BS Mechanical Engineering Suggested Four Year Plan
2022 – 2023 Catalog

A grade of C- or better is required

Freshman

<table>
<thead>
<tr>
<th>Description</th>
<th>Course No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Engr &amp; CS</td>
<td>ECS 1100</td>
</tr>
<tr>
<td>Differential Calculus or Calculus I</td>
<td>Math 2413 or 2417</td>
</tr>
<tr>
<td>Introduction to Programming</td>
<td>CS 1325</td>
</tr>
<tr>
<td>Introduction to MECH I</td>
<td>MECH 1100</td>
</tr>
<tr>
<td>General Chemistry &amp; Lab</td>
<td>Chem 1311/1111</td>
</tr>
<tr>
<td>Freshman Seminar</td>
<td>UNIV 1010</td>
</tr>
</tbody>
</table>

3 hours FROM: Mech 1208

Sophomore

<table>
<thead>
<tr>
<th>Description</th>
<th>Course No</th>
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</thead>
<tbody>
<tr>
<td>Introduction to MECH II</td>
<td>MECH 1208</td>
</tr>
<tr>
<td>Integral Calculus or Calculus II</td>
<td>Math 2414 or 2419</td>
</tr>
<tr>
<td>Applied Linear Algebra</td>
<td>ENGR 2300</td>
</tr>
<tr>
<td>Mechanics and Heat</td>
<td>Phys 2325</td>
</tr>
<tr>
<td>Physics Lab I</td>
<td>Phys 2125</td>
</tr>
</tbody>
</table>

3 hours FROM: Mechanics of Several Variables (Summer) |

3 hours FROM: Choices Below

3 hours FROM: Elective

Junior

<table>
<thead>
<tr>
<th>Description</th>
<th>Course No</th>
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</thead>
<tbody>
<tr>
<td>Statics</td>
<td>Mech 2310</td>
</tr>
<tr>
<td>Differential Equations</td>
<td>Math 2420</td>
</tr>
<tr>
<td>Advanced Engineering Math</td>
<td>ENGR 3300</td>
</tr>
<tr>
<td>Electromagnetism and Waves</td>
<td>Phys 2326</td>
</tr>
<tr>
<td>Physics Lab II</td>
<td>Phys 2126</td>
</tr>
</tbody>
</table>

3 hours FROM: Choices Below

Core Curriculum Assessment | UNIV 2020 |

6 hours FROM: Choices Below

Senior

<table>
<thead>
<tr>
<th>Description</th>
<th>Course No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof &amp; Tech Communication</td>
<td>ECS 3390</td>
</tr>
<tr>
<td>Fluid Mechanics</td>
<td>Mech 3315</td>
</tr>
<tr>
<td>Kinematics &amp; Dynamics</td>
<td>Mech 3350</td>
</tr>
<tr>
<td>Computer Aided Design</td>
<td>Mech 3305</td>
</tr>
<tr>
<td>Computer Aided Design Lab</td>
<td>Mech 2105</td>
</tr>
</tbody>
</table>

3 hours FROM: Choice Below

Core Curriculum Assessment | UNIV 2020 |

3 hours FROM: Choices Below

Description Course No

Fluid Mechanics Lab MECH 2120
Mechanics of Materials MECH 2320
Dynamics MECH 2330
Thermodynamics MECH 3310
Probability and Statistics ENGR 3341

3 hours FROM: Choices Below

Description Course No

Statics Mech 2310
Differential Equations Math 2420
Advanced Engineering Math ENGR 3300
Electromagnetism and Waves Phys 2326
Physics Lab II Phys 2126

3 hours FROM: Choices Below

Core Curriculum Assessment | UNIV 2020 |

6 hours FROM: Choices Below

Description Course No

Mechanics of Materials Lab MECH 2120
Mechanics of Materials MECH 2320
Dynamics MECH 2330
Thermodynamics MECH 3310
Probability and Statistics ENGR 3341

3 hours FROM: Choices Below

Description Course No

Statics Mech 2310
Differential Equations Math 2420
Advanced Engineering Math ENGR 3300
Electromagnetism and Waves Phys 2326
Physics Lab II Phys 2126

3 hours FROM: Choices Below

Core Curriculum Assessment | UNIV 2020 |

6 hours FROM: Choices Below

Description Course No

Heat Transfer Lab Mech 3120
Systems and Controls Lab Mech 4110
Systems and Controls Mech 4310
Senior Design Project I Mech 4381

3 hours FROM: Choices Below

Description Course No

Mech Prescribed Elective (3) Mech 33xx/43xx
Mech Prescribed Elective (3) Mech 33xx/43xx

3 hours FROM: Choices Below

Description Course No

Mech Prescribed Elective 33xx/43xx
Mech Prescribed Elective 33xx/43xx

3 hours FROM: Choices Below

Description Course No

Rhet 1302
Govt 2305
Govt 2306

3 hours FROM: History 1300, 1304, 2331
Arts 1301
Danc 1310
Film 2332
Mus 1306
Theda 1310

3 hours FROM: History 2300, 2341
Huma 1301
Lit 2331
Phil 1301
Phil 1316, 1317

6 hours FROM: History 1301
History 1302
History 2301
History 2302
History 2330

6 hours FROM: ECON 2301
ECON 2302
PSY 2301
PSY 2314
SOC 1301
SOC 2300

3 hours FROM: MATH 2413

Free Elective or MATH 2413

PREQ CRITICAL PATH

May use lower level course

Legend

Courses may be taken in any order, as long as prerequisites are met.

Pre-requisite

Pre-req

Take LAB next long semester

More Courses

Description Course No

Mech Prescribed Elective 33xx/43xx
Mech Prescribed Elective 33xx/43xx

3 hours FROM: Choices Below

Description Course No

Rhet 1302
Govt 2305
Govt 2306

3 hours FROM: History 1300, 1304, 2331
Arts 1301
Danc 1310
Film 2332
Mus 1306
Theda 1310

3 hours FROM: History 2300, 2341
Huma 1301
Lit 2331
Phil 1301
Phil 1316, 1317

6 hours FROM: History 1301
History 1302
History 2301
History 2302
History 2330

6 hours FROM: ECON 2301
ECON 2302
PSY 2301
PSY 2314
SOC 1301
SOC 2300

3 hours FROM: MATH 2413