UNDERGRADUATE CURRICULUM CHANGE MEMO

Date: May 26, 2021

From: Methaq Abed, Associate Professor of Practice and Undergraduate Program Director Mechanical Engineering

Through: Jack Chessa, Chair of Mechanical Engineering

Through: Patricia Nava, Interim Dean College of Engineering

To: Art Duval, Chair of University Curriculum Committee

Proposal Title: Adding Pre-Professional Experience (MECH 4370) course

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The Mechanical Engineering department has updated their BS degree plan taking effect in Fall 2019. Pre-Professional Experience courses in the designated area have been offered; this course falls under the Solid Mechanics area category.

CURRICULUM PROPOSAL

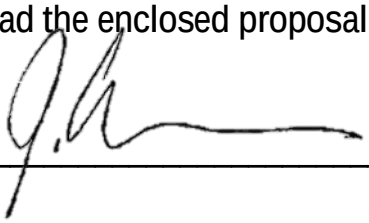
APPROVAL PAGE

Proposal Title: Adding a MECH 4370 Course in Mechanical Engineering

College: Engineering Department: Mechanical

DEPARTMENT CHAIR- Jack Chessa

I have read the enclosed proposal and approve this proposal on behalf of the department.



Signature 5/3/2021

Signature Date

COLLEGE CURRICULUM COMMITTEE CHAIR – Louis Everett

I have read the enclosed documents and approve the proposal on behalf of the college curriculum committee.

Signature Date

COLLEGE DEAN – Patricia Nava

I have read the enclosed documents and approve the proposal on behalf of the college. I certify that the necessary funds will be allocated by the college in support of this proposal.

Signature Date

From:	Granda, Virginia D
To:	Rivera, Julie A
Cc:	Nava, Patricia A.; Everett, Louis
Subject:	FW: UG COECC May 14, 2021 Approved Proposals
Date:	Monday, May 17, 2021 4:24:55 PM
Attachments:	CE-BS-in-Construction-Engineering--Catalog Update.pdf CS-Course-Prerequisites-Updates--CS-2101-CS-3350-CS-3432.pdf ECE-BS-Comp-Engr-Propoosal.pdf ME-Addition-of-MECH-4370-to-Solid-Mechanics-Area.pdf

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Good afternoon Julie,

Attached are the UG proposals that were approved by our college.

Please let us know when the proposals will be discussed in the UGCC meeting.

Best Regards,

Virginia

Virginia Granda-Becker
Coordinator for Academic Affairs and Undergraduate Studies

College of Engineering
The University of Texas at El Paso
500 W. University Ave
El Paso, TX 79968
Office: (915) 747-8011
www.utep.edu/engineering/eec

-----Original Message-----
From: Nava, Patricia A.
Sent: Monday, May 17, 2021 4:03 PM
To: Granda, Virginia D <granda@utep.edu>
Subject: Re: UG COECC May 14, 2021 Approved Proposals

All are approved.

P. Nava, Ph.D.
Interim Dean
College of Engineering
University of Texas, El Paso

On May 14, 2021, at 3:17 PM, Granda, Virginia D <granda@utep.edu> wrote:

Good afternoon Dr. Nava,

Please find attached the UG proposals that were approved by our COECC and its chair.

Can you please reply letting me know if you approve these proposals?

Best Regards,

Virginia

Virginia Granda-Becker
Coordinator for Academic Affairs and Undergraduate Studies

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El Paso, TX 79968
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www.utep.edu/engineering/eec<http://www.utep.edu/engineering/eec>

From: Everett, Louis
Sent: Friday, May 14, 2021 3:08 PM
To: Granda, Virginia D <granda@utep.edu>
Subject: Re: UG COECC May 14, 2021 Approved Proposals

I approve these.

From: Granda, Virginia D <granda@utep.edu<mailto:granda@utep.edu>>
Sent: Friday, May 14, 2021 3:07:04 PM
To: Everett, Louis <leverett@utep.edu<mailto:leverett@utep.edu>>
Subject: UG COECC May 14, 2021 Approved Proposals

Good afternoon Dr. Everett,

Attached are the UG proposals that were approved by our COECC on May 14, 2021.

Please reply if you approve these proposals as the COECC chair.

Best Regards,

Virginia

Virginia Granda-Becker
Coordinator for Academic Affairs and Undergraduate Studies

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DEGREE PLAN

Required Credits: 128

Code	Title	Hours
University Core Curriculum		
Complete the University Core Curriculum requirements.		42
Mechanical Engineering Designated Core (All courses require a grade of C or better.)		
CE 2326 Econ for Engrs & Scientists is a designated core course. It is required for graduation even if other course is used to fulfill the core. All Mechanical Engineering majors are encouraged to take CE 2326 to fulfill the core.		
Required Courses:		
CE 2326	Econ for Engrs & Scientists	3
CHEM 1305 & CHEM 1105	General Chemistry and Laboratory for CHEM 1305	4
MATH 1508	Precalculus ((Listed if completed, but not required))	3-5
or MATH 1310	Trigonometry and Conics	
PHYS 2420	Introductory Mechanics	4
Mechanical Engineering (Other Requirements) (All courses require a grade of C or better.)		
Required Courses:		
MATH 1411	Calculus I	4
MATH 1312	Calculus II	3

Code	Title	Hours
MATH 2313	Calculus III	3
MATH 2326	Differential Equations	3
Science Elective		
Select one of the following options:		4
BIOL 1305 & BIOL 1107	General Biology and Topics in Study of Life I [c]	
CHEM 1306 & CHEM 1106	General Chemistry and Laboratory for CHEM 1306 [c]	
PHYS 2421	Introductory Electromagnetism	
MATH/Science Elective		
Select one of the following:		
BIOL 1306	Organismal Biology	
MATH 3323	Matrix Algebra	
MATH 3335	Applied Analysis I	
MATH 4329	Numerical Analysis	
MATH 4336	Applied Analysis II	
PHYS 2325	Survey of Modern Physics	
PHYS 3351	Analytical Mechanics I	

Code	Title	Hours
STAT 3320	Probability and Statistics	
MATH Elective		
Select one of the following:		
MATH 3323	Matrix Algebra	
MATH 3335	Applied Analysis I	
MATH 4329	Numerical Analysis	
MATH 4336	Applied Analysis II	
STAT 3320	Probability and Statistics	
Mechanical Engineering Major		
Required Courses: [1]		
MECH 1305	Graphic & Design Fundamentals [C]	3
MECH 1321	Mechanics I-Statics [C]	3
MECH 2103	Engineering Computations [3]	1
MECH 2311	Intro to Thermal-fluid Sci [C]	3
MECH 2322	Mechanics of Materials [C]	3
MECH 2331	Matl & Manufacturing Processes [C]	3

Code	Title	Hours
MECH 2340	Mechanics II - Dynamics [C]	3
MECH 2342	Electro Mechanical Systems [C]	3
MECH 3312	Thermodynamics [3]	3
MECH 3314	Fluid Mechanics [3]	3
MECH 3334	Mechanical Design [3]	3
MECH 3345	System Dynamics [3]	3
MECH 3352	Engineering Analysis II [3]	3
MECH 4315	Heat Transfer [3]	3
MECH 4366	Senior Design Project [2, 3]	3
Select one of the following:		
MECH 2131	Manufacturing Engineering Lab [c]	
MECH 2132	Additive Manufacturing Lab [c]	
MECH 2133	Metal Casting Lab [c]	
Select two of the following:		
MECH 3103	Mechatronics Lab [3]	
MECH 3113	Thermo-fluid Lab [3]	

Code	Title	Hours
MECH 3123	Solid Mechanics Lab [3]	
Select one of the following:		
MECH 4326	Finite Element Analysis [3]	
MECH 4330	Dynamic Systems Simulation [3]	
MECH 4392	Special Topics in Computation [3]	
Select five of the following (minimum of one from each area):		
Solid Mechanics Area		
MECH 4336	Principles of Engr Design [3]	
MECH 4395	Special Topics in Mech. Engr. [3]	
MECH 4370	Pre-Professional Experience [C]	
Thermal Fluid Area		
MECH 4316	Thermal System Design [3]	
MECH 4394	Special Topics in Therm Fluid [3]	
Electro-Mechanical Area		
MECH 4346	Mechatronics [3]	
MECH 4393	Special Topics in Elect-Mech [3]	
Total Hours		**128**

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Code	Title	Hours
Course List		
C	Course require a grade of C or better.	
[1]	All institutional courses appearing in this area count towards the major GPA with a minimum of 2.0	
[2]	Must be in the last full semester and have a 2.0 GPA or better in major.	
[3]	Course requires grade of D or better	