

# Construction Management

- Bachelor of Science (B.S.)
- Program Curriculum



## Mathematics/Science coursework 15 cr.

CHEM 1020 - Chemical Technology	4 cr.
• course also satisfies UNIFI Scientific Reasoning requirement.	
MATH 1150 - Calculus for Technology	4 cr.
PHYSICS 1511 - General Physics I	4 cr.
• course also satisfies UNIFI Scientific Reasoning requirement.	
STAT 1772 - Introduction to Statistical Methods	3 cr.
• course also satisfies UNIFI Quantitative Reasoning requirement.	

## Technical Core 57 cr.

ENGR 1000 - Intro. to Engineering & Professional Practices	3 cr.
TECH 1015 - Introduction to Sustainability	3 cr.
• course also satisfies UNIFI Responsibility requirement.	
PHIL 1560 - Science, Technology & Ethics	3 cr.
• course also satisfies UNIFI Elective requirement.	
TECH CM 1000 - Fundamentals of CM Materials & Methods	3 cr.
TECH 1016 - Computer Aided Design & Drafting	2 cr.
TECH CM 1050 - Construction Safety	3 cr.
TECH CM 1100 - Construction Documents	3 cr.
TECH CM 2000 - Land, Route & Construction Surveying	3 cr.
TECH CM 2050 - Construction Law	3 cr.
ENGR 2080 - Statics	2 cr.
ENGR 2180 - Strengths of Materials	2 cr.
TECH CM 2200 - Construction Project Management	3 cr.
TECH CM 2300 - Building Services	3 cr.
TECH CM 3000 - Heavy Constr. Operations & Equipment	3 cr.
TECH CM 3050 - Construction Estimating	3 cr.
TECH CM 3150 - Constr. Project Planning, Sched. & Control	3 cr.
TECH CM 3300 - Pre Construction Management	3 cr.
TECH CM 4200 - Structural Components of Construction	3 cr.
TECH CM 4350 - Constr. Company Operations & Mgmt.	3 cr.
ENGR 4500 - Senior Design	3 cr.

## Business & Management coursework 12 cr.

ACCT 2120 - Principles of Financial Accounting	3 cr.
• course also satisfies UNIFI Elective requirement.	
ECON 1031 - Introduction to Business Economics	3 cr.
• course also satisfies UNIFI Elective requirement.	
ENGLISH 3772 - Technical Writing for Eng. Technologists	3 cr.
MGMT 3100 - Legal & Social Environment of Business	3 cr.

### Credit Totals

Math/Science coursework	15 cr.
Technical Core coursework	57 cr.
Business & Management coursework	12 cr.
UNI Foundational Inquiry (UNIFI)	37 cr.
Credits counted twice (major & UNIFI)	-22 cr.
<b>Total</b>	<b>99 cr.</b>
University Electives needed	21 cr.
<b>Grand Total</b>	<b>120 cr.</b>

## UNI Foundational Inquiry 37 cr.

Written Communications	3 cr.
Oral Communications	3 cr.
Quantitative Reasoning	3 cr.
• requirement completed with STAT 1772.	
Human Condition (Domestic)	3 cr.
Human Condition (Global)	3 cr.
Scientific Reasoning	4 cr.
• requirement completed with PHYSICS 1511.	
Human Expression	3 cr.
Responsibility	3 cr.
• requirement completed with TECH 1015.	
UNIFI Elective	3 cr.
• requirement completed with CHEM 1020.	
UNIFI Elective	3 cr.
• requirement completed with ECON 1031.	
UNIFI Elective	3 cr.
• requirement completed with PHIL 1560.	
UNIFI Elective	3 cr.
• requirement completed with ACCT 2120.	

Inspired by the University of Northern Iowa mission to engage students in high-quality and high-impact learning experiences within a challenging and supportive environment, UNI's new general education requirements are designed to ensure that students' foundational learning experiences lead to a lifetime full of potential. For more information, visit [unifi.uni.edu](http://unifi.uni.edu).

## Utilizing University Electives

Students enrolled in the Construction Management B.S. program at UNI have 21 open university elective credits to complete prior to graduation. Selecting one of the minors below will effectively utilize these credits:

### General Business Concepts Minor 24 cr.

ACCT 2120 - Principles of Financial Accounting <sup>^</sup>	3 cr.
ECON 1011 - Statistics for Business Analytics	3 cr.
ECON 1031 - Intro to Business Economics <sup>^</sup>	3 cr.
MKTG 2110 - Principles of Marketing	3 cr.
MGMT 2080 - Intro to Information Systems	3 cr.
MGMT 3100 - Legal & Social Environment of Business <sup>^</sup>	3 cr.
MGMT 3965 - Organizational Behavior	3 cr.
STAT 1772 - Intro to Statistical Methods <sup>^</sup>	3 cr.

### Real Estate Minor 15 cr.

MKTG 2110 - Principles of Marketing	3 cr.
FIN 3110 - Principles of Real Estate	3 cr.
FIN 3115 - Real Estate Law & Brokerage	3 cr.
FIN 3120 - Real Estate Appraisal & Investment	3 cr.
Elective (TECH CM 1000) <sup>^</sup>	3 cr.

### Certificate in Entrepreneurship 15 cr.

ECON 1031 - Introduction to Business Economics <sup>^</sup>	3 cr.
MKTG 2110 - Principles of Marketing	3 cr.
ENTR 2010 - Financials for the Entrepreneurial Enterprise	3 cr.
ENTR 3583 - Entrepreneurship	3 cr.
ENTR 3586 - Entrepreneurship Strategy	3 cr.

<sup>^</sup> - denotes course is also part of Construction Management curriculum.

## Department of Applied Engineering & Technical Management

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 25 Industrial Technology Center  
 Cedar Falls, IA 50614-0178  
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## Important ALEKS Test Information

The ALEKS test is a math placement test that all UNI students must complete prior to enrolling in certain math & science courses. Below are the scores required for the math & science requirements in this program:

- PHYSICS 1511: 45
- STAT 1772: 50
- MATH 1150: 61

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## Example course sequence for *first-year, freshmen* students

<p><b>Fall 1</b></p> <p>UNIFI Written Communication course 3 cr.</p> <p>PHYSICS 1511 - General Physics I 4 cr.</p> <p>ENGR 1000 - Introduction to Engineering &amp; Professional Practices<sup>FO</sup> 3 cr.</p> <p>TECH CM 1000 - Fundamentals of CM Materials &amp; Methods 3 cr.</p> <p>TECH CM 1050 - Construction Safety 3 cr.</p> <p style="text-align: right;"><b>Total: 16 cr.</b></p>	<p><b>Spring 1</b></p> <p>UNIFI Oral Communication course 3 cr.</p> <p>MATH 1150 - Calculus for Technology<sup>SO</sup> 4 cr.</p> <p>PHIL 1560 - Science, Technology &amp; Ethics 3 cr.</p> <p>TECH CM 1100 - Construction Documents<sup>^</sup> 3 cr.</p> <p>ECON 1031 - Introduction to Business Economics 3 cr.</p> <p style="text-align: right;"><b>Total: 16 cr.</b></p>
<p><b>Fall 2</b></p> <p>CHEM 1020 - Chemical Technology 4 cr.</p> <p>TECH 1016 - Computer Aided Design &amp; Drafting<sup>FO</sup> 2 cr.</p> <p>TECH CM 2000 - Land, Route &amp; Construction Surveying<sup>^</sup> 3 cr.</p> <p>TECH CM 2200 - Construction Project Management<sup>^</sup> 3 cr.</p> <p>ENGR 2080 - Statics<sup>^</sup> 2 cr.</p> <p style="text-align: right;"><b>Total: 14 cr.</b></p>	<p><b>Spring 2</b></p> <p>UNIFI Human Expression course 3 cr.</p> <p>STAT 1772 - Introduction to Statistical Methods 3 cr.</p> <p>ENGR 2180 - Strengths of Materials<sup>^</sup> 2 cr.</p> <p>TECH CM 2050 - Construction Law<sup>^</sup> 3 cr.</p> <p>University elective course 3 cr.</p> <p style="text-align: right;"><b>Total: 14 cr.</b></p>
<p><b>Fall 3</b></p> <p>UNIFI Human Condition (Domestic) course 3 cr.</p> <p>TECH CM 2300 - Building Services<sup>^</sup> 3 cr.</p> <p>TECH CM 3000 - Heavy Construction Operations &amp; Equipment<sup>FO</sup> 3 cr.</p> <p>TECH CM 3050 - Construction Estimating<sup>^</sup> 3 cr.</p> <p>ACCT 2120 - Principles of Financial Accounting 3 cr.</p> <p style="text-align: right;"><b>Total: 15 cr.</b></p>	<p><b>Spring 3</b></p> <p>TECH 1015 - Introduction to Sustainability 3 cr.</p> <p>TECH CM 3150 - Construction Project Planning, Scheduling &amp; Control<sup>^</sup> 3 cr.</p> <p>TECH CM 3300 - Pre Construction Management<sup>^</sup> 3 cr.</p> <p>ENGLISH 3772 - Technical Writing for Engineering Technologists<sup>^</sup> 3 cr.</p> <p>MGMT 3100 - Legal &amp; Social Environment of Business 3 cr.</p> <p style="text-align: right;"><b>Total: 15 cr.</b></p>
<p><b>Fall 4</b></p> <p>UNIFI Human Condition (Global) course 3 cr.</p> <p>TECH CM 4200 - Structural Components of Construction<sup>FO</sup> 3 cr.</p> <p>University elective course 3 cr.</p> <p>University elective course 3 cr.</p> <p>University elective course 3 cr.</p> <p style="text-align: right;"><b>Total: 15 cr.</b></p>	<p><b>Spring 4</b></p> <p>TECH CM 4350 - Construction Company Operations &amp; Management<sup>^</sup> 3 cr.</p> <p>ENGR 4500 - Senior Design<sup>^</sup> 3 cr.</p> <p>University elective course 3 cr.</p> <p>University elective course 3 cr.</p> <p>University elective course 3 cr.</p> <p style="text-align: right;"><b>Total: 15 cr.</b></p>

## Example course sequence for *transfer students with an A.A. or A.S. degree*

<p><b>Fall 1</b></p> <p>PHYSICS 1511 - General Physics I 4 cr.</p> <p>ENGR 1000 - Introduction to Engineering &amp; Professional Practices<sup>FO</sup> 3 cr.</p> <p>TECH CM 1000 - Fundamentals of CM Materials &amp; Methods 3 cr.</p> <p>TECH 1016 - Computer Aided Design &amp; Drafting<sup>FO</sup> 2 cr.</p> <p>TECH CM 1050 - Construction Safety 3 cr.</p> <p style="text-align: right;"><b>Total: 15 cr.</b></p>	<p><b>Spring 1</b></p> <p>MATH 1150 - Calculus for Technology<sup>SO</sup> 4 cr.</p> <p>PHIL 1560 - Science, Technology &amp; Ethics 3 cr.</p> <p>TECH CM 1100 - Construction Documents<sup>^</sup> 3 cr.</p> <p>ACCT 2120 - Principles of Financial Accounting 3 cr.</p> <p>ENGLISH 3772 - Technical Writing for Engineering Technologists<sup>^</sup> 3 cr.</p> <p style="text-align: right;"><b>Total: 16 cr.</b></p>
<p><b>Fall 2</b></p> <p>CHEM 1020 - Chemical Technology 4 cr.</p> <p>TECH CM 2050 - Construction Law<sup>^</sup> 3 cr.</p> <p>ENGR 2080 - Statics<sup>^</sup> 2 cr.</p> <p>TECH CM 2200 - Construction Project Management<sup>^</sup> 3 cr.</p> <p>TECH CM 3050 - Construction Estimating<sup>^</sup> 3 cr.</p> <p style="text-align: right;"><b>Total: 15 cr.</b></p>	<p><b>Spring 2</b></p> <p>ECON 1031 - Introduction to Business Economics 3 cr.</p> <p>TECH 1015 - Introduction to Sustainability 3 cr.</p> <p>ENGR 2180 - Strengths of Materials<sup>^</sup> 2 cr.</p> <p>TECH CM 3150 - Construction Project Planning, Scheduling &amp; Control<sup>^</sup> 3 cr.</p> <p>TECH CM 3300 - Pre Construction Management<sup>^</sup> 3 cr.</p> <p style="text-align: right;"><b>Total: 14 cr.</b></p>
<p><b>Fall 3</b></p> <p>TECH CM 2000 - Land, Route &amp; Construction Surveying<sup>^</sup> 3 cr.</p> <p>TECH CM 2300 - Building Services<sup>^</sup> 3 cr.</p> <p>TECH CM 3000 - Heavy Construction Operations &amp; Equipment<sup>FO</sup> 3 cr.</p> <p>TECH CM 4200 - Structural Components of Construction<sup>FO</sup> 3 cr.</p> <p style="text-align: right;"><b>Total: 12 cr.</b></p>	<p><b>Spring 3</b></p> <p>STAT 1772 - Introduction to Statistical Methods 3 cr.</p> <p>TECH CM 4350 - Construction Company Operations &amp; Management<sup>^</sup> 3 cr.</p> <p>ENGR 4500 - Senior Design<sup>^</sup> 3 cr.</p> <p>MGMT 3100 - Legal &amp; Social Environment of Business 3 cr.</p> <p style="text-align: right;"><b>Total: 12 cr.</b></p>

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#### Legend

<sup>^</sup> - course requires a prerequisite.  
<sup>%</sup> - course requires a co-requisite.  
<sup>FO</sup> - course is only offered in the fall.  
<sup>SO</sup> - course is only offered in the spring.