**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).

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| ***Mechanical Engineering Core*** | | |
| 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 BSOE 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 |

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| **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 |
| Physics for Engineers 1 | PHY 2048 | 3 |
| General Physics 1 Lab | PHY 2048L | 1 |

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| **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 |

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| **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 |

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| **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 equiv\*\* | WOH 2012 | 3 |

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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 |

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| **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 |

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| **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 |

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| --- | --- | --- |
| **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.](http://www.fau.edu/academic/registrar/FAUcatalog/degreerequirements.php#intellectual)

