

BACHELOR OF SCIENCE, MAJOR IN ENGINEERING TECHNOLOGY WITH TEACHING CERTIFICATION

| Code | Title | Hours |
|--|--|---------|
| Bachelor of Science, Major in Engineering Technology with Teaching Certification | | |
| Core Curriculum (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum) | | |
| Component Area I (Communication) | | 6 |
| Component Area II (Mathematics) | | 3 |
| Component Area III (Life and Physical Science) | | 8 |
| Component Area IV (Language, Philosophy, and Culture) | | 3 |
| Component Area V (Creative Arts) | | 3 |
| Component Area VI (U.S. History) | | 6 |
| Component Area VII (Political Science/Government) | | 6 |
| Component Area VIII (Social and Behavioral Sciences) | | 3 |
| Component Area IX (Component Area Option) | | 4 |
| Degree Specific Requirements | | |
| MATH 3379 or ENGL 3330 | Statistical Mthods in Practice Intro to Technical Writing | 3 |
| MATH 1314 | Pre Calculus Algebra ¹ | 3 |
| MATH 1316 | Plane Trigonometry ¹ | 3 |
| PHYS 1301 & PHYS 1101 | General Phy-Mechanics & Heat and General Physics Laboratory I | 4 |
| PHYS 1302 & PHYS 1102 | Gen Phy-Snd,Lght, Elec, & Mag and General Physics Laboratory II | 4 |
| Major Core | | |
| ETDD 1361 | Engineering Graphics | 3 |
| ETEC 1010 | Engineering Foundations | 1-2 |
| ETEE 1340 | Introduction to Circuits | 3 |
| ETCM 1363 | Wood Frame Construction | 3 |
| Major | | |
| ETEE 2320 | Circuits and Systems | 3 |
| ETCM 2363 | Architectural Design | 3 |
| ETDD 3310 | Product Design & Development | 3 |
| ETEC 4340 | Alternative Energy Technology | 3 |
| INED 4310 | Occup. Human Relations in CTE | 3 |
| INED 4363 | Preparation Of Instructnal Mtr | 3 |
| INED 4364 | Teaching in Schools & Industry | 3 |
| INED 4391 | Lab Mgt,Organization & Control | 3 |
| Advanced Electives selected from: ETEC, ETEE, ETDD, ETCM, ETSM and INED | | 12 |
| Minor | | |
| CISE 3384 | The Teaching Profession | 3 |
| CISE 4364 | Mth Tch Secondary Schools | 3 |
| CISE 4378 | Content Literacy | 3 |
| CISE 4379 | Differentiated Pedagogy | 3 |
| CISE 4380 | Respon Of Pro Educator | 3 |
| CISE 4394 | Creatng Env For Lrng-Secondary | 3 |
| CISE 4396 | Std Tch Secondary Classroom | 3 |
| CISE 4397 | Std Tch Secondary Classroom | 3 |
| Total Hours | | 126-127 |

¹ MATH 1316 or MATH 1314 or MATH 1420 or MATH 1324 satisfies the Core Curriculum requirement for Component Area II (Mathematics) and the Degree Specific requirement. MATH 1420 also satisfies 1 semester credit hour of the Core Curriculum requirement for Component Area IX (Component Area Option).

For certification purposes the minor is considered to be Secondary Education. No other minor is required, but if an additional teaching field is desired, the student must meet the requirements of that teaching field. For the degree of Bachelor of Science and a teaching certificate with an integrated teaching field in technology, the student must complete a minimum of 48 semester hours in Engineering Technology and 21 semester hours in Secondary Education. The courses listed above are required of all students who are majoring in Engineering Technology and seeking a teaching certificate. The student should be advised by the Engineering Technology/Industrial Education teacher educator. Contact the advisor at (936) 294-1216, or seek advisement for Engineering Technology at the SAM Center.

First Year

| Fall | Hours Spring | Hours |
|--|--|--------------|
| Component Area I (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareai) | 3 Component Area I (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareai) | 3 |
| Component Area IX (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix) | 1 Component Area III (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiii) | 4 |
| ETDD 1361 | 3 Component Area IV (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiiv) | 3 |
| ETCM 1363 | 3 ETEC 1010 | 1-2 |
| ETEE 1340 | 3 ETEE 2320 | 3 |
| MATH 1314 ¹ | 3 MATH 1316 ¹ | 3 |
| | 16 | 17-18 |

Second Year

| Fall | Hours Spring | Hours |
|---|--|--------------|
| Component Area III (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiii) | 4 Component Area VI (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavi) | 3 |
| Component Area V (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareav) ² | 3 Component Area VII (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavii) | 3 |
| Component Area VI (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavi) | 3 Component Area VIII (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaviii) | 3 |
| ETDD 3310 | 3 ETCM 2363 | 3 |
| PHYS 1301 & PHYS 1101 | 4 ETEC Advanced Elective | 3 |
| | 17 | 15 |

Third Year

| Fall | Hours Spring | Hours |
|--|---------------------|--------------|
| Component Area VII (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavii) | 3 CISE 4378 | 3 |
| CISE 3384 | 3 CISE 4380 | 3 |
| ETEC Program Advanced Electives | 6 ETEC 4340 | 3 |
| PHYS 1302 & PHYS 1102 | 4 INED 4363 | 3 |
| | INED 4364 | 3 |
| | 16 | 15 |

Fourth Year

| Fall | Hours Spring | Hours |
|-------------|--|--------------|
| CISE 4364 | 3 Component Area IX (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix) | 3 |

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|---------------------------------|--------------------------|----|
| CISE 4379 | 3 CISE 4394 | 3 |
| ETEC Program Advanced Electives | 3 CISE 4396 | 3 |
| INED 4310 | 3 CISE 4397 | 3 |
| INED 4391 | 3 MATH 3379 or ENGL 3330 | 3 |
| | 15 | 15 |

Total Hours: 126-127

¹ MATH 1316 (catalog.shsu.edu/archives/2019-2020/search/?P=MATH%201316) or MATH 1314 (catalog.shsu.edu/archives/2019-2020/search/?P=MATH%201314) or MATH 1420 (catalog.shsu.edu/archives/2019-2020/search/?P=MATH%201420) or MATH 1324 (catalog.shsu.edu/archives/2019-2020/search/?P=MATH%201324) satisfies the Core Curriculum requirement for Component Area II (Mathematics) and the Degree Specific requirement. MATH 1420 (catalog.shsu.edu/archives/2019-2020/search/?P=MATH%201420) also satisfies 1 semester credit hour of the Core Curriculum requirement for Component Area IX (Component Area Option).

² PLSC 2399 is suggested.