

Program Change Request

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

Viewing: **BS-MMET : Manufacturing and Mechanical Engineering Technology - BS**

Last approved: 03/27/18 6:12 pm

Last edit: 11/08/18 8:06 pm

Changes proposed by: mdjohnson

Catalog Pages Using this Program [Manufacturing and Mechanical 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
8. Faculty Senate 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	Manufacturing & Mechanical Engineering Technology (MMET)
Associated Program	Not Applicable
Catalog Program Title	Manufacturing and Mechanical Engineering Technology - BS
CIP and Fund code	15061300

Rationale for Proposal

The **program is removing ENGR 482 from** ~~changes to the MMET 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	128
Is this program eligible for financial aid?	Yes
Will program hours change	No

Approval Path

1. 10/12/18 7:44 pm
Michael Johnson (mdjohnson): Approved for ETID Department Head
2. 10/18/18 10:55 am
Angel Mario Carrizales (carri1214): Approved for Curricular Services Review
3. 10/22/18 5:30 pm
Eileen Hoy (ehoy): Approved for EN Committee Preparer UG
4. 10/22/18 9:01 pm
Prasad Enjeti (enjeti): Approved for EN Committee Chair UG
5. 10/23/18 10:07 am
Prasad Enjeti (enjeti): Approved for EN College Dean UG
6. 11/06/18 9:17 am
Sandra Williams (sandra-williams): Approved for UCC Preparer
7. 12/10/18 10:44 am
Terra Bissett (t.bissett): Approved for UCC Chair

History

1. Feb 13, 2017 by Jay Porter (jporter)
2. Apr 4, 2017 by Angel Mario Carrizales (carri1214)

(increase/decrease)
due to the proposed
curriculum changes?

3. Mar 27, 2018 by Jay
Porter (jporter)

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	
MMET 105	Engineering Graphics 1	2
MMET 181	Manufacturing and Assembly Processes I 1	3
MMET 206	Nonmetallic Materials 1	3
PHYS 207	Electricity and Magnetism for Engineering and Science 1	3
STAT 211	Principles of Statistics I 1	3
	Semester Credit Hours	16

Spring

MMET 207	Metallic Materials 1	3
MMET 275	Mechanics for Technologists 1	3
MMET 281	Manufacturing and Assembly Processes II 1	3
ISEN 302	Economic Analysis of Engineering Projects 1	2
Select one of the following:		3
ENGL 210	Technical and Business Writing	
COMM 203	Public Speaking	
COMM 205	Communication for Technical Professions	
University Core Curriculum 3		3
	Semester Credit Hours	17

Third Year

Fall

ENGR 482/PHIL 482	Ethics and Engineering	3
IDIS 300	Industrial Electricity 1	4
MMET 303	Fluid Mechanics and Power 1	4
MMET 376	Strength of Materials 1	4
MMET 380	Computer-Aided Manufacturing 1	3
University Core Curriculum 3		3
	Semester Credit Hours	18

Spring

MMET 320	Quality Assurance 1	3
MMET 361	Product Design and Solid Modeling 1	3
MMET 363	Mechanical Design Applications I 1	3
MMET 383	Manufacturing Information Systems 1	4
Technical elective 1,6		3
High Impact Experience 7		0
ENTC 399	High Impact Experience	
	Semester Credit Hours	16

Fourth Year

Fall

MMET 370	Thermodynamics for Technologists 1	4
MMET 402	Inspection Methods and Procedures 1	3
MMET 410	Manufacturing Automation and Robotics 1	3
MMET 429	Managing People and Projects in a Technological Society 1	3
MMET 463	Mechanical Design Applications II 1	3
	Semester Credit Hours	16

Spring

MMET 412	Production and Inventory Planning 1	3
MMET 422	Manufacturing Technology Projects 1	2
Technical elective 1,6		3
University Core Curriculum 3		6
	Semester Credit Hours	14
	Total Semester Credit Hours	97

6See departmental advisor for a list of approved technical electives. Students interested in Co-op may use [ENGR 385](#) for up to 3 semester credit hours. [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. The curriculum lists the minimum number of classes required for graduation. Additional courses may be taken.

Total Program Hours 128

Additional information

Required Proposal	MMET Degree Eval_Rev.pdf
Forms	012218PresidentApprovalMemo.pdf MMET_Deg_Eval.pdf
Reviewer Comments	<p>Angel Mario Carrizales (carri1214) (10/18/18 10:13 am): Curricular Services: The attached degree evaluation contains two discrepancies that have been corrected as they were cause by an data entry error on the evaluation. (ENDG 105 was listed instead of MMET 105 and the University Writing Area requirement was not displaying correctly) No action is required from the initiator.</p> <p>Angel Mario Carrizales (carri1214) (10/18/18 10:14 am): Curricular Services: The International and Cultural Diversity Area of the degree evaluation will be replaced with a new International and Cultural Diversity and Cultural Discourses Area.</p> <p>Terra Bissett (t.bissett) (12/10/18 10:44 am): UCC approved December 2018.</p>

Key: 715


[Print](#)

Detail Requirements

Michael Johnson
Oct 12, 2018 07:20 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 MMET	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 :	23
Level :	Undergraduate	Results as of :	Oct 12, 2018
Majors :	Manufacturing & Mech Engr Tech	Minors :	
Departments :	Eng Tech & Ind Distribution	Concentrations :	

	Met	Credits	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
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This is NOT an official evaluation.

Area Major Coursework (64.000 credits) - 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.	MMET 181	3hrs												
No	AND	B.	MMET 206	3hrs												
No	AND	C.	MMET 207	3hrs												
No	AND	D.	MMET 275	3hrs												
No	AND	E.	MMET 281	3hrs												

No	AND	F.	MMET 303 4hrs Must have a grade of 'C' or better.
No	AND	G.	MMET 320 3hrs Must have a grade of 'C' or better.
No	AND	H.	MMET 361 3hrs Must have a grade of 'C' or better.
No	AND	I.	MMET 363 3hrs Must have a grade of 'C' or better.
No	AND	J.	MMET 370 4hrs Must have a grade of 'C' or better.
No	AND	K.	MMET 376 4hrs Must have a grade of 'C' or better.
No	AND	L.	MMET 380 3hrs Must have a grade of 'C' or better.
No	AND	M.	MMET 383 4hrs Must have a grade of 'C' or better.
No	AND	N.	MMET 402 3hrs Must have a grade of 'C' or better.
No	AND	O.	MMET 410 3hrs Must have a grade of 'C' or better.
No	AND	P.	MMET 412 3hrs Must have a grade of 'C' or better.
No	AND	Q.	MMET 422 2hrs Must have a grade of 'C' or better.
No	AND	R.	MMET 429 3hrs Must have a grade of 'C' or better.
No	AND	S.	MMET 463 3hrs Must have a grade of 'C' or better.
No	AND	T.	IDIS 300 4hrs Must make a grade of 'C' or better.

Total Credits and GPA 0.000 .00

unofficial evaluation

Area Supporting Coursework (19.000 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.	ISEN 302 2hrs Must make a grade of 'C' or better.												
No	AND	E.	Technical Electives 6hrs Select a course approved by the program coordinator Must make a grade of 'C' or better.												
No	AND	F.	STAT 211 3hrs Must make a grade of 'C' or better.												
No	AND	G.	ENDG 105 2hrs 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.	Communication Rqmt	3hrs												
													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													
No	AND	B.	MATH 152													
													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													
No	AND	D.	CHEM 117													
													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	General LPC	3hrs											
													Total Credits and GPA	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 GPA	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.	Social Science Rqmt	3hrs												
			Select from courses with the Social and Behavioral Science attribute [KSOC].													
													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.

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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												
			Select from any course with the [KHIS] attribute.													
No	AND	B.	Political Science Rqmt	6hrs												
			Take POLS 206 and POLS 207.													
													Total Credits and <u>GPA</u>	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 <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													
			One course required. A list of possible high-impact experiences is available in the ETID advising office.													
			Includes:													
			• ENTC 399													
													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
													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 <u>GPA</u>		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 <u>GPA</u>		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												
													Select from ENDG 407-408; ENTC 300-499; IDIS 300; MMET 300-499.			
No	AND	B.	Residence 300-499	24hrs												
													Select any courses level 300-499.			
													Total Credits and <u>GPA</u>		0.000	.00

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Area : GPR-Major - Not Met

Description Must maintain a 2.0 GPA in courses listed below.

Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
No	A.		Major GPR	68+hrs												
													Includes: CHEM 102, 107; ; ENGL 103-104; ENGR 102, 216, 217, 385, 482; ESET 100-499; IDIS 300; ISEN 302; MATH 151-152; MMET 100-499; PHIL 482 ; PHYS 206-207; STAT 211.			
													Major GPR 68+hrs 65 hrs			
													Total Credits and <u>GPA</u>		0.000	.00

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