SPACE ENGINEERING

NEW

For Students following all calendars (April 18, 2023)

- Student will take EECS 2200 and 2210 in lieu of PHYS 3050 and 3150

For students following the 2022-2023 Academic Calendar:

- ESSE 3380 4.00 “Introduction to Mechatronics”, a major requirement, will not be offered Fall/Winter 2023-2024
  - Approved course substitute: Until ESSE 3380 4.00 is offered, students must complete PHYS 2030 3.00 instead

- MECH 3409 3.00 “Machine Elements Design”, a major requirement, is currently offered but will not be open to Space Engineering students at this time
  - Approved course substitute: Until MECH 3409 3.00 is available, students must complete PHYS 3250 3.00 instead

- ESSE 4380 4.00 “Mechatronic Systems and Design”, a technical elective option, will not be offered Fall/Winter 2023-2024
  - Students may select from any other available technical electives listed in the Academic Calendar
For students following the 2022-2023 Academic Calendar:

- **ESSE 3380 4.00 “Introduction to Mechatronics”,** a major requirement, will **not** be offered Fall/Winter 2023-2024
- **Approved course substitute:** Until ESSE 3380 4.00 is offered, students must complete PHYS 2030 3.00 instead

For students following the 2022-2023 Academic Calendar:

- **MECH 3409 3.00 “Machine Elements Design”,** a major requirement, is currently offered but will **not** be open to Space Engineering students at this time
- **Approved course substitute:** Until MECH 3409 3.00 is available, students must complete PHYS 3250 3.00 instead

For students following the 2022-2023 Academic Calendar:

- **ESSE 4380 4.00 “Mechatronic Systems and Design”,** a technical elective option, will **not** be offered Fall/Winter 2023-2024
- Students may select from any other available technical electives listed in the Academic Calendar
SPACE ENGINEERING

RECAP

Subject code changes:

• ENG 3330 3.00 is now ESSE 3330 3.00
• ENG 4350 6.00 is now ESSE 4350 6.00
• ENG 3320 3.00 is now ESSE 3320 3.00
• PHYS 4110 3.00 is now ESSE 4110 3.00

“Two of” Technical Electives: Students are required to complete 6.00 credits of technical electives from a “two of” list in their Academic Calendar. Students may choose from courses listed in their original Academic Calendar or they may select courses from a more recent Academic Calendar. For example:

For example, the 2016-2017 Academic Calendar states:

• Two of: LE/EECS 4421 3.00, LE/ENG 3320 3.00, LE/ENG 4330 3.00, LE/ESSE 3020 3.00; LE/ESSE 4220 3.00, LE/ESSE 4230 3.00, LE/ESSE 4610 3.00, SC/PHYS 3070 3.00, SC/PHYS 4120 3.00.

Whereas the 2022-2023 Academic Calendar states:

• Two of: LE/EECS 4421 3.00, LE/ESSE 3320 3.00, LE/ENG 4330 3.00, LE/ENG 4650 3.00, LE/ESSE 3020 3.00; LE/ESSE 3670 3.00, LE/ESSE 4220 3.00, LE/ESSE 4230 3.00, SC/PHYS 3070 3.00, SC/PHYS 4120 3.00, LE/ESSE 4380 4.00.

For students following the 2021-2022 Academic Calendar and prior:

ESSE 3380 4.00 and MECH 3409 3.00, when offered and available for Space Engineering students, can also count towards the “Two of” technical electives.
## SPACE ENGINEERING

### RECAP

<table>
<thead>
<tr>
<th>No longer offered: ESSE 2360 3.00 and ESSE 3340 3.00 will no longer be offered effective Fall/Winter 2019/2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement: ENG 2003 3.00 may be taken instead of ESSE 2360 3.00</td>
</tr>
<tr>
<td>Replacement: MECH 3302 3.00 may be taken instead of ESSE 3340 3.00</td>
</tr>
<tr>
<td>Replacement: ESSE 4610 3.00 was replaced with ESSE 3670 3.00</td>
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</tbody>
</table>

**Students following the 2014-2015 or 2015-2016 or 2016-2017 or 2017-2018 Academic Calendars:**

EECS 2031 3.00 is listed as a degree requirement:

- Previous approved course substitution: Take EECS 1541 3.00 to satisfy your EECS 2031 3.00 degree requirement.
- Approved course substitution effective Fall 2019: If EECS 1541 3.00 was not completed by Winter 2019, you must complete ESSE 2220 3.00 (not EECS 1541 3.00) to satisfy the EECS 2031 3.00 degree requirement.

**Students following the 2018-2019 Academic Calendar:**

While ESSE 2220 3.00 is listed as a degree requirement, it was not offered in the Fall/Winter 2018-2019 academic session.

- Approved course substitution: Students requiring ESSE 2220 3.00 were approved to complete EECS 2031 3.00 E/Z instead in the Fall/Winter 2018-2019 academic session only.

**If you entered in Fall/Winter 2013-2014:** If you have not yet taken ENG 2002 3.00, the approved course substitute is ESSE 2361 3.00.