

Academic Programs – Mechanical Engineering Program

The table of courses in the Mechanical Engineering Core should be changed to the following (highlighted in red). The change consists of:

- 1) Creation of a New Common Course on Vibration Synthesis & Analysis (EGN 4323).
- 2) Termination of Existing Courses: EML 4220 (Vibration Synthesis & Analysis).

<i>Mechanical Engineering Core</i>		
Electro-Mechanical Devices	EGM 4045	3
Fundamentals of Engineering	EGN 1002	3
Statics	EGN 3311	3
Dynamics	EGN 3321	3
Strength of Materials	EGN 3331	3
Engineering Thermodynamics	EGN 3343	3
Engineering Materials 1	EGN 3365	3
Experimental Methodology	EML 3523C	3
Fluid Mechanics	EML 3701	3
Applied Thermal Fluid Engineering	EML 4127	3
Heat Transfer	EML 4142	3
Vibration Synthesis and Analysis	EGN 4323	3
Machine Design 2	EML 4262	3
Finite Element Analysis for Engineering Design	EGM 4350	3
Machine Design 1	EML 4500	3
Engineering Design	EML 4521C	3
Design Project	EML 4551	3
Dynamic Systems	EGN 4432	3
Mechanical Engineering Lab	EML 4730L	3

The sample four-year program of study for BSME should be changed to the following (the change is highlighted in red).

Sample Four-Year Program of Study for Bachelor of Science in Mechanical Engineering

First Year, Fall (14 credits)		
College Writing 1*	ENC 1101	3
Calculus with Analytic Geometry 1	MAC 2311	4
General Chemistry 1	CHM 2045	3
General Chemistry 1 Lab	CHM 2045L	1
Fundamentals of Engineering	EGN 1002	3

First Year, Spring (14 credits)		
College Writing 2* or equivalent	ENC 1102	3
Calculus with Analytic Geometry 2	MAC 2312	4
Engineering Graphics	EGN 1111C	3
General Physics for Engineers 1	PHY 2048	3
General Physics 1 Lab	PHY 2048L	1

Second Year, Fall (14 credits)		
Statics	EGN 3311	3
Calculus with Analytic Geometry 3	MAC 2313	4
Introduction to Philosophy (GRW) or equiv.**	PHI 2010	3
Physics for Engineers 2	PHY 2044	3
General Physics 2 Lab	PHY 2049L	1

Second Year, Spring (15 credits)		
Strength of Materials	EGN 3331	3
Engineering Thermodynamics	EGN 3343	3
Computer Applications in Engineering 1	EGN 2213	3
Engineering Mathematics 1	MAP 3305	3
Foundations of Society and Human Behavior course**		3

Third Year, Fall (15 credits)		
Electro-Mechanical Devices	EGM 4045	3
Dynamics	EGN 3321	3
Fluid Mechanics	EML 3701	3
Computer Applications in Mechanical Engineering 2	EML 4534	3
History of Civilization 1 (GRW) or	WOH 2012	3

equiv**		
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Third Year, Spring (15 credits)		
Dynamic Systems	EGN 4432	3
Heat Transfer	EML 4142	3
Finite Element Analysis for Engineering Design	EGM 4350	3
Foundations of Creative Expression course**		3
Foundations of Society and Human Behavior course**		3

Third Year, Summer (12 credits)		
Probability and Statistics for Engineers	STA 4032	3
Vibration Synthesis and Analysis	EGN 4323	3
Technical Elective		3
Foundations of Creative Expression course**		3

Fourth Year, Fall (15 credits)		
Engineering Materials 1	EGN 3365	3
Experimental Methodology	EML 3523C	3
Applied Thermal Fluid Engineering	EML 4127	3
Machine Design 1	EML 4500	3
Engineering Design	EML 4521C	3

Fourth Year, Spring (14 credits)		
Machine Design 2	EML 4262	3
Design Project	EML 4551	3
Mechanical Engineering Lab	EML 4730L	3
Technical Electives		5
Total		128

* Course meets Writing Across Curriculum (Gordon Rule) requirements.

** Courses may be selected from the appropriate portion of the [Intellectual Foundations Program](#).

Approved by:	
Department Chair: <u>[Signature]</u>	Date: <u>10-8-15</u>
College Curricular Chair: <u>[Signature]</u>	<u>10/02/2015</u>
College Dean: <u>[Signature]</u>	<u>12/06/2015</u>
UUPC Chair: <u>[Signature]</u>	<u>11/12/15</u>
Undergraduate Studies Dean: <u>[Signature]</u>	<u>11/13/15</u>
UFS President: _____	_____
Provost: _____	_____