

Computer Eng. (+14 –10)	Electrical Engineering (+36 credits)	Engineering Core (89.5 credits)	Mechanical Engineering (+39 credits)
<p>3 EE courses not required in the Computer Engineering concentration (take the 4 below instead)</p> <p>1</p> <p>Fall: 15</p> <p>Spring: 13.5</p>	<p>ELE xxx: required courses + (ELE 271, ELE 314 or ELE 342) for a minor in EE</p> <p>credits/semester</p> <p>15</p>	<p>Engineering Core (89.5 credits)</p> <p>3+ HON 101⁴ Built Environment: Energy (Entry Year Experience)</p> <p>3 HON 100⁴ Writing in Honors (College Writing)</p> <p>4+1 PHY 121⁴ General Physics I + PHY 114: lab I</p> <p>4 MAT 152⁴ Calculus A (Quantitative Reasoning)</p> <p>3+1.5 HON 113⁴ Principles of Chemistry I + CHY 114: lab I (Science Explorations)</p> <p>4+1 PHY 123⁴ General Physics II + PHY 116: lab II</p> <p>4 MAT 153⁴ Calculus B</p>	<p>MEE xxx: required courses for a minor in ME</p> <p>credits/semester</p> <p>15</p> <p>3 MEE 150⁴ Appl. Mechanics: Statics</p>
<p>2</p> <p>4 COS 161⁴ Algorithms in Programming</p> <p>19</p>	<p>4+ ELE 172⁴ Digital Logic</p> <p>4+ ELE 271 Microprocessor Systems</p> <p>Java</p> <p>18</p>	<p>3+1 _____ 160⁴ Introduction to Programming: C or Java</p> <p>3 ELE 216^{2,4} Circuits 1: Steady-State Analysis</p> <p>3 EGN 210^{2,4} Technical Writing</p> <p>4 MAT 252^{2,4} Calculus C</p> <p>3+1 ELE 217⁴ Circuits 2: System Dynamics + ELE 219: lab</p> <p>4 EGN 248⁴ Intro to Differential Equations and Linear Algebra</p> <p>3 HON 107⁴ Oral Interp. Text (Creative Expression)</p> <p>3 _____ International - if not elsewhere</p>	<p>3+1 MEE 251⁴ Strength of Materials + MEE 259: lab</p> <p>3 MEE 270 Appl. Mechanics: Dynamics</p> <p>3 MEE 230² Thermodynamics 1: Laws and Properties</p> <p>17</p>
<p>3</p> <p>4 COS 285 Data Structures</p> <p>16</p> <p>3 COS _____ Computer Science Elective (>300)</p> <p>16</p>	<p>4+ ELE 342 Electronics 1: Devices and Circuits</p> <p>3 ELE 314 Linear Signals and Systems</p> <p>4+ ELE 343 Electronics 2: Electronic Design</p> <p>3+1 EGN 325 Control Systems + EGN 329: lab</p> <p>15</p> <p>3 ELE 351 Electromagnetic Fields</p> <p>15</p> <p>3+1 ELE 486 Digital Signal Processing + ELE 489: lab</p> <p>16</p>	<p>3 ELE 323 Electromech. Energy Conversion</p> <p>3 EGN 260^{2,4} Materials Science for Engineers</p> <p>3 HON 102⁴ Honors Cultural Interpretation Topics</p> <p>3 HON 215⁴ Thinking in Honors</p> <p>3 EGN 301³ Jr Design Project, Engr. Profession (Capstone)</p> <p>3 MAT 380^{2,4} Theory of Probability and Statistics</p> <p>3 EGN 304² Engineering Economics (Cluster 1)</p> <p>3 _____ Honors Elective (HON >310)</p> <p>3 _____ Honors Elective (HON >310)</p> <p>3 _____ Honors Elective (HON >310)</p> <p>1 HON 415⁴ Honors Capstone</p>	<p>3 MEE 360 Fluid Mechanics</p> <p>3+1 MEE 331 Thermodynamics 2: Flows and Cycles + MEE 339: lab</p> <p>4+ MEE 372 Computer-Aided Design of Machine Elements</p> <p>3+1 MEE 432 Heat Transfer + MEE 439: lab</p> <p>4+ MEE 373 Design of Machines and Mechanisms</p> <p>3 _____ Eng. Elective (ELE, MEE or EGN >300)</p> <p>3+1 MEE 374 Theory and Applc. Vibrations + MEE 379: lab</p> <p>13</p>
<p>4</p> <p>3 _____ Elective (COS, EGN, ELE or MEE >300)</p> <p>15</p> <p>16</p> <p>Total Credits: 129.5</p>	<p>3 _____ Eng. Elective (ELE, MEE or EGN >300)</p> <p>3 _____ Eng. Elective (ELE, MEE or EGN >300)</p> <p>125.5</p>	<p>3 _____ Eng. Elective (ELE, MEE or EGN >300)</p> <p>Instr.</p> <p>3 EGN 402⁴ Senior Design Project (Capstone)</p> <p>3 HON 310¹ Honors Eth. Inq., Soc Resp. and Citizensh Topics</p> <p>3 HON 103⁴ Honors Socio-Cultural Analysis + Diversity Topics</p> <p>3 _____ Eng. Elective (ELE, MEE or EGN >300)</p> <p>3 _____ Eng. Elective (ELE, MEE or EGN >300)</p> <p>128.5</p>	<p>128.5</p>

+ Course containing an integral laboratory component (+1: co-registration with a 1-credit lab course). Lab pre-reqs are in the Catalog.
1 Requires completion of 3 among *Science Explorations*, *Socio-Cultural Analysis*, *Cultural Interpretation*, and *Creative Expression*.
2 Contributes to a *Thematic Cluster*. The *Thematic Cluster* requirement may be replaced by a minor.

3 Requires advisor permission, with the expectation of graduation in 3 semesters.
4 May be offered more than once/year, based on demand.
May be satisfied in conjunction with another requirement (aka double-dipping)