

APPLIED TECHNOLOGY | BACHELOR OF SCIENCE IN TECHNOLOGY STUDIES (TECHNOLOGY EDUCATION)

Program Summary

Code	Title	Hours
General Education Courses		34
TECS Core Courses		18
Concentration Core Courses		21
Technology Education Pathway Requirements		9
Cognate		3
Open Electives ¹		4
Secondary Education		31
Total Hours		120

¹ 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 ^{GE} 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
General Education		34-35
TECS Core		
TECS 120	Power, Energy, and Transportation	3
TECS 130	STEM in Technology Systems	3
TECS 200	Engineering Graphics	3
TECS 312	Graphic Communication Techniques	3

TECS 318	Introduction to ComputerAided Drafting	3
TECS 490	Occupational Safety, Health, and Liability	2
Concentration Core Courses		
TECS 180	Materials, Processes, and Production	3
TECS 240	Plastic Processes	3
TECS 260	Metal Processes	3
TECS 277	Early Field Experience ¹	1
TECS 280	Wood Processes	3
TECS 440	Maintenance and Repair of Equipment	1
TECS 460	Teaching Technology & Engineering Education ¹	3

CTE Pathway Certificate Areas

Select at least one of the following areas. Minimum of one certificate required: 9

Construction		
TECS 314	Furniture/Cabinet Construction & Finishing	
TECS 406	Problems in Technology Studies	
TECS 485	Building Construction	
Drafting/CAD Design		
TECS 355	Computer-Aided Drafting	
TECS 415	Construction Graphics	
TECS 445	Civil Drafting	
Manufacturing		
TECS 119	Introduction to Welding	
TECS 331	Machine Tool Operations	
TECS 430	Computer-Aided Manufacturing	
STEM		
TECS 310	Manufacturing Graphics	
TECS 355	Computer-Aided Drafting	
TECS 375	Robotics: Engineering Problem Solving	
Cognate		
TECS 391	Technology in Society	3
Total Hours		46

¹ Grade of "C" or better required.

² Grade of "B" or better required.

Bachelor of Science (BS) in Education

The Bachelor of Science in Education with a emphasis in Secondary Education is available only as part of a dual major in conjunction with a major in an academic teaching field approved by the KSDE at the PreK-12 and 6-12 levels. The teaching fields available at FHSU for students interested in licensure at middle or high school levels are art, biology, business, chemistry, earth/space science, English, modern languages (Spanish), journalism, mathematics, music, physical education, physics, psychology, technology education (communications; power, energy, transportation; production), history and government. For requirements in each content, please contact the appropriate teaching area departmental office. Students wishing to complete the requirements for the Secondary Education major must also meet the Teacher Education Program admission requirements. This program follows the Conceptual Framework for Teacher Education at Fort Hays State University.

Code	Title	Hours
Secondary Education Core		19
Courses from field of study		variable
Student Teaching		12
Total number of credit hours varies based on chosen field of study		

General Education

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Code	Title	Hours
General Education		34-35

Program Admission Requirements & General Education Courses

To earn an undergraduate degree at FHSU, you must complete 34 hours of General Education coursework. For the Secondary Education degree the following classes typically applied to the general education requirements must be completed with the specified grade for admission to the teacher education program, these include:

Code	Title	Hours
ENG 101	English Composition I (Grade C) ^{GE}	3
ENG 102	English Composition II (Grade B) ^{GE}	3
COMM 100	Fundamentals of Oral Communication (Grade B) ^{GE}	3
or COMM 304	Intermediate Interpersonal Communication	
MATH 110	College Algebra (Grade C) ^{GE}	3
or MATH 101	Contemporary Mathematics	
or MATH 130	Pre-Calculus Mathematics	
or MATH 234	Analytic Geometry and Calculus I	
MATH 250	Elements of Statistics (Grade C) ^{GE}	3

For a current list of all teacher education admission requirements check out the programs website (<https://www.fhsu.edu/cert/admission-to-teacher-education/>)

Secondary Education Requirements

These requirements are in addition to the requirements for the primary degree

Code	Title	Hours
Secondary Education Core Non-Restricted Courses		
TEEL 202	Foundations of Education (Grade C)	3

TEEL 231	Human Growth and Development (Grade C) ^{GE}	3
TECS 301	Introduction to Instructional Technology (Grade C)	3
___ 277	Early Field Experience (Grade C)	

Secondary Education Core Restricted Courses (Admission to Teacher Education Required)

TESP 302	Educating Students with Exceptionalities	3
TEEL 431	Educational Psychology	3
TESS 494	The Secondary School Experience	4
Student Teaching Courses		
TESS 496	Student Teaching Secondary	11
TEEL 675	Seminar in Education I	1

Total Secondary Education Courses: 31 Credit Hours. The 31 credit hours doesn't include method classes in the discipline or additional cognates necessary for specific fields.

- All program courses must be completed with a C or better
- Major requires 2.75 GPA

Degree Requirements

Code	Title	Hours
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All bachelor degrees require:

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

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A minimum of 45 hours of recognized upper division credit

A minimum of 120 hours of recognized college credit

Degree Maps

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.