

Program Change Request

Date Submitted: 10/12/18 7:35 pm

Viewing: **BS-ESET : Electronic Systems Engineering Technology - BS**

Last approved: 03/27/18 6:05 pm

Last edit: 11/08/18 8:21 pm

Changes proposed by: mdjohnson

Catalog Pages Using this Program [Electronic Systems Engineering Technology - BS](#)

In Workflow

1. ETID Department Head
2. Curricular Services Review
3. EN Committee Preparer UG
4. EN Committee Chair UG
5. EN College Dean UG
6. UCC Preparer
7. UCC Chair Preparer
9. Faculty Senate
10. Provost II
11. President
12. Curricular Services

Contact(s)

Name	E-mail	Phone
Michael Johnson Jay Porter	mdjohnson@tamu.edu jporter@tamu.edu	979-845-4902 979-845-1459

Academic level Undergraduate
 Effective Term 2019-2020
 Department Eng Tech & Ind Distribution
 College Engineering
 Program type Degree
 Degree designation BS - Bachelor of Science
 With a major in Electronic Sys Engr Technology (ESET)
 Associated Program **Not Applicable**
 Catalog Program Title Electronic Systems Engineering Technology - BS
 CIP and Fund code 15030300

Rationale for Proposal

The **program is removing ENGR 482 from changes to the ESET curriculum since are being made to reflect changes by the course is being phased out by College of Engineering to the College. first year curriculum and to the engineering/physics courses sequences. To accommodate this removal, the program will:**

- change an existing course to a W course to account for the loss of ENGR 482.
- add an LPC course to account for the loss of ENGR 482 meeting the LPC requirement.
- add an ethics component to other courses in the curriculum to account for the loss of ENGR 482 satisfying the ABET ethics requirement. These include substituting ENGR 111, ENGR 112, PHYS 218 and PHYS 208 with ENGR 102, ENGR 216 (cross listed with PHYS 216), ENGR 217 (cross listed with PHYS 217), PHYS 206 and PHYS 207. The rationale is to continue to have the same physics theory as before augmented by real world applications in engineering. The total hours do not change and the core curriculum requirements are still met.

Program hours 127
 Is this program eligible for financial aid? Yes
 Will program hours change (increase/decrease) No

Approval Path

1. 10/12/18 7:43 pm Michael Johnson (mdjohnson): Approved for ETID Department Head
2. 10/16/18 5:23 pm Sandra Williams (sandra-williams): Approved for Curricular Services Review
3. 10/18/18 5:06 pm Eileen Hoy (ehoy): Approved for EN Committee Preparer UG
4. 10/18/18 5:53 pm Prasad Enjeti (enjeti): Approved for EN Committee Chair UG
5. 10/18/18 5:56 pm Prasad Enjeti (enjeti): Approved for EN College Dean UG
6. 10/19/18 2:16 pm Sandra Williams (sandra-williams): Approved for UCC Preparer
7. 11/05/18 3:09 pm Sandra Williams (sandra-williams): Approved for UCC Chair

History

1. Feb 13, 2017 by Jay Porter (jporter)
2. Mar 27, 2018 by Jay Porter (jporter)

due to the proposed
curriculum changes?

Program delivery mode On-campus

Catalog Program Requirements

Plan of Study Grid

Second Year

Fall

	Semester Credit Hours
ENGR 217/PHYS 217 Experimental Physics and Engineering Lab III - Electricity and Magnetism 12	12
ESET 210 Circuit Analysis 1	4
ESET 219 Digital Electronics 1	4
ESET 269 Embedded Systems Development in C 1	3
PHYS 207 Electricity and Magnetism for Engineering and Science 1	3
Semester Credit Hours	16

Spring

ESET 211 Power Systems and Circuit Applications 1	3
ESET 315 Local-and-Metropolitan-Area Networks 1	4
ESET 329 Six Sigma and Applied Statistics 1	3
ESET 349 Microcontroller Architecture 1	4
Mathematics 1,6	3
Semester Credit Hours	17

Third Year

Fall

ESET 319 Engineering Leadership 1	3
ESET 333 Product Development 1	3
ESET 350 Analog Electronics 1	4
ESET 355 Electromagnetics and High Frequency Systems 1	4
ESET 369 Embedded Systems Software 1	4
Semester Credit Hours	18

Spring

ESET 352 Electronics Testing I 1	4
ESET 359 Electronic Instrumentation 1	4
ESET 415 Advanced Network Systems and Security 1	3
ESET 455 Wireless Transmission Systems 1	4
High Impact Experience 7	0
ENTC 399 High Impact Experience	
University Core Curriculum 3	3
Semester Credit Hours	18

Fourth Year

Fall

ESET 419 Engineering Technology Capstone I 1	3
ESET 462 Control Systems 1	4
Technical elective 1,6	3
Select one of the following:	3
ENGL 210 Technical and Business Writing	
COMM 203 Public Speaking	
COMM 205 Communication for Technical Professions	
Semester Credit Hours	13

Spring

ESET 420 Engineering Technology Capstone II 1	2
ENGR 482/PHIL 482 Ethics and Engineering	3
Technical elective 1,6	3
University Core Curriculum 3	3
University Core Curriculum 3	3
University Core Curriculum 3	3
Semester Credit Hours	14
Total Semester Credit Hours	96

6See departmental advisor for a list of approved electives. [ENTC 485](#) is not for general use as a technical elective.

7All students are required to complete a high-impact experience in order to graduate. The list of possible high-impact experiences is available in the ETID advising office. This curriculum lists the minimum number of classes required for graduation. Additional courses may be taken.

Total Program Hours 127

Additional information

Required Proposal [ESET-Degree-Eval_Rev.pdf](#)
Forms [012218PresidentApprovalMemo.pdf](#)
[ESET_Deg_Eval.pdf](#)

Reviewer Comments **Sandra Williams (sandra-williams) (11/05/18 3:09 pm):** UCC approved November 2018.

Key: 562


[Print](#)

Detail Requirements

Michael Johnson
Oct 12, 2018 07:16 pm

Viewing: [Degree Evaluation](#) (DEGEVAL, [Email](#))
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Information for [Degree Evaluation](#)

 This is NOT an official evaluation.

Print Instructions

Program Evaluation

Limitation Correspondence: No more than 12 hours of correspondence earned through an accredited institution may be used for an undergraduate degree.

Limitation Combination: Maximum combination of 18 hours of 481, 482, 485 and/or 491 courses may be used for an undergraduate degree.

Limitation No more than 50% of courses required for the degree plan can be taken as Distance Education Courses for non-distance degree programs.

Limitation Only one of the following will satisfy the requirements for a degree: GENE 301, GENE 302, GENE 315, and GENE 320.

Limitation Only one of the following will satisfy the requirements for a degree: MATH 131, MATH 142, MATH 147, MATH 151, and MATH 171.

Limitation Only one of the following will satisfy the requirements for a degree: MATH 140, MATH 141, and MATH 166.

Limitation Only one of the following will satisfy the requirements for a degree: MATH 148, MATH 152, and MATH 172.

Limitation Only one of the following will satisfy the requirements for a degree: MATH 221, MATH 251, and MATH 253.

Limitation Only one of the following will satisfy the requirements for a degree: MATH 304, MATH 309, MATH 311, and MATH 323.

Limitation Only one of the following will satisfy the requirements for a degree: STAT 301, STAT 302, and STAT 303.

Program :	BS ESET	Catalog Term :	Fall 2018 - College Station
Campus :	College Station	Evaluation Term :	Fall 2018 - College Station
College :	Engineering	Expected Graduation Date :	
Degree :	Bachelor of Science	Request Number :	22
Level :	Undergraduate	Results as of :	Oct 12, 2018
Majors :	Electronic Sys Engr Technology	Minors :	
Departments :	Eng Tech & Ind Distribution	Concentrations :	

	Met	Credits	Courses		
		Required	Used	Required	Used
Total Required :	No	127.000	0.000		0
Program GPA :	Yes	.00	.00		
Overall GPA :	No	2.00	.00		

Other Course Information

Transfer :		0.000		0
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This is NOT an official evaluation.

Area Major Coursework (79.000 credits) - Not Met

Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course Title	Attribute	Credits	Grade	Source
No		A.	ENGR 102	2hrs											
No	AND	B.	ENGR 216 or PHYS 216	2hrs											
No	AND	C.	ENGR 217 or PHYS 217	2hrs											
No	AND	D.	ESET 210	4hrs											
No	AND	E.	ESET 211	3hrs											

No	AND	F.	ESET 219 4hrs Must make a grade of 'C' or better.
No	AND	G.	ESET 269 3hrs Must make a grade of 'C' or better.
No	AND	H.	ESET 315 4hrs Must make a grade of 'C' or better.
No	AND	I.	ESET 319 3hrs Must make a grade of 'C' or better.
No	AND	J.	ESET 329 3hrs Must make a grade of 'C' or better.
No	AND	K.	ESET 333 3hrs Must make a grade of 'C' or better.
No	AND	L.	ESET 349 4hrs Must make a grade of 'C' or better.
No	AND	M.	ESET 350 4hrs Must make a grade of 'C' or better.
No	AND	N.	ESET 352 4hrs Must make a grade of 'C' or better.
No	AND	O.	ESET 355 4hrs Must make a grade of 'C' or better.
No	AND	P.	ESET 359 4hrs Must make a grade of 'C' or better.
No	AND	Q.	ESET 369 4hrs Must make a grade of 'C' or better.
No	AND	R.	ESET 415 3hrs Must make a grade of 'C' or better.
No	AND	S.	ESET 419 3hrs Must make a grade of 'C' or better.
No	AND	T.	ESET 420 2hrs Must make a grade of 'C' or better.
No	AND	U.	ESET 455 4hrs Must make a grade of 'C' or better.
No	AND	V.	ESET 462 4hrs Must make a grade of 'C' or better.
No	AND	W.	Technical Electives 6hrs See advisor for list of approved technical electives. Must make a grade of 'C' or better.

Total Credits and GPA 0.000 .00

unofficial evaluation

Area Communication (6.000 credits) - Not Met

:																
Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
No		A.	ENGL 103 or ENGL 104				3hrs									
No	AND	B.	Communications Elect				3hrs									

Total Credits and GPA 0.000 .00

unofficial evaluation

Area Mathematics (11.000 credits) - Not Met

:																
Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
No		A.	MATH 151													

- Must have a grade of 'C' or better.
- No AND B. MATH 152
- Must have a grade of 'C' or better.
- No AND C. MATH Elective 3hrs
- Must make a grade of 'C' or better.
- Select course approved by advising department.

Total Credits and GPA 0.000 .00

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Area Life and Physical Sciences (10.000 credits) - Not Met

Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
No		A.	PHYS 206	3hrs												
No	AND	B.	PHYS 207	3hrs												
No	AND	C.	CHEM 107/117	(4hrs)												

Total Credits and GPA 0.000 .00

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Area Language, Philosophy & Culture (3.000 credits) - Not Met

Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
No		A.	ENGR 482	3hrs												

Total Credits and GPA 0.000 .00

unofficial evaluation

Area Creative Arts (3.000 credits) - Not Met

Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
No		A.	Creative Arts Requirement	3hrs												

Total Credits and GPA 0.000 .00

unofficial evaluation

Area Social and Behavioral Sciences (3.000 credits) - Not Met

Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
No		A.	Social Science Rqmt	3hrs												

Total Credits and GPA 0.000 .00

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Area : Citizenship (12.000 credits) - Not Met

Description Completion of 4 semesters of Upper-Level ROTC may be substituted for 3 hours of American History and 3 hours of Political Science.
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Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course Title	Attribute	Credits	Grade	Source
No		A.	American History	Rqmt 6hrs											
No	AND	B.	Political Science	Rqmt 6hrs											

Select from any course with the [KHIS] attribute.

Take POLS 206 and POLS 207.

Total Credits and GPA 0.000 .00

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Area : Work Not Applied - Met

Description See advisor for acceptable substitutions.
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Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course Title	Attribute	Credits	Grade	Source
No		A.	Courses not applied												

Total Credits and GPA 0.000 .00

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Area High Impact Experience - Not Met

Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course Title	Attribute	Credits	Grade	Source
No		A.	High-Impact Experience												

One course required.
A list of possible high-impact experiences is available in the ETID advising office.

Includes:

- ENTC 399

Total Credits and GPA 0.000 .00

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Area University Writing Requirement - Not Met

Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course Title	Attribute	Credits	Grade	Source
No		A.	Writing Requirement												

Two courses required.
Only sections of ESET 419; ENGR 482; PHIL 482 the Writing attribute [UWRT] may be used to satisfy this requirement.

Total Credits and GPA 0.000 .00

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Area Int'l & Cult Diversity - Not Met

Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course Title	Attribute	Credits	Grade	Source
No		A.	Int'l & Cultural Diversity	6hr											

Select from courses with the International and Cultural Diversity attribute [UICD] (except sections of BUSN 289 with the UWRT attribute).

Total Credits and GPA 0.000 .00

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Area Foreign Language - Not Met

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Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course Title	Attribute	Credits	Grade	Source
No		A.	Foreign Language Rqmt												
Complete one of the following: 1. Two years of the same foreign language in High School. 2. A two semester sequence of the same foreign language for University credit.															

Total Credits and GPA 0.000 .00

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Area : Residence Requirement - Not Met

Description A minimum of 36 hours of 300-400 level coursework must be completed at Texas A&M University. 12 hours must be in the major field.

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Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course Title	Attribute	Credits	Grade	Source
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No		A.	Residence-Major 12hrs					Select from ENGR 111, 112; ESET 300-499.							
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No	AND	B.	Residence 300-499 24hrs					Select any courses level 300-499.							
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Total Credits and GPA 0.000 .00

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Area GPR-Major - Not Met

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Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course Title	Attribute	Credits	Grade	Source
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No		A.	Major GPR - 98 hrs				95 hrs	Select from ESET 100-499; CHEM 102, 107; ENGL 103-104; ENGR 385, 482; MATH 151, 152, 251, 304, 308; PHYS 206-207; STAT 211; PHIL-482. Must maintain a GPR of 2.000 in all courses taken.							
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Total Credits and GPA 0.000 .00

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