# BACHELOR OF SCIENCE, MAJOR IN ENGINEERING TECHNOLOGY WITH TEACHING CERTIFICATION

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|---|---|---|
| **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** | | |
| Select one of the following: | | 3 |
| MATH 1314 | Pre Calculus Algebra | |
| MATH 1324 | Mth For Mngl Decision Making | |
| MATH 1420 | Calculus I | |
| Select one of the following: [1] | | 3 |
| MATH 1316 | Plane Trigonometry [1] | |
| MATH 1430 | Calculus II | |
| MATH 2399 | Mth For Mngl Decision Making | |
| PHYS 1301<br>& PHYS 1101 | General Phy-Mechanics & Heat<br>and General Physics Laboratory I | 4 |
| PHYS 1302<br>& PHYS 1102 | Gen Phy-Snd,Lght, Elec, & Mag<br>and General Physics Laboratory II | 4 |
| ACOM 3360 | Communication Skills for Agriculturists | 3 |
| **Major Core** | | |
| ETEC 1100 | Foundations in Engr Technology | 1 |
| ETEE 1340 | Electronics Technology I | 3 |
| ETEC 1371 | Descriptive Geometry | 3 |
| ETDD 1361 | Engineering Graphics | 3 |
| or ETDD 1390 | Intro -Computer Aided Drafting | |
| ETCM 1363 | Wood Frame Construction | 3 |
| **Major** | | |
| ETEE 2320 | Electronics Technology II | 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 4364 | Teaching in Schools & Industry | 3 |
| INED 4391 | Lab Mgt,Organization & Control | 3 |
| 12 hours 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 4377 | Assmt Stdnt Lrng In Secondary | 3 |
| CISE 4378 | Content Literacy | 3 |
| CISE 4380 | Respon Of Pro Educator | 3 |
| CISE 4394 | Creatng Env For Lrng-Secondary | 3 |

| | | |
|---|---|---|
| CISE 4396 | Std Tch Secondary Classroom | 3 |
| or CISE 4397 | Std Tch Secondary Classroom | |
| Total Hours | | 123 |

[1] MATH 1316 or MATH 1314 or MATH 1420 or MATH 1324 satisfies the requirement for Component Area II and the degree specific requirement.

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 Industrial Technology and 21 semester hours in Secondary Education. The courses listed above are required of all students who are majoring in Industrial Technology and seeking a teaching certificate. The student should be advised by the Industrial Sciences and Technology teacher educator. Contact the advisor at (936) 294-1216, or seek advisement for Industrial Sciences at the SAM Center.

**First Year**

| Fall | Hours | Spring | Hours |
|---|---|---|---|
| ETEE 1340 | 3 | ETEC 1100 | 1 |
| ETDD 1361 or 1390 | 3 | ETEE 2320 | 3 |
| ETCM 1363 | 3 | PHYS 1301<br>& PHYS 1101 | 4 |
| MATH 1314, 1324, or 1420[1] | 3 | 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 III (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiii) | 4 |
| Component Area IX (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix) | 1 | Component Area IV (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiv) | 3 |
| | 16 | | 18 |

**Second Year**

| Fall | Hours | Spring | Hours |
|---|---|---|---|
| ETDD 3310 | 3 | ETEC 1371 | 3 |
| MATH 1316, 2399, or 1430 | 3 | ETCM 2363 | 3 |
| 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 (PLSC 2399 is suggested) | 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 |
| | 16 | | 15 |

**Third Year**

| Fall | Hours | Spring | Hours |
|---|---|---|---|
| CISE 3384 | 3 | INED 4364 | 3 |
| PHYS 1302<br>& PHYS 1102 | 4 | ETEC 4340 | 3 |
| Component Area VII (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavii) | 3 | CISE 4364 | 3 |
| ETEC Program Advanced Electives | 6 | CISE 4377 | 3 |
| | | CISE 4380 | 3 |
| | 16 | | 15 |

**Fourth Year**

| Fall | Hours | Spring | Hours |
|---|---|---|---|
| INED 4310 | 3 | Component Area IX (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix) | 3 |
| ETEC Program Advanced Electives | 6 | ACOM 3360 | 3 |
| INED 4391 | 3 | CISE 4394 | 3 |
| CISE 4378 | 3 | CISE 4397 or 4396 | 3 |
| | 15 | | 12 |

Total Hours: 123

[1] Satisfies Component Area II. MATH 1420 also satisfies one hour of Component Area IX.