

# Program Change Request

Date Submitted: 10/22/18 3:50 pm

Viewing: **BS-ELEN : Electrical Engineering - BS**

Last approved: 03/27/18 6:04 pm

Last edit: 11/08/18 7:35 pm

Changes proposed by: karsilay

Catalog Pages Using  
this Program

[Electrical Engineering - BS](#)

## Contact(s)

Name	E-mail	Phone
<del>Sandra Williams</del>	<del>sandra-williams@tamu.edu</del>	<del>979-845-8201</del>
Aydin Karsilayan	karsilay@tamu.edu	979-458-3555
<del>John Hurtado</del>	<del>jehurtado@tamu.edu</del>	<del>979-845-1659</del>

Academic level Undergraduate

Effective Term 2019-2020

Department Electrical & Computer Eng

College Engineering

Program type Degree

Degree designation BS - Bachelor of Science

With a major in Electrical Engineering (ELEN)

Associated Program **Not Applicable**

Catalog Program Title  
Electrical Engineering - BS

CIP and Fund code 14100100

## Rationale for Proposal

Changes are required by the College of Engineering due to program changes in the freshman year.

Program hours 128

Is this program eligible  
for financial aid? Yes

Will program hours  
change  
(increase/decrease)  
due to the proposed  
curriculum changes? No

Program delivery mode  
On-campus

## In Workflow

1. **ECEN 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**
8. **Faculty Senate Preparer**
9. Faculty Senate
10. Provost II
11. President
12. Curricular Services

## Approval Path

1. 10/16/18 9:56 am  
Aydin Karsilayan  
(karsilay): Approved for  
ECEN Department Head
2. 10/18/18 12:38 pm  
Sandra Williams  
(sandra-williams):  
Rollback to Initiator
3. 10/18/18 1:11 pm  
Aydin Karsilayan  
(karsilay): Approved for  
ECEN Department Head
4. 10/22/18 3:14 pm  
Angel Mario Carrizales  
(carr1214): Rollback to  
Initiator
5. 10/22/18 3:50 pm  
Aydin Karsilayan  
(karsilay): Approved for  
ECEN Department Head
6. 10/23/18 5:38 pm  
Angel Mario Carrizales  
(carr1214): Approved  
for Curricular Services  
Review
7. 11/17/18 8:20 am  
Eileen Hoy (ehoy):  
Approved for EN  
Committee Preparer UG
8. 11/18/18 11:34 am  
Prasad Enjeti (enjeti):  
Approved for EN  
Committee Chair UG
9. 11/18/18 12:02 pm  
Prasad Enjeti (enjeti):  
Approved for EN  
College Dean UG
10. 11/19/18 8:27 am  
Sandra Williams

## Catalog Program Requirements

(sandra-williams):

Approved for UCC

Preparer

11. 12/10/18 10:50 am

Terra Bissett (t.bissett):

Approved for UCC Chair

**History**

1. Feb 13, 2017 by Sandra

Williams (sandra-williams)

2. Mar 27, 2018 by Aydin

Karsilayan (karsilay)

## Plan of Study Grid

## Second Year

		Semester Credit Hours
Fall		
<a href="#">CSCE 121</a>	Introduction to Program Design and Concepts 1	4
<a href="#">ECEN 248</a>	Introduction to Digital Systems Design 1	4
<a href="#">MATH 251</a>	Engineering Mathematics III 1	3
<a href="#">PHYS 207</a>	Electricity and Magnetism for Engineering and Science 1	3
<a href="#">PHYS 217/ENGR 217</a>	Experimental Physics and Engineering Lab III - Electricity and Magnetism 12	12
	Semester Credit Hours	16

## Spring

<a href="#">ECEN 214</a>	Electrical Circuit Theory 1	4
<a href="#">MATH 308</a>	Differential Equations 1	3
<a href="#">MATH 311</a>	Topics in Applied Mathematics I 1	3
<a href="#">University Core Curriculum</a>	3	6
	Semester Credit Hours	16

## Third Year

Fall		
<a href="#">ECEN 314</a>	Signals and Systems 1	3
<a href="#">ECEN 322</a>	Electric and Magnetic Fields 1	3
<a href="#">ECEN 325</a>	Electronics 1	4
<a href="#">PHYS 222</a>	Modern Physics for Engineers 1	3
	Select one of the following:	3
<a href="#">ENGL 210</a>	Technical and Business Writing	
<a href="#">COMM 205</a>	Communication for Technical Professions	
<a href="#">COMM 243</a>	Argumentation and Debate	
	Semester Credit Hours	16

## Spring

<a href="#">ECEN 303</a>	Random Signals and Systems 1	3
<a href="#">ECEN 340</a>	<b>Electric Energy Conversion 1</b>	<b>3</b>
<a href="#">ECEN 350/CSCE 350</a>	Computer Architecture and Design 1	4
<a href="#">ECEN 370</a>	Electronic Properties of Materials 1	3
<a href="#">ECEN elective-6</a>		<del>3</del>
	Technical elective 6	3
<a href="#">High Impact Experience-7</a>		<del>0</del>
<a href="#">ECEN 399</a>	<b>High Impact Professional Development</b>	-
	Semester Credit Hours	16

## Fourth Year

Fall		
<a href="#">ECEN 403</a>	Electrical Design Laboratory I 1	3
<a href="#">ECEN elective 6</a>		11
<a href="#">University Core Curriculum</a>	3	3
<a href="#">High Impact Experience 7</a>		0
<a href="#">ECEN 399</a>	<b>High Impact Professional Development</b>	
	Semester Credit Hours	17
Spring		
<a href="#">ECEN 404</a>	Electrical Design Laboratory II 1	3
<a href="#">ECEN elective 6</a>		10
<a href="#">ENGR 482/PHIL 482</a>	<b>Ethics and Engineering-8</b>	<del>3</del>
<a href="#">University Core Curriculum</a>	3	3
	Semester Credit Hours	16

Total Semester Credit Hours

97

6 See advising office for list of approved electives

7 All students are required to complete a high-impact experience in order to graduate. The list of possible high-impact experiences is available in the ECEN advising office.

~~8 Fulfills the University Core Curriculum requirement for Language, Philosophy and Culture.~~

## Total Program Hours 128

### Additional information

Required Proposal Forms  
~~[ELEN-Degree-Evaluation-with-Adjustments.pdf](#)~~  
~~[012218PresidentApprovalMemo.pdf](#)~~  
[ELEN-degeval-19-20 Updated 2.pdf](#)

Reviewer Comments  
**Sandra Williams (sandra-williams) (10/18/18 12:38 pm):** Rollback: Please update the program per the email sent to cars@tamu.edu.  
**Angel Mario Carrizales (carri1214) (10/22/18 2:59 pm):** Removed documents that applied to a previous submission  
**Angel Mario Carrizales (carri1214) (10/22/18 3:14 pm):** Rollback: The sum of all areas above "Work Not Applied" is 131 credit hours. Please review the degree evaluation submitted and make the necessary corrections so that the areas above Work Not Applied add up to 128 credit hours. Also, please remove the first page in the attached document. The Degree/Certificate Revision Request Form is not used in curricular proposals.  
**Angel Mario Carrizales (carri1214) (10/23/18 5:38 pm):** Initial concerns addressed.  
**Terra Bissett (t.bissett) (12/10/18 10:50 am):** UCC approved December 2018.


Key: 561

[Print](#)

## Detail Requirements

Windy M. Lala  
 Oct 12, 2018 05:32 pm  
 Viewing: Degree Evaluation (DEGEVAL, , Email)  
 Change Student

### 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** Maximum 4 hours of ENGR 385 may be used in this degree program.
- 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.

<b>Program :</b>	BS ELEN	<b>Catalog Term :</b>	Fall 2018 - College Station
<b>Campus :</b>	College Station	<b>Evaluation Term :</b>	Fall 2018 - College Station
<b>College :</b>	Engineering	<b>Expected Graduation Date :</b>	
<b>Degree :</b>	Bachelor of Science	<b>Request Number :</b>	20
<b>Level :</b>	Undergraduate	<b>Results as of :</b>	Oct 12, 2018
<b>Majors :</b>	Electrical Engineering	<b>Minors :</b>	
<b>Departments :</b>	Electrical & Computer Eng	<b>Concentrations :</b>	

Met		Credits		Courses	
Required	Used	Required	Used	Required	Used

Detail Requirements

Total Required : No 128.000 0.000 0  
 Program GPA : Yes .00 .00  
 Overall GPA : No 2.00 .00  
 Other Course Information  
 Transfer : 0.000 0

This is NOT an official evaluation.

Area : Major Coursework ( ~~34,000~~ <sup>37.00</sup> credits ) - Not Met

Met	Condition	Rule	Subject	Attribute	Low	High	Required	Credits	Required	Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source	
No	A.	ECEN 214	4hrs																
		Must have a grade of 'C' or better.																	
No	AND	B.	ECEN 248	4hrs															
		Must have a grade of 'C' or better.																	
No	AND	C.	ECEN 303	3hrs															
		Must make a grade of 'C' or better.																	
No	AND	D.	ECEN 314	3hrs															
		Must make a grade of 'C' or better.																	
No	AND	E.	ECEN 322	3hrs															
		Must make a grade of 'C' or better.																	
No	AND	F.	ECEN 325	4hrs															
		Must make a grade of 'C' or better.																	
No	AND	<del>G.</del> <sup>H</sup>	ECEN 350	4hrs															
		Must make a grade of 'C' or better.																	
No	AND	<del>H.</del> <sup>I</sup>	ECEN 370	3hrs															
		Must make a grade of 'C' or better.																	
No	AND	<del>I.</del> <sup>J</sup>	ECEN 403	3hrs															
		Must make a grade of 'C' or better.																	
No	AND	<del>J.</del> <sup>K</sup>	ECEN 404	3hrs															
		Must make a grade of 'C' or better.																	

*G. ECEN 340 3hrs must make a grade of 'C' or better*

Total Credits and GPA 0.000 .00

unofficial evaluation

**33.0**

Area : Supporting Coursework ( ~~26,000~~ credits ) - Not Met

Description : Students must complete a minimum of 7 courses and a minimum of 24 hours.

Met	Condition	Rule	Subject	Attribute	Low	High	Required	Credits	Required	Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
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Detail Requirements

No		A.	ECEN Electives <sup>21</sup> hrs Students must complete a minimum of <sup>6</sup> courses. Select from ECEN 326, 333, 338, 351, 410-480, 489.		
No	AND	B.	MATH 251 Must earn a grade of 'C' or better		
No	AND	C.	MATH 308 Must earn a grade of 'C' or better		
No	AND	D.	MATH 311 Must earn a grade of 'C' or better		
No	AND	E.	PHYS 222 Must earn a grade of 'C' or better		
				Total Credits and GPA	0.000 .00

unofficial evaluation

**Area : Additional Coursework ( 13.000 credits ) - Not Met**

No		A.	ENGR 102 2hrs Must make a grade of 'C' or better		
No	AND	B.	ENGR 216 2hrs Must make a grade of 'C' or better		
No	AND	C.	ENGR 217 2hrs Must make a grade of 'C' or better		
No	AND	D.	Technical Electives 3hrs Select from CSCE 313-314; ESET 352; MATH 414, 442, 470-471; MEEN 221-222, 315; MSEN 222, 325; PHYS 221.		
No	AND	E.	CSCE 121 4hrs Must make a grade of 'C' or better.		
				Total Credits and GPA	0.000 .00

unofficial evaluation

**Area : Communication ( 6.000 credits ) - Not Met**

No		A.	ENGL 103 or ENGL 104 3hrs Must make a grade of 'C' or better.		
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Detail Requirements

No	AND	B.	Speech/Writing Elect 3hrs						
			Must make a grade of 'C' or better.						
			Select from COMM 205, 243; ENGL 210.						
									Total Credits and GPA
									0.000
									.00

unofficial evaluation

**Area : Mathematics ( 8.000 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 make a grade of 'C' or better							
No	AND	B.	MATH	152										
							Must make a grade of 'C' or better							
												Total Credits and GPA	0.000	.00

unofficial evaluation

**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									
							Must make a grade of 'C' or better.							
No	AND	B.	PHYS	207	3hrs									
							Must make a grade of 'C' or better.							
No	AND	C.	CHEM	107	and 117	4hrs								
							Must make a grade of 'C' or better							
												Total Credits and GPA	0.000	.00

unofficial evaluation

**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.		ENGL	402	3hrs									

*Language, Philosophy and Culture Requirement 3hrs*  
*Select three hours from any course with the language, Philosophy and culture attributes [KLPCL].*

Detail Requirements

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**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				
	Select three hours from any course with the Creative Arts attribute [KCRA].				
				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				
	Select from courses with the Social and Behavioral Science attribute [KSOC].				
				Total Credits and GPA	0.000 .00

unofficial evaluation

**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.

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				
	Select from any course with the [KHIS] attribute.				
No	B. Political Science Rqmt 6hrs				
	AND				
	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.

Met	Condition Rule Subject Attribute	Low High Required Credits	Required Courses	Term Subject Course Title Attribute	Credits Grade Source
No	A. Courses not applied				



Detail Requirements

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 ECEN advising office.

Includes:

- ECEN 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

Only sections of ECEN 403; ~~ENGR 404~~; ~~UGST 497~~ with the Writing attribute [UWRT] may be used to satisfy this requirement.

No AND B. ~~Writing Requirement~~  
**Communications**

Only sections of ECEN 404; ~~ENGR 402~~; ~~PHIL 402~~; ~~UGST 491~~ with the ~~Writing~~ attribute **Communications** may be used to satisfy this requirement.

**[UWRT]**

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 **3**

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

**Area: Cultural Discourse**  
**A. Cultural Discourse 3hr**

Detail Requirements

unofficial evaluation

Area : Foreign Language - Not Met

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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unofficial evaluation

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.

Met	Condition	Rule Subject	Attribute	Low High	Required Credits	Required Courses	Term	Subject Course	Title	Attribute	Credits	Grade	Source
No	A.	Residence-Major	12hrs										
No	B.	Residence	300-499	24hrs									

Total Credits and GPA	0.000	.00
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unofficial evaluation

Area : GPR-Major - Not Met

Met	Condition	Rule Subject	Attribute	Low High	Required Credits	Required Courses	Term	Subject Course	Title	Attribute	Credits	Grade	Source
No	A.	Major GPR	26+hrs										

Select from ECEN 100-499. Must maintain a GPR of 2.00 in all courses taken.

Total Credits and GPA	0.000	.00
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unofficial evaluation

Back to Display Options

[Print](#)