

# Program Change Request

Date Submitted: 10/12/18 7:41 pm

## Viewing: **BS-MXET-SED : Multidisciplinary Engineering Technology - BS, STEM Education Track**

Last approved: 04/12/18 4:01 pm

Last edit: 11/08/18 8:27 pm

Changes proposed by: mdjohnson

Catalog Pages Using this Program [Multidisciplinary Engineering Technology - BS, STEM Education Track](#)

### 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
8. Faculty Senate Preparer
9. Faculty Senate
10. Provost II
11. President
12. Curricular Services

### Contact(s)

Name	E-mail	Phone
Michael Johnson	mdjohnson@tamu.edu	979-845-4902

Academic level Undergraduate  
 Effective Term 2019-2020  
 Department Eng Tech & Ind Distribution  
 College Engineering  
 Program type Degree w/Concentration  
 Degree designation BS - Bachelor of Science  
 With a major in Multidisciplinary Engineering Technology (MXET)  
 Associated Program **Not Applicable**  
 With a concentration in STEM Education (SED)

Catalog Program Title  
 Multidisciplinary Engineering Technology - BS, STEM Education Track

CIP and Fund code 15040300

### Rationale for Proposal

**The program is removing ENGR 482 from the curriculum since the course is being phased out by the College. 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.

Program hours 127

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

### Approval Path

1. 10/12/18 7:44 pm  
Michael Johnson (mdjohnson): Approved for ETID Department Head
2. 10/16/18 5:25 pm  
Sandra Williams (sandra-williams): Approved for Curricular Services Review
3. 10/18/18 5:07 pm  
Eileen Hoy (ehoy): Approved for EN Committee Preparer UG
4. 10/18/18 5:54 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 3:14 pm  
Sandra Williams (sandra-williams): Approved for UCC Chair

### History

1. Apr 12, 2018 by Angel Mario Carrizales (carri1214)

## Catalog Program Requirements

### Plan of Study Grid

#### Second Year

Fall Semester Credit Hours

<a href="#">ENGR 217/PHYS 217</a>	Experimental Physics and Engineering Lab III - Electricity and Magnetism	12
<a href="#">ESET 210</a>	Circuit Analysis 1	4
<a href="#">ESET 219</a>	Digital Electronics 1	4
<a href="#">MMET 207</a>	Metallic Materials 1	3
<a href="#">PHYS 207</a>	Electricity and Magnetism for Engineering and Science 1	3
	Semester Credit Hours	16

#### Spring

<a href="#">ESET 269</a>	Embedded Systems Development in C	3
<a href="#">ESET 319</a>	Engineering Leadership 1,6	3
<a href="#">ESET 350</a>	Analog Electronics	4
<a href="#">INST 210</a>	Understanding Special Populations	3
<a href="#">MMET 275</a>	Mechanics for Technologists	3
	Semester Credit Hours	16

#### Summer

Math Elective 1,7		3
	Semester Credit Hours	3

#### Third Year

##### Fall

<a href="#">MMET 370</a>	Thermodynamics for Technologists 1	4
<a href="#">MXET 375</a>	Applied Dynamic Systems 1	3
<a href="#">TEFB 322</a>	Teaching and Schooling in Modern Society 1,6	3
<a href="#">TEFB 324</a>	Teaching Skills II 1,6	3
Technical elective 1,8		4
	Semester Credit Hours	17

##### Spring

<a href="#">ESET 359</a>	Electronic Instrumentation 1	4
<a href="#">ESET 419</a>	Engineering Technology Capstone I 1	3
or <a href="#">MMET 429</a>	or Managing People and Projects in a Technological Society	
<a href="#">MMET 363</a>	Mechanical Design Applications I	3
<a href="#">TEFB 406</a>	Science in the Middle and Secondary School 1,6	3
High Impact Experience 9		0
<a href="#">ENTC 399</a>	High Impact Experience	
Technical elective 1,6,8		2
	Semester Credit Hours	15

##### Summer

<a href="#">University Core Curriculum 3</a>		6
	Semester Credit Hours	6

#### Fourth Year

##### Fall

<a href="#">EDCI 358</a>	Instructional Methods in Engineering and Technology Education 1,6	3
<a href="#">ENGR 482/PHIL 482</a>	<del>Ethics and Engineering</del>	<del>3</del>
<a href="#">ESET 420</a>	Engineering Technology Capstone II 1	2
or <a href="#">MMET 422</a>	or Manufacturing Technology Projects	
<a href="#">RDNG 465</a>	Reading in the Middle and Secondary Grades 1,6	3
<a href="#">TEFB 407</a>	Mathematics in the Middle and Senior School 1,6	3
Select one of the following:		3
<a href="#">COMM 203</a>	Public Speaking	
<a href="#">COMM 205</a>	Communication for Technical Professions	
<a href="#">ENGL 210</a>	Technical and Business Writing	
<a href="#">University Core Curriculum 3</a>		3
	Semester Credit Hours	17

##### Spring

<a href="#">MEFB 497</a>	Supervised Clinical Teaching 1,6	6
	Semester Credit Hours	6
	Total Semester Credit Hours	96

6Meets the 29 hr **STEM Education** focus area requirements.

7See a departmental advisor for a list of approved electives.

8The 6 hours of technical electives will be satisfied by taking [ESET 329](#) and [ESET 333](#). All other options must be approved in advance by the MXET program coordinator.

9All 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 ~~FS-35-191~~

Required Proposal [MXET\\_Ed\\_Deg\\_Eval.pdf](#)  
Forms

Reviewer Comments **Sandra Williams (sandra-williams) (11/05/18 3:14 pm):** UCC approved November 2018.

Key: 898


[Print](#)

# Detail Requirements

Michael Johnson  
Oct 12, 2018 07:36 pm

Viewing: [Degree Evaluation](#) (DEGEVAL, [Email](#))  
[Change Student](#)  
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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.

<b>Program :</b>	BS MXET-STEM Education	<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>	25
<b>Level :</b>	Undergraduate	<b>Results as of :</b>	Oct 12, 2018
<b>Majors :</b>	Multidisc Engineering Tech	<b>Minors :</b>	
<b>Departments :</b>	Eng Tech & Ind Distribution	<b>Concentrations :</b>	

	Met	Credits	Courses		
		Required	Used	Required	Used
<b>Total Required :</b>	No	127.000	0.000		0
<b>Program GPA :</b>	Yes	.00	.00		
<b>Overall GPA :</b>	No	2.00	.00		
<b>Other Course Information</b>					
<b>Transfer :</b>			0.000		0

This is NOT an official evaluation.

**Area :** Major Coursework ( 50.000 credits ) - Not Met

**Description** Must make a grade of 'C' or better in all courses.

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 219	4hrs										

No	AND	F.	ESET 269 3hrs Must make a grade of 'C' or better.
No	AND	G.	ESET 350 4hrs Must make a grade of 'C' or better.
No	AND	H.	ESET 359 4hrs Must make a grade of 'C' or better.
No	AND	I.	MMET 207 3hrs Must make a grade of 'C' or better.
No	AND	J.	MMET 275 3hrs Must make a grade of 'C' or better.
No	AND	K.	MMET 363 3hrs Must make a grade of 'C' or better.
No	AND	L.	MMET 370 4hrs Must make a grade of 'C' or better.
No	AND	M.	ESET 419 or MMET 429 3hrs Must make a grade of 'C' or better.
No	AND	N.	ESET 420 or MMET 422 2hrs Must make a grade of 'C' or better.
No	AND	O.	MXET 375 3hrs Must make a grade of 'C' or better.
No	AND	P.	Technical Elective 4hrs Must make a grade of 'C' or better. See advisor for approved courses

Total Credits and GPA 0.000 .00

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**Area Focus Area Coursework ( 29.000 credits ) - Not Met**

Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
No		A.	ESET 319 3hrs													
No	AND	B.	TEFB 322 3hrs													
No	AND	C.	TEFB 324 3hrs													
No	AND	D.	TEFB 406 3hrs													
No	AND	E.	TEFB 407 3hrs													
No	AND	F.	EDCI 358 3hrs													
No	AND	G.	RDNG 465 3hrs													
No	AND	H.	MEFB 497 6hrs													
No	AND	I.	Technical Elective 2hrs													

Total Credits and GPA 0.000 .00

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**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.	Communication Reqmt 3hrs Select from COMM 203, 205; ENGL 210.													

Total Credits and GPA 0.000 .00

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**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	4hrs											
No	AND	B.	MATH 152	4hrs											
No	AND	C.	Mathematics Elective	3hrs											
													Total Credits and <u>GPA</u>	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.	CHEM 107/117	4hrs											
No	AND	B.	PHYS 206	3hrs											
No	AND	C.	PHYS 207	3hrs											
													Total Credits and <u>GPA</u>	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				General LPC 3hrs							
													Total Credits and <u>GPA</u>	0.000	.00

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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											
													Total Credits and <u>GPA</u>	0.000	.00

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**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.	INST 210	3hrs											
													Total Credits and <u>GPA</u>	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.

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										
													Total Credits and <u>GPA</u>	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												
													Total Credits and <u>GPA</u>	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												
													Total Credits and <u>GPA</u>	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												
													Total Credits and <u>GPA</u>	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**

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.

Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
No		A.	Residence-Major 12hrs													
Includes ESET 300-499; MMET 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 ( 48.000 credits ) - Not Met**

Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
No		A.	Major GPR 48+hrs													
Includes ESET 100-499 and MMET 100-499; ENGR 102, 216, 217; PHYS 206, 207; CHEM 107; ENGL 103-104.																

Total Credits and GPA 0.000 .00

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