	<b>17.0</b>	<b>22.0</b>			

**NOTES:**

<sup>A</sup> Included in occupational specialty – GPA of 2.0 or higher must be maintained in the area of occupational specialty.

<sup>B</sup> Program Elective must be approved by the Concrete Technology Department advisor.