

# Mechanical Engineering (AES)

## Degree Pathway<sup>1</sup>



**WAUBONSEE**  
COMMUNITY COLLEGE

The following table sets out recommended courses to earn an associate degree at Waubonsee and transfer on to become a mechanical engineering major at a four-year school. Courses are mapped to the requirements of the general Associate in Arts and/or Associate in Science degrees, complete with categories noted in bold and credit hours noted in parentheses. To see the full list of degree requirements and course options, visit [waubonsee.edu/transfer](http://waubonsee.edu/transfer)

<p style="text-align: center;"><b>1<sup>st</sup> Semester</b></p> <ul style="list-style-type: none"> <li>○ <b>ENG 101</b> – First-Year Composition I (3) <i>with or without ENG 099</i><sup>2</sup></li> <li>○ <b>MTH 131</b> – Calculus With Analytic Geometry (4)<sup>2</sup></li> <li>○ <b>CHM 121</b> – General Chemistry (4)<sup>2</sup></li> <li>○ <b>CIS 115</b> – Introduction to Programming (3)<sup>4</sup></li> </ul> <p style="text-align: center;"><b>Total Credits = 14 - 15</b></p>	<p style="text-align: center;"><b>2<sup>nd</sup> Semester</b></p> <ul style="list-style-type: none"> <li>○ <b>ENG 102</b> – First-Year Composition II (3)</li> <li>○ <b>MTH 132</b> – Calculus with Analytic Geometry II (4)<sup>2</sup></li> <li>○ <b>PHY 221</b> – General Physics I (5)<sup>2,4</sup></li> <li>○ <b>CIS 130</b> – C++ Programming (3)<sup>4</sup></li> <li>○ <b>EGR 101</b> – Engineering Graphics (3)<sup>4</sup></li> </ul> <p style="text-align: center;"><b>Total Credits = 18</b></p>
<p style="text-align: center;"><b>3<sup>rd</sup> Semester</b></p> <ul style="list-style-type: none"> <li>○ <b>MTH 233</b> – Calculus With Analytic Geometry III (4)</li> <li>○ <b>PHY 222</b> – General Physics II (5)<sup>4</sup></li> <li>○ <b>EGR 220</b> – Analytic Mechanics–Statistics (3)<sup>4</sup></li> <li>○ <b>CIS 230</b> – Advanced C++ (3)<sup>4</sup></li> </ul> <p style="text-align: center;"><b>Total Credits = 15</b></p>	<p style="text-align: center;"><b>4<sup>th</sup> Semester</b></p> <ul style="list-style-type: none"> <li>○ <b>COM 100</b> - Fundamentals of Speech Communication (3)</li> <li>○ <b>MTH 240</b> – Differential Equations (3)<sup>4</sup></li> <li>○ <b>EGR 230</b> – Analytical Mechanics Dynamics (3)<sup>4</sup></li> <li>○ <b>IAI Social Behavioral <u>OR</u> Humanities &amp; Fine Arts</b> (3)<sup>3,4</sup></li> <li>○ <b>IAI Social Behavioral <u>OR</u> Humanities &amp; Fine Arts</b> (3)<sup>3,4</sup></li> <li>○ <b>IAI Social Behavioral <u>OR</u> Humanities &amp; Fine Arts</b> (3)<sup>3,4</sup></li> </ul> <p style="text-align: center;"><b>Total Credits = 18</b></p>

1. Certain colleges have specific requirements. Please see a Counselor or Advisor for detailed requirements.
2. Take your placement test and work with a counselor as certain colleges have specific requirements.
3. At least one course from Social and Behavioral Science or Humanities and Fine Arts must meet the Non-Western/Diversity requirement.
4. Please see a Counselor or Advisor for detailed requirements.

*Waubonsee does not discriminate based on any characteristic protected by law in its programs and activities.*