Program Map: BSED Engineering and Technology Education (P-12)
(120 credits)
College of Education

Name: **SID:**   **Advisor:**

Start Date: **Catalog Date:**   **Expected Graduation Date:**

Freshman

Fall Courses			Spring Courses			Notes
Course	**Name**	**Hours**	**Course**	**Name**	**Hours**	
Area A ENGL 1101	Composition I Pre-requisite: None	3	Area A ENGL 1102	Composition II Pre-requisite: ENGL 1101	3	Prepare for GACE Program Admission Exams **
Area A MATH 1111*	College Algebra or test score Pre-requisite: None	3	MATH 1113	Pre-Calculus Pre-requisite: MATH 1111	3	** You are exempt from GACE Program Admission Exams by having a combination ACT score of 43 or a combination SAT score of 1000.
Area B HUMN 1201	Critical Thinking & Communication Pre-requisite: None	3	Area F EDUC 2100	Reading and Writing Strategies Pre-requisite: None	3	
Area E PSYC 2103	Human Growth & Development Pre-requisite: None	3	Area F EDUC 2110	Investigating Critical & Contemporary Issues in Education Pre-requisite: None	3	
Area F EDUC 2000	Technology in Teaching & Learning Pre-requisite: None	3	ETED 2500	Introduction to Engineering and Technology Education Pre-requisite: None	3	
Area F EDUC 1103	FYE for Future Educators Pre-requisite: None	2				
Fall Milestones		**Total**	**Spring Milestones**		**Total**	
		17			15	

Sophomore

Fall Courses			Spring Courses			Notes
Course	**Name**	**Hours**	**Course**	**Name**	**Hours**	
Area D PHYS 1111K	Introductory Physics I Pre-requisite: MATH 1113	4	Area B AFRS 1501	Survey African American Experience Pre-requisite: None	2	Secure Tort Liability Insurance
Area D CSCI/CISM 1130	Computer Applications Pre-requisite: NONE	3	Area D PHYS 1112K	Introductory Physics II Pre-requisite: PHYS 1111K	4	Secure Assessment Account
Area E POLS 1101	American Government Pre-requisite: None	3	Area E	Elective Pre-requisite: None	3	Complete Georgia Professional Standards Commission (GaPSC) Pre-Service Certification and Background Check
Area F EDUC 2120	Exploring Socio-Cultural Influences in Teaching & Learning Pre-requisite: None	3	CSCI 1301	Computer Science Pre-requisite: Math 1111	3	
ETED 2201	Literacy & Technical Writing in Engineering and Technology Ed Pre-requisite: None	3	Area F EDUC 2130	Exploring Teaching and Learning Pre-requisite: None	3	Apply for Admission to the Teacher Education Program (TEP)
Fall Milestones		**Total**	**Spring Milestones**		**Total**	
Take GACE Program Admission Exams		16	Retake GACE Program Admission Exams, if needed.		15	

Junior

Fall Courses			Spring Courses			Notes
Course	**Name**	**Hours**	**Course**	**Name**	**Hours**	
Area C	Elective Pre-requisite: None	3	EDUC 3200	Curriculum and Assessment Pre-requisite: Admission to TEP	3	Secure Tort Liability Insurance
Area C	Elective Pre-requisite: None	3	ETED 3301	Electrical Power and Energy Systems Pre-requisite: None	3	Apply for Student Teaching/ Clinical Practice Placement
Area E HIST 2111 or HIST 2112	Survey US History to Post Civil or Survey US History Post Civ-Present Pre-requisite: None	3	ETED 3302	Hydraulic and Pneumatic Systems in Technology Education Pre-requisite: None	3	
ETED 3000	Principles of Engineering & Technology Education Pre-requisite: None	3	ETED 3303	Construction Systems Pre-requisite: None	3	
EDUC 3030	Teaching Exceptional Learners Pre-requisite: Admission to TEP	3	ETED 3304	Transportation Systems Pre-requisite: None	3	
			ETED 3305	Manufacturing Systems Pre-requisite: None	3	
Fall Milestones		**Total**	**Spring Milestones**		**Total**	
Take GA Educator Ethics: Program Entry Exam (350)		15	Take GACE Content Exams Test I [052] and Test II [053] or Combined Test I and II [522]		18	

Senior

Fall Courses			Spring Courses			Notes
Course	**Name**	**Hours**	**Course**	**Name**	**Hours**	
EDUC 3040	Classroom Management & Ethics Pre-requisite: None	3	EDUC 4475	Student Teaching/Clinical Practice Pre-requisite: Admission to TEP GaPSC Pre-Service Certificate Required	10	Secure Tort Liability Insurance
ETED 3211	Connections in P-12 Engineering Technology Education Pre-requisite: Admission to TEP	3	EDUC 4476	Student Teaching Seminar Co-requisite: EDUC 4475	2	Apply for Graduation
ETED 4416	Methods & Research in P-12 Engineering and Technology Pre-requisite: Admission to TEP	3				Complete Exit Counseling (Financial Aid)
ETED 4417	Practicum in Teaching P-12 Engineering and Technology Education Pre-requisite: Admission to TEP	3				Complete Evaluation of Cooperating Teacher Survey Complete Program Graduate Survey
Fall Milestones		**Total**	**Spring Milestones**		**Total**	
Take Georgia Educator Ethics: Program Exit Exam (360)		13	Submit edTPA		12	

Core Curriculum (Programmed Preferred Options in Bold)

Area B – Institutional Options 5 hrs.

> **AFRS 1501 Survey of African-American Experience 2 hrs.**
> **HUMN 1201 Critical Thinking & Communication 3 hrs.**

Area C – Humanities/Fine Arts, and Ethics 6 hrs.,

1. Select one of the following:
   ENGL 2111 World Literature I 3 hrs.
   ENGL 2112 World Literature II 3 hrs.
   ENGL 2121 British Literature I 3 hrs.
   ENGL 2122 British Literature II 3 hrs.
   ENGL 2131 American Literature I 3 hrs.
   ENGL 2132 American Literature II 3 hrs.
   ENGL 2222 African American Literature 3 hrs.
   PHIL 2010 Introduction to Philosophy 3 hrs.
   PHIL 2030 Introduction to Ethics 3 hrs.

2. Select one of the following:
   ARTS 1101 Introduction to Visual Art 3 hrs.
   DNCE 2010 Dance Appreciation 3 hrs.
   ENGL 2521 Introduction to Film 3 hrs.
   HUMN 2011 Humanities 3 hrs.
   MUSC 1101 Introduction to Music 3 hrs.
   THEA 2101 Introduction to Theatre 3 hrs.

Area D – Natural Sciences, Math & Technology 10 hrs.

1. Select one of the following:
   BIOL 1107 Principles of Biology I 3 hrs.
   BIOL 1108 Principles of Biology II 3 hrs.
   CHEM 1211 Principles of Chemistry I 3 hrs.
   CHEM 1212 Principles of Chemistry II 3 hrs.
   CISM 1130 Computer Applications 3 hrs. or
   CSCI 1130 Computer Applications 3 hrs.
   CSCI 1301 Computer Science I 3 hrs.
   ENVS 1140 Environmental Issues 3 hrs.

2. Select two of the following lab sciences:
   BIOL 1107/1107L Principles of Biology I 4 hrs.
   BIOL 1108/1108L Principles of Biology II 4 hrs.
   CHEM 1211/1211L Principles of Chemistry 4 hrs.
   CHEM 1212/1212L Principles of Chemistry 4 hrs.
   PHYS 1111K Introductory Physics I 4 hrs.
   PHYS 1112K Introductory Physics II 4 hrs.
   PHYS 2211K Principles of Physics I 4 hrs.
   PHYS 2212K Principles of Physics II 4 hrs.

Area E – Social Science 12 hrs.

> **POLS 1101 American Government 3 hrs.**

1. Select one of the following:
   HIST 2111 U.S. History to the Post-Civil War Period 3 hrs.
   HIST 2112 U.S. History from the Post-Civil War to Pre 3 hrs.

2. Select two of the following:
   AFRS 2000 Introduction to Africana Studies 3 hrs.
   ANTH 1101 Introduction to Anthropology 3 hrs.
   ECON 2105 Principles of Macro-Economics 3 hrs.
   GEOG 1101 Introduction to Human Geography 3 hrs.
   HIST 1111 World Hist to Early Modern Times 3 hrs.
   HIST 1112 World History Early Modern Times to Pres 3 hrs.
   POLS 2401 Global Issues 3 hrs.
   PSYC 1101 Intro to General Psychology 3 hrs.
   PSYC 2103 Human Growth & Development 3 hrs.
   SOCI 1101 Introduction to Sociology 3 hrs.
   SOCI 1160 Social Problems 3 hrs.

Distinctive Courses in this Major

EDUC 3030 Teaching Exceptional Learners 3 credits
This course is designed to prepare candidates to work collaboratively with families and school personnel to have a positive impact on the educational, social and behavioral development of all students, including those with a full range of disabilities and in a diverse society. The course focuses on knowledge of legislative mandates for serving exceptional students, characteristics of exceptionality, best practice in facilitating teaching and learning, and accountability through assessment of outcomes. **There are 60 required field hours in this course. This course cannot be passed without verification of completion of field hours. Admission to TEP required.**

EDUC 3200 Curriculum and Assessment 3 credits
This course will engage students in the investigation of curriculum, instruction, and assessment development with an emphasis on student learning outcomes. This course will review assessment methods relative to constructing, evaluating and interpreting tests with an understanding on reliability, valid and fair measurements; descriptive and inferential statistics, and state competency testing. Students will cover knowledge management and methods for integrating technology into assessment practice. **There are 60 required field hours in this course. This course cannot be passed without verification of completion of field hours. Admission to TEP.**

ETED 4416 Teaching and Research in P-12 Engineering & Technology Education 3 credits
This course is an examination of the philosophy, mission, vision, goals, and research recommended by ISTE, content standards, and teaching methods of Engineering and Technology Education in multicultural and diverse classrooms of today. This course is designed to give engineering technology education students specialty and professional knowledge in the area of integrating technology into school curricula. Research-based teaching strategies, instructional design, assessment, and lab management are examined and best practices applied. **The eportfolio is required. Admission to TEP required. Taken with ETED 4417.**

ETED 4417 Practicum in Teaching P-12 Engineering and Technology Education 3 credits
This course is designed to provide teacher candidates with experience in a supervised school setting where they show active involvement with mentor teacher in creating and teaching lessons, grading papers, or any other classroom work. Students will learn how to implement meaningful and engaging instruction for secondary students in engineering technology; developing critical thinking, problem solving, literacy, and democratic character; assessing learner performance. **There are 120 required field hours in this course. This course cannot be passed without verification of completion of field hours. Taken with ETED 4416.**

EDUC 4475 Student Teaching/Clinical Practice 10 credits
Student teaching is a **630-hour field-based capstone requirement** for teacher certification and BSED candidates. Requirements for entry, grade level and/or content placement, and teaching experiences at the assigned school adhere to the most recent rules for teacher certification mandated by the GaPSC. **Taken with EDUC 4476.**

EDUC 4476 Student Teaching Seminar 2 credits
This seminar, taken with EDUC 4475 Student Teaching/Clinical Practice, provides students with structured support to meet final teacher preparation program requirements mandated by the GaPSC for teacher certification. **Completion of GACE assessments and submission of the teaching portfolio to edTPA are required to complete this course. Taken with EDUC 4475.**