

# APPLIED TECHNOLOGY | BACHELOR OF SCIENCE IN TECHNOLOGY STUDIES (CONSTRUCTION MANAGEMENT)

## Program Summary

Code	Title	Hours
General Education Courses		34
Industrial Technology Core Courses		26
Construction Management Core Courses		24
Management Requirements		9
Directed Electives		9
Cognates		18
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Open electives are the credit hours required to reach a minimum of 120 total hours and 45 upper-level hours. The number listed assumes all courses are completed at FHSU as listed. This number may vary if students transfer courses, or have individual substitutions allowed. Students should speak with their advisor if either situation applies to determine if the number will vary, and to ensure they enroll in a minimum of 45 upper-level hours. Students entering within 1 year of high school graduation will take UNIV 101 Freshman Seminar and may apply that hour in the open elective category.

## Program Requirements

### General Education

All undergraduate degrees require completion of the Kansas Systemwide General Education (<https://catalog.fhsu.edu/general-education/>).

Courses identified with <sup>GE</sup> on this page may satisfy a general education requirement in addition to the identified degree requirement. Students who apply a degree requirement to satisfy a general education requirement will typically add an equal number of hours to the the university elective category. This flexibility may allow you to complete a minor or certificate within the 120 hour degree. Transfer students and students majoring in programs with approved exceptions (<https://www.fhsu.edu/general-education/documents/fhsu-gen-ed-transfer-exceptions-explainer1.pdf>) are especially encouraged to select these courses in completing General Education requirements to maximize the likelihood of completing the degree with 120 credit hours.

Code	Title	Hours
<b>General Education</b>		<b>34-35</b>

Code	Title	Hours
<b>Industrial Tech Core Requirements</b>		
TECS 120	Power, Energy, and Transportation <sup>1</sup>	3
TECS 130	STEM in Technology Systems <sup>1</sup>	3
TECS 200	Engineering Graphics <sup>1</sup>	3

TECS 312	Graphic Communication Techniques <sup>1</sup>	3
TECS 318	Introduction to ComputerAided Drafting <sup>1</sup>	3
TECS 480	Industrial Management <sup>2</sup>	3
TECS 490	Occupational Safety, Health, and Liability <sup>3</sup>	2
TECS 495	Training and Instructional Systems <sup>4</sup>	3
or TECS 460	Teaching Technology & Engineering Education	
Select one course from the following:		3
TECS 406	Problems in Technology Studies	
TECS 499	Internship <sup>5</sup>	
TECS 606	Technology Issues	

Construction Management Core Courses		
Select 24 credit hours from the following:		24
TECS 180	Materials, Processes, and Production	
TECS 380	Construction Material and Testing <sup>2</sup>	
TECS 382	Construction Estimating and Scheduling	
TECS 385	Construction Planning and Design	
TECS 415	Construction Graphics <sup>4</sup>	
TECS 475	Mechanical and Electrical Systems <sup>4</sup>	
TECS 484	Site Preparation and Foundation	
TECS 485	Building Construction <sup>2</sup>	

Management Requirements		
GBUS 204	Business Law I	3
MGT 301	Management Principles <sup>1</sup>	3
MGT 411	Applied Management Skills	3
Select nine credit hours from TECS electives		9
Cognates		
MATH 101	Contemporary Mathematics <sup>GE</sup>	3
or MATH 110	College Algebra	
MATH 250	Elements of Statistics <sup>GE</sup>	3-5
or MATH 234	Analytic Geometry and Calculus I	
GSCI 100	Exploring Earth <sup>GE</sup>	3
IDS 390	Technology in Society	3
PHYS 102	Physical Science <sup>GE</sup>	3
PHYS 103	Physical Science Laboratory <sup>GE</sup>	1
or GSCI 102	Exploring Earth Laboratory	
<b>Total Hours</b>		<b>84-86</b>

<sup>1</sup> Classes offered **both** Fall and Spring.  
<sup>2</sup> Class offered in the Spring.  
<sup>3</sup> Class offered Intersession (between Fall and Spring semesters) / Spring.  
<sup>4</sup> Class offered in the Fall.  
<sup>5</sup> TECS 499 Internship—Internship Students: plan ahead for internship. Start gathering details the semester **before** you want to do internship. 9 credit hours of internship can be broken up into segments (before your senior year). Get an internship manual from the Applied Tech office (AT 121 or [dat@fhsu.edu](mailto:dat@fhsu.edu)). Make appointment with Mr. Stewart: Department Chair (AT 121) before you are ready to enroll. Note: **all** students (grade level and major) are encouraged to attend & participate in the Career Fair held each fall. This will give you personal contacts with many companies to set up internship, summer work, or full-time employment upon graduation. **All** Technology Studies students plan to attend the **Career Fair!**

## Degree Requirements

Code	Title	Hours
<b>All bachelor degrees require:</b>		
GPA of 2.0 on FHSU courses & 2.0 on all coursework (Higher program requirements prevail over the 2.0 when set)		
A minimum of 30 hours earned from FHSU with a grade of D, C, B, or A		
Successful completion of an upper division Writing and Information Literacy course (Most majors contain a course designated)		
A minimum of 45 hours of recognized upper division credit		
A minimum of 120 hours of recognized college credit		

## Degree Maps

Course	Title	Hours
<b>Freshman</b>		
<b>Fall</b>		
UNIV 101	Freshman Seminar	1
SGE010	English Discipline Area	3
LDRS 200	Discovering Leadership	3
SGE050	Social Behavioral Sciences Discipline Area	3
TECS 130	STEM in Technology Systems	3
TECS 318	Introduction to ComputerAided Drafting	3
TECS 180	Materials, Processes, and Production	3
<b>Hours</b>		<b>19</b>
<b>Spring</b>		
SGE070	Institutionally Designated Area: Critical Thinking	3
SGE060	Arts Humanities Discipline Area	3
SGE010	English Discipline Area	3
TECS 120	Power, Energy, and Transportation	3
TECS 200	Engineering Graphics	3
<b>Hours</b>		<b>15</b>
<b>Sophomore</b>		
<b>Fall</b>		
SGE030	Math Statistics Discipline Area	
MATH 101	Contemporary Mathematics <sup>1,GE</sup>	3
SGE020	Communication Discipline Area	3
TECS 312	Graphic Communication Techniques	3
TECS 484	Site Preparation and Foundation	3
GBUS 204	Business Law I	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
SGE060	Arts Humanities Discipline Area	3
SGE040	Natural Physical Science Discipline Area	
PHYS 102 & PHYS 103	Physical Science and Physical Science Laboratory <sup>1,GE</sup>	4
TECS 415	Construction Graphics	3
TECS 485	Building Construction	3
Directed Electives		3
<b>Hours</b>		<b>16</b>
<b>Junior</b>		
<b>Fall</b>		
TECS 391	Technology in Society	3
TECS 382	Construction Estimating and Scheduling	3
TECS 495	Training and Instructional Systems	3
MATH 250	Elements of Statistics	3
Directed Electives		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
TECS 380	Construction Material and Testing	3

TECS 385	Construction Planning and Design	3
TECS 480	Industrial Management	3
GSCI 240	Introduction to Geographic Information Systems (GIS)	3
Directed Choices		3
<b>Hours</b>		<b>15</b>
<b>Senior</b>		
<b>Fall</b>		
TECS 490	Occupational Safety, Health, and Liability	2
TECS 475	Mechanical and Electrical Systems	3
MGT 301	Management Principles	3
Open Electives		5
<b>Hours</b>		<b>13</b>
<b>Spring</b>		
TECS 499	Internship	9
MGT 411	Applied Management Skills	3
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>120</b>

**Academic Degree Maps** are term-by-term sample course plans that specify milestones, courses, and special requirements that are necessary for facilitating on-time completion. Degree Maps are *examples* and are not prescriptive. Individualized choices such as concentration options, transfer credits, optional minors, advisory programs (certificates), etc. can alter the recommended coursework. Course offerings are subject to change. Students should consult with their academic advisors for additional guidance on course planning.

To determine courses to take in the directed choices (often listed as Program Elective Course) and directed elective course blocks see the overview tab for courses. To locate approved courses in General Education areas (Undergraduate Programs) see the general education section (<https://catalog.fhsu.edu/general-education/>) of the catalog.

The undergraduate course maps typically advise the most efficient route for students to complete the general education requirements. Courses that are required in the major may be listed as fulfilling relevant general education requirements. This will result in more open elective course hours in some maps than is listed on the degree overview page.