Name: Date:

Central Connecticut State University School of Engineering, Science & Technology

B.S.Ed. in **Technology & Engineering Education** (K-12)

120 credits minimum†‡

Program to be effective Fall 2017. Last update 10/14/2016.

General Education (44 credits minimum†‡)

International requirement: Two international courses ✓

- ☐
- ☐

Study Area I: Arts & Humanities	pre-requisites	ⓘ	cr.	✓
Literature Elective: 200 level+	ENG 110	☐	3	
arts / humanities elective		☐	3	
arts / humanities elective		☐	3	

Study Area II: Social Sciences			
U.S. History: HIST 161 or HIST 162		3	
TE101 Introduction to STEM Systems		3	
social sciences elective	☐	3	

Study Area III: Behavioral Sciences			
PSY 136 Life Span Development		3	
EDF 215 Education in a Multicultural Society		3	

Study Area IV: Natural Sciences			
PHYS 111 Introductory Physics		3	
natural sciences elective	☐	3	

Skill Area I: Communication Skills			
ENG 110 Introduction to College Writing	**P**‡	3	
communication skills elective	☐	3	

Skill Area II: Mathematics			
STAT 104 Elementary Statistics	**P**‡	3	
MATH 115 Trigonometry (OR MATH 119)	**P**‡	3	

Skill Area III: Foreign Language requirement (check one)

- three sequential years of one foreign language in high school ☐
- passing a standardized foreign language exam ☐
- completion of a 112- or 114-level foreign language course ☐
- successful completion of an upper level foreign language course ☐
- demonstration of native proficiency in foreign language ☐

Skill Area IV: University Requirement		
PE 144 (for students who enter with less than 15 cr.)	2	

Technology & Engineering Education (76 credits)

Program checkpoints ✓

- PRAXIS CORE passed ☐
- professional acceptance (Sept. 10 / Feb. 10) ☐
- PRAXIS II / Technology Education passed ☐

Major courses		pre-requisites	cr.	✓
ENGR 150 Introduction to Engineering			3	
ET 241 Applied Statics & Strength of Materials		PHYS 111, MATH 115	3	
TE 115 Laboratory Safety and Management	**F**		3	
TE 201 Children's Creativity & Engineering	**F**	TE 101	3	
TE 215 Materials Processing	**S**	TE 115	3	
TE 217 STEM Laboratory Practices	**S**	TE 115	4	
TE 218 Electrical Applications for STEM	**F**		3	
TE 221 Innovation and Invention	**F**		4	
TE 245 Building Design and Construction	**S**		4	
TE 310 Communication Systems	**S**		3	
TE 330 Transportation Design	**S**	TE 215, 221	4	
TE 399 Teaching Technology and Engineering	**F**	TE 299	3	
TE 417 Robot Design and Construction	**F**	TE 215, 221	4	
TE 498 Senior Design Project	**S**	TE 115, *TE 400	3	

Pre-professional block

(NOTE: EDTE 314 and TE 299 must be taken together)

TE 299 Technology & Engineering Practicum	TE 201	3	
EDTE 314 Applying Learning Theories in Diverse Settings (		3	

Professional courses

(NOTE: each of these courses requires professional acceptance)

SPED 315 Intro to Educating Learners with Exceptionalities		3	
RDG 440 Introduction to Literacy		3	

(NOTE: EDSC 425 and TE 400 must be taken together)

TE 400 Professional Practices and Responsibi	**S** *TE 399	3	
EDSC 425 Principles and Evaluation (K-12)		3	

Student-teaching semester

(NOTE: you may not take other courses during this semester)

EDSC 431 Student Teaching I — Technology and Engineer	5	
EDSC 432 Student Teaching II — Technology and Enginee	5	
TE 419 Student-Teaching Seminar	1	

P Enrollment requires a placement exam

***** Prerequisite course **may be** taken concurrently

F Fall-only course

S Spring-only course

† Students who have not met the Foreign Language Requirement prior to enrollment will be required to take six additional credits of foreign language.

‡ Students' placement-test scores may require them to take between three and nine additional credits in remedial English or mathematics courses.

ⓘ Students must select **at least two courses designated "international"** from among their General Education electives. Failure to do this will require three or six additional credits.

Proposed change to the Technology Education, B.S. (Certifiable for PK-12 teaching) program

submitted 4/28/16
modified 10/14/2016

Current (130 credits, 124 encumbered)		Proposed (120 credits, all encumbered)		notes
General Education (44 credits)		**General Education (44 credits minimum)**		should read "minimum" because we've removed 6 cr. of foreign language
HIST 161 American History to 1877 OR HIST 162 American Hist	3	HIST 161 American History to 1877 OR HIST 162 American History fror	3	
TE 101 Introduction to STEM Systems	3	TE 101 Introduction to STEM Systems	3	
PSY 236 Life Span Development	3	PSY 136 Life Span Development	3	
study area III elective	3	EDF 215 Education in a Multicultural Society	3	new course
PHYS 111 Introductory Physics I	3	PHYS 111 Introductory Physics I	3	
ENG 110 Introduction to College Writing	3	ENG 110 Introduction to College Writing	3	
STAT 104 Elementary Statistics	3	STAT 104 Elementary Statistics	3	
MATH 115 Trigonometry OR MATH 119 Pre-Calculus with Trigor	3	MATH 115 Trigonometry OR MATH 119 Pre-Calculus with Trigonometry	3	
PE 144 (for students who enter with less than 15 cr.)	2	PE 144 (for students who enter with less than 15 cr.)	2	
study area I electives (incl. Lit)	9	*study area I electives (incl. Lit)*	9	
study area II elective	3	*study area II elective*	3	I included these here for calculations only
study area IV elective	3	*study area IV elective*	3	
skill area I elective	3	*skill area I elective*	3	
These courses count toward the overall general education requirements. Note: This major does not require a minor.		These courses count toward the overall general education requirements. Note: This major does not require a minor.		
Technology & Engineering Education (80 credits)		**Technology & Engineering Education (76 credits)**		
Technology Education (K-12) Prof. Requirements (6 credits)				move TE 400 to "Professional Education Requirements" and TE 399 and "Both of these courses…" verbiage to "Major Courses.
TE 399 Teaching Technology and Engineering	3			
TE 400 Professional Practices and Responsibilities	3			
Note: Both of these courses may not be available each semester and are seldom available during the summer sessions; refer to the course description section of this catalog for information.				
Technical Requirements (47 credits)		**Major Courses (50 credits)**		note heading change
ENGR 150 Introduction to Engineering	3	ENGR 150 Introduction to Engineering	3	
ET 241 Applied Statics and Strength of Materials	3	ET 241 Applied Statics and Strength of Materials	3	
TE 115 Electronic Portfolios and Assessment	3	TE 115 STEM Laboratory Safety and Management	3	revised course
STEM 201 Children's Creativity & Engineering	3	TE 201 Children's Creativity & Engineering	3	
TE 215 Materials Processing	3	TE 215 Materials Processing	3	
TE 217 STEM Laboratory Practices	4	TE 217 STEM Laboratory Practices	4	
TE 218 Electrical Applications for STEM	3	TE 218 Electrical Applications for STEM	3	
TE 221 Innovation and Invention	4	TE 221 Innovation and Invention	4	
TE 245 Building Design and Construction	4	TE 245 Building Design and Construction	4	
TE 299 Technology/Engineering Education Practicum	3	TE 299 Technology/Engineering Education Practicum	3	
TE 310 Communication Systems	3	TE 310 Communication Systems	3	
TE 330 Transportation Design	4	TE 330 Transportation Design	4	
		TE 399 Teaching Technology and Engineering	3	
TE 417 Robot Design, Construction & Competition	4	TE 417 Robot Design, Construction & Competition	4	
TE 498 Senior Design Project	3	TE 498 Senior Design Project	3	
Students may take additional technical courses approved by their Technology Education advisor to fulfill their General Education requirements.		Note:These courses may not be available each semester and are seldom available during the summer sessions; refer to the course description section of this catalog for information.		remove "Students may take…"
Professional Education Requirements (27 credits)		**Professional Education Requirements (26 credits)**		
SPED 315 Intro to Educating Learners with Exceptionalities	3	SPED 315 Intro to Educating Learners with Exceptionalities	3	
EDF 415 Foundations of Education	3			
EDTE 314 Applying Learning Theories in Diverse Settings (K-12	3	EDTE 314 Applying Learning Theories in Diverse Settings (K-12 Progra	3	
EDSC 425 Multicultural, Interdisciplinary Teaching at the Second	3	EDSC 425 Multicultural, Interdisciplinary Teaching at the Secondary Lev	3	
RDG 440 Introduction to Literacy	3	RDG 440 Introduction to Literacy	3	
		TE 400 Professional Practices and Responsibilities	3	
		TE 419 Student-Teaching Seminar	1	
EDSC 414 Preliminary Student Teaching	6	EDSC 431 Student Teaching I — Technology and Engineering Educatic	5	new courses
EDSC 415 Student Teaching	6	EDSC 432 Student Teaching II — Technology and Engineering Educati	5	
Admission to the Professional Program Students must make formal application for admission to the Professional Program of Technology Education after completion of 45 credits in course work. At least 15 of these credits must be in TE courses. Applications are available from the Dean of Education and Professional Studies, Barnard Hall, and must be filed prior to September 21 or February 21. Acceptance is prerequisite to taking TE 400, EDSC 414, EDSC 415 and EDSC 425, EDF 415, RDG 440, and SPED 315. Students must maintain a minimum 2.50 grade point average in all technology courses. See School of Education and Professional Studies, Admission to Professional Program for additional information.		**Admission to the Professional Program** Students must make formal application for admission to the Professional Program of Technology **and Engineering** Education after completion of 45 credits in course work. At least 15 of these credits must be in TE courses **(different criteria apply to transfer students; contact the Office of the Dean of Education and Professional Studies for details)**. Applications are available from the Dean of Education and Professional Studies, Barnard Hall, and must be filed **by** September **10** or February **10**. Acceptance is prerequisite to taking TE 400, **TE 419**, EDSC 425, **EDSC 431**, **EDSC 432**, RDG 440, and SPED 315. Students must maintain a minimum **3.00** grade point average in all **TE** courses. **See the entry in this catalog for** School of Education and Professional Studies, Admission to Professional Program for additional information.		note corrected language

CENTRAL CONNECTICUT STATE UNIVERSITY

FOUR-YEAR ACADEMIC MAP (proposed)

Revised 4/25/16

B.S.Ed. in **Technology & Engineering Education** (K-12)

Effective Term: Fall 2017

Semester 1	**cr.**	**min. gr.**	**CHECKPOINT**	**MILESTONE**	**WARNING**
ENG 110 Freshman Composition **[requires placement exa**	3	C–	• maintain a 3.0 GPA in TE and STEM courses		
MATH 115 Trigonometry **[requires placement exam]**	3	C–	• maintain an overall GPA of 2.7		
PSY 136 Life Span Development	3	C–	• **take 111-level foreign language** if needed (+3 cr.)		
TE 101 Introduction to STEM Systems	3	C	• take **PRAXIS CORE exam**		
TE Laboratory Safety and Management **[Fall only]**	3	C			
TOTAL	**15**				
Semester 2					
ENGR 150 Introduction to Engineering	3	C–	• maintain a 3.0 GPA in TE and STEM courses		
PE 144 Health & Wellness	2	C–	• maintain an overall GPA of 2.7		
STAT 104 Elementary Statistic **[requires placement exam**	3	C–	• **take 112-level foreign language** if needed (+3 cr.)		
TE 215 Materials Processing **[Spring only]**	3	C			
TE 217 STEM Laboratory Practices **[Spring only]**	4	C			
TOTAL	**15**				
Semester 3					
EDF 215 Education in a Multicultural Society	3	C	• maintain a 3.0 GPA in TE and STEM courses		
U.S. History: HIST 161 or HIST 162	3	C–	• maintain an overall GPA of 2.7		
PHYS 111 Introductory Physics	3	C–			
TE 201 Children's Creativity & Engineering **[Fall only]**	3	C			
TE 221 Innovation and Invention **[Fall only]**	4	C			
TOTAL	**16**				
Semester 4					**WARNING**
EDTE 314 Principles of Learning	3	C	• maintain a 3.0 GPA in TE and STEM courses		• failure to have earned passing scores on all three PRAXIS CORE sections by the end of this semester may delay your graduation.
Literature Elective: 200 level+	3	C–	• maintain an overall GPA of 2.7		
TE 299 Practicum	3	C	• **apply for professional acceptance** [due Sep.10 /		
TE 310 Communication Systems **[Spring only]**	3	C			
TE 245 Building Design & Construction **[Spring only]**	4	C			
TOTAL	**16**				
Semester 5					**WARNING**
ET 241 Appl. Statics & Strength Materials	3	C–	• maintain a 3.0 GPA in TE and STEM courses		• failure to receive professional acceptance this semester (application due Sep.10 / Feb.10) will delay your graduation.
RDG 440 Introduction to Literacy	3	C	• maintain an overall GPA of 2.7		
study area IV elective	3	C–			
TE 399 Teaching Tech & Engineering **[Fall only]**	3	C	• you should have completed at least 3 credits of international courses by the end of this semester.		
TE 218 STEM Electrical Applications **[Fall only]**	3	C			
TOTAL	**15**				
Semester 6				**MILESTONE**	
EDSC 425 Principles and Evaluation K-12	3	C	• maintain a 3.0 GPA in TE and STEM courses	• **apply for CCSU graduation** [due one year prior to graduation]	
study area I elective	3	C–	• maintain an overall GPA of 2.7		
TE 330 Transportation Design **[Spring only]**	4	C	• it is recommended that you take the PRAXIS II exam around the end ofg this semester		
TE 400 Professional Practices… **[Spring only]**	3	C			
TE 498 Senior Design Project **[Spring only]**	3	C			
TOTAL	**16**				
Semester 7				**MILESTONE**	
study area I elective	3	C	• maintain a 3.0 GPA in TE and STEM courses	• **apply for student teaching** [due Sep.15 / Feb.15]	
study area II elective	3	C	• maintain an overall GPA of 2.7		
skill area I elective	3	C–	• you should have completed 6 credits of international courses by the end of this semester.	• **take PRAXIS II**	
SPED 315 Intro to Educating Learners with Exceptionalities	3	C–			
TE 417 Robot Design, Constr & Comp **[Fall only]**	4	C–			
TOTAL	**16**				
Semester 8					**WARNING**
EDSC 431 Student Teaching I	5	C			• you may not enroll in additional coursework during your student-teaching semester.
EDSC 432 Student Teaching II	5	C			
TE 419 Student Teaching Seminar	1	C			
TOTAL	**11**				

Total credits 120

Central Connecticut State University School of Engineering, Science & Technology

B.S.Ed. in **Technology & Engineering Education** (K-12)

based on proposed 120-credit program to be effective Fall 2017. Last update 10/14/2016.

suggested 4-YEAR PLAN

see your advisor to plan your courses

First Year (10 courses, 30 credits)

FALL				SPRING			
			credits	• take **PRAXIS CORE exam** • **begin foreign language** if needed (+3 cr.)			
ENG	110		3	ENGR	150		3
MATH	115		3	PE	144		2
TE	101		3	STAT	104		3
TE	**115**	**F**	3	**TE**	**215**	**S**	3
PSY	136		3	**TE**	**217**	**S**	4
			15				**15**

Second Year (16 courses, 32 credits)

FALL				SPRING			
				• **apply for professional accept-ance**			
EDF	215		3	• **complete foreign language** if needed (+3 cr.)			
PHYS	111		3	EDTE	314		3
HIST 161 / 162			3	TE	299		3
TE	**201**	**F**	3	**TE**	**310**	**S**	3
TE	**221**	**F**	4	**TE**	**245**	**S**	4
				science elective (SA4)			3
			16				**16**

Third Year (19 courses, 32 credits)

FALL				SPRING			
				• **apply for CCSU graduation**			
ET	241		3	EDSC	425		3
TE	**399**	**F**	3	**TE**	**400**	**S**	3
RDG	440		3	*elective (SA1)*			3
science elective (SA4)			3	**TE**	**330**	**S**	4
TE	**417**	**F**	4	**TE**	**498**	**S**	3
			16				**16**

Fourth Year (7 courses, 26 credits)

FALL				SPRING			
• **apply for student teaching** • **take PRAXIS II**				**Student Teaching Block**			
SPED	315		3	EDSC	431		5
TE	**218**	**F**	3	EDSC	432		5
elective (SA1)			3	TE	419		1
elective (SA2)			3				
elective (SK1)			3				
			15				**11**

Total credits 120

suggested 3½-YEAR PLAN

see your advisor to plan your courses

First Year (11 courses, 34 credits)

FALL				SPRING				SUMMER
			credits					
ENG	110		2	• take **PRAXIS CORE exam**				
PE	144		3	ENGR	150		3	
MATH	115		3	STAT	104		3	
TE	101		3	**TE**	**215**	**S**	3	
TE	**115**	**F**	3	**TE**	**217**	**S**	4	
PSY	136		3	**TE**	**245**	**S**	4	
			17				**17**	0

Second Year (12 courses, 35 credits)

FALL				SPRING				SUMMER
				• **apply for professional accept-ance**				
PHYS	111		3	ET	241		3	students required to take additional coursework in foreign language will need 3 or 6 additional summer or winter credits (see curriculum
HIST 161/162			3	EDTE	314		3	
TE	**201**	**F**	3	TE	299		3	
TE	**221**	**F**	4	**TE**	**310**	**S**	3	
TE	**417**	**F**	4	*science elective (SA4)*			3	
				literature elective (SA1)			3	
			17				**18**	0

Third Year (13 courses, 40 credits)

FALL				SPRING				SUMMER	
• **apply for CCSU graduation**				• **apply for student teaching** • **take PRAXIS II**					
EDF	2xx		3	EDSC	425		3	*elective (SA1)*	3
SPED	315		3	RDG	440		3	*elective (SA2)*	3
TE	**399**	**F**	3	**TE**	**330**	**S**	4		
TE	**218**	**F**	3	**TE**	**498**	**S**	3		
elective (SA1)			3	**TE**	**400**	**S**	3		
elective (SK1)			3						
			18				**16**		**6**

Fourth Year (2 courses, 11 credits)

FALL			
Student Teaching Block			
EDSC	431		5
EDSC	432		5
TE	419		1
			11

Total credits 120

F Fall-only course

S Spring-only cours