

Program Change Request

Date Submitted: 10/18/18 1:10 pm

Viewing: **BS-CEEN : Computer Engineering - BS, Electrical Engineering Track**

Last approved: 03/20/18 4:28 pm

Last edit: 11/08/18 8:02 pm

Changes proposed by: karsilay

[Computer Engineering - BS, Electrical Engineering Track](#)
Catalog Pages Using
this Program

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 3:18 pm
Angel Mario Carrizales (carri1214): Approved for Curricular Services Review
5. 10/22/18 5:28 pm
Eileen Hoy (ehoy): Approved for EN Committee Preparer UG
6. 10/22/18 8:53 pm
Prasad Enjeti (enjeti): Approved for EN Committee Chair UG
7. 10/23/18 10:07 am
Prasad Enjeti (enjeti): Approved for EN College Dean UG
8. 11/06/18 9:17 am
Sandra Williams (sandra-williams): Approved for UCC Preparer
9. 12/10/18 10:53 am
Terra Bissett (t.bissett): Approved for UCC Chair

Contact(s)

Name	E-mail	Phone
Aydin Karsilayan	karsilay@tamu.edu	979-458-3555

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	Computer Engineering - CEEN (CEEN)
Associated Program	Not Applicable

Catalog Program Title

Computer Engineering - BS, Electrical Engineering Track

CIP and Fund code 14090100

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? YesWill program hours
change
(increase/decrease)
due to the proposed
curriculum changes? NoProgram delivery mode
On-campus

Catalog Program Requirements

History

1. Feb 13, 2017 by Sandra Williams (sandra-williams)
2. Mar 20, 2018 by Aydin Karsilayan (karsilay)

Plan of Study Grid

Second Year

		Semester Credit Hours
Fall		
CSCE 121	Introduction to Program Design and Concepts 1	4
ECEN 248	Introduction to Digital Systems Design 1	4
MATH 251	Engineering Mathematics III 1	3
PHYS 207	Electricity and Magnetism for Engineering and Science 1	3
PHYS 217/ENGR 217	Experimental Physics and Engineering Lab III - Electricity and Magnetism 12	12
	Semester Credit Hours	16
Spring		
CSCE 221	Data Structures and Algorithms 1	4
CSCE 222/ECEN 222	Discrete Structures for Computing 1	3
ECEN 214	Electrical Circuit Theory 1	4
MATH 308	Differential Equations 1	3
STAT 211	Principles of Statistics I 1,6	3
or ECEN 303	or Random Signals and Systems	
	Semester Credit Hours	17

Third Year

Fall		
CSCE 313	Introduction to Computer Systems 1	4
ECEN 314	Signals and Systems 1	3
ECEN 350/CSCE 350	Computer Architecture and Design 1	4
MATH 311	Topics in Applied Mathematics I 1	3
Select one of the following:		3
ENGL 210	Technical and Business Writing	
COMM 205	Communication for Technical Professions	
COMM 243	Argumentation and Debate	
	Semester Credit Hours	17
Spring		
CSCE 315	Programming Studio 1	3
CSCE 481	Seminar 1	1
ECEN 325	Electronics 1	4
ECEN 449	Microprocessor Systems Design 1	3
ECEN 454	Digital Integrated Circuit Design 1	3
University Core Curriculum	3	3
High Impact Experience 8		0
ECEN 399	High Impact Professional Development	-
	Semester Credit Hours	17

Fourth Year

Fall		
ECEN 403	Electrical Design Laboratory I 1	3
University Core Curriculum	3	3
Area elective 7		6
ENGR elective 9		3
ENGR 482/PHIL 482 Ethics and Engineering	10	3
Engineering elective 7		3
High Impact Experience 8		0
ECEN 399	High Impact Professional Development	
	Semester Credit Hours	15
Spring		
ECEN 404	Electrical Design Laboratory II 1	3
University Core Curriculum	3	6
Area elective 7		6
	Semester Credit Hours	15
	Total Semester Credit Hours	97

6 Students intending to specialize in Communications are encouraged to take [ECEN 303](#).

7 See advising office for a listing of approved electives.

8 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.

~~9 See advising office for a listing of approved electives.~~

~~10 Fulfills the University Core Curriculum requirement for Language, Philosophy and Culture.~~

Total Program Hours 128

Additional information

Required Proposal	CEEN-Degree-Evaluation-with-Adjustments.pdf
Forms	012218PresidentApprovalMemo.pdf CEEN-degeval-19-20 Updated-1.pdf
Reviewer Comments	Sandra Williams (sandra-williams) (10/18/18 12:38 pm): Rollback: Please update the program per the email sent to cars@tam.u.edu. Angel Mario Carrizales (carri1214) (10/19/18 2:00 pm): Removed documents that applied to a previous submission Angel Mario Carrizales (carri1214) (10/19/18 2:22 pm): Edits made to conform to catalog style guidelines. Terra Bissett (t.bissett) (12/10/18 10:53 am): UCC approved December 2018.

Key: 714


[Print](#)

Detail Requirements

Windy M. Lala
Oct 12, 2018 05:28 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 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 CEEN [ECEN]	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 :	19
Level :	Undergraduate	Results as of :	Oct 12, 2018
Majors :	Computer Engineering - CEEN	Minors :	
Departments :	Electrical & Computer Eng	Concentrations :	

	Met	Credits	Courses		
		Required	Used	Required	Used
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 (47.000 credits) - Not Met

Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course Title	Attribute	Credits	Grade	Source
No		A.	CSCE 121	4hrs											
			Must have a grade of 'C' or better.												
No	AND	B.	CSCE 221	4hrs											
			Must have a grade of 'C' or better.												
No	AND	C.	CSCE 313	4hrs											
			Must have a grade of 'C' or better.												
No	AND	D.	CSCE 315	3hrs											
			Must have a grade of 'C' or better.												
No	AND	E.	CSCE 481	1hr											
			Must have a grade of 'C' or better.												
No	AND	F.	ECEN 214	4hrs											
			Must have a grade of 'C' or better.												
No	AND	G.	ECEN 248	4hrs											
			Must have a grade of 'C' or better.												
No	AND	H.	ECEN 314	3hrs											
			Must have a grade of 'C' or better.												
No	AND	I.	ECEN 325	4hrs											
			Must have a grade of 'C' or better.												
No	AND	J.	ECEN 350	4hrs											
			Must have a grade of 'C' or better.												
No	AND	K.	ECEN 449	3hrs											
			Must have a grade of 'C' or better.												
No	AND	L.	ECEN 454	3hrs											
			Must have a grade of 'C' or better.												
No	AND	M.	ECEN 403	3hrs											
			Must have a grade of 'C' or better.												
No	AND	N.	ECEN 404	3hrs											
			Must make a grade of 'C' or better.												

Total Credits and GPA 0.000 .00

unofficial evaluation

Area : Supporting Coursework (24.000 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											
			Must make a grade of 'C' or better.												
No	AND	B.	ENGR 216 or PHYS 216	2hrs											
			Must make a grade of 'C' or better.												
No	AND	C.	ENGR 217 or PHYS 217	2hrs											
			Must make a grade of 'C' or better.												
No	AND	D.	ENGR Elective	3hrs											
			Select from MATH 414, 442, 471; MEEN 221-222, 315; MSEN 222; PHYS 221-222.												
No	AND	E.	MATH 251	3hrs											
			Must make a grade of 'C' or better.												
No	AND	F.	MATH 302 or ECEN/CSCE 222	3hrs											
			Must make a grade of 'C' or better.												
No	AND	G.	MATH 308	3hrs											
			Must make a grade of 'C' or better.												
No	AND	H.	MATH 311	3hrs											
			Must make a grade of 'C' or better.												
No	AND	I.	STAT 211 or ECEN 303	3hrs											
			Must make a grade of 'C' or better.												
												Total Credits and GPA	0.000	.00	

unofficial evaluation

Area : Area Electives (12.000 credits) - Not Met

Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course Title	Attribute	Credits	Grade	Source
No		A.	Area Electives	12hrs											
			Choose at least 2 depth tracks and take 2 courses in one track for a total of 4 courses with at least 12 hours. Choose from:												
			a. Communications and Networks: CSCE 463-465; ECEN 423, 424, 434, 455, 478; MATH 470.												
			b. VLSI: ECEN 326, 468, 469, 474, 475.												
			c. Software Systems: CSCE 314, 410, 411, 431, 434, 435, 442, 465; ECEN 434, 469.												

- d. Signal/Imaging Processing and Graphics: CSCE 441, 443; ECEN 444, 447, 448.
- e. Robotics/Embedded Systems: CSCE 420, 452, 456; ECEN 420, 422.
- f. Information: CSCE 310, 436, 438, 444, 470; ECEN 455.

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												
			Must make a grade of 'C' or better.													
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 have a grade of 'C' or better.													
No	AND	B.	MATH 152													
			Must have 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 have a grade of 'C' or better.													
No	AND	B.	PHYS 207	3hrs												
			Must have a grade of 'C' or better.													

No AND C. CHEM 107/117 (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.	ENGR 482													

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

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												

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 AND B. Political Science Rqmt 6hrs
Take POLS 206 and POLS 207.

Total Credits and GPA 0.000 .00

unofficial evaluation

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											

Total Credits and GPA 0.000 .00

unofficial evaluation

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											
No	AND	B.		Writing Requirement											

Only sections of ECEN 403; ~~ENGR 401; UGST 491~~ with the Writing attribute [UWRT] may be used to satisfy this requirement.

Only sections of ECEN 404; ~~ENGR 482; PHIL 483; UGST 491~~ with the ~~Writing~~ attribute [UWRT] may be used to satisfy this requirement.

Communications
[UWRT]

Total Credits and GPA 0.000 .00

unofficial evaluation

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*

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

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								
Select from CSCE 300-499; ECEN 300-499.															
No	AND	B.	Residence 300-499				24hrs								
Select any courses level 300-499.															
													Total Credits and GPA	0.000	.00

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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 48+hrs												
			Includes CSCE 100-499; ECEN 100-499.												

Total Credits and GPA 0.000 .00

unofficial evaluation

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