

BEACH

EDGE
APPLIED PHYSICS

Recommended Roadmap

Physics B.S. + Applied Physics M.S.

| Semester | Status | Required Courses (# of units) | Elective Courses (# of units) | GE Courses | Total B.S. Units | Total Major Units | Total M.S. Units |
|---------------------------|--|--|----------------------------------|---|------------------|-------------------|------------------|
| Year 1: Fall | Lower-division courses only | PHYS 151 (4) | | <ul style="list-style-type: none"> • GE Area A2 (3) • GE Area B4 = MATH 122 (4) • GE Area C,D,E,F (3) • NSCI 190A (1) | 15 | 8 | 0 |
| Year 1: Spring | Lower-division courses only | PHYS 152 (4) | Elective (1) | <ul style="list-style-type: none"> • GE Area A1 (3) • GE Area A3 (3) • B4 = MATH 123 (4) | 15 | 8 | 0 |
| Year 2: Fall | MSDR complete with “C” or better – can declare major with 2.25 | <ul style="list-style-type: none"> • PHYS 254 (3) • PHYS 255 (1) • MATH 224 (4) | Elective (1) | <ul style="list-style-type: none"> • GE Area C,D,E,F (3) • GE Area C,D,E,F (3) | 15 | 8 | 0 |
| Year 2: Spring | | <ul style="list-style-type: none"> • MATH 247 (3) • PHYS 310 or 360 (3) • BIOL 200/211 (4) or CHEM 111A (5) | Elective (1-2) | GE Area C,D,E,F (3) | 15 | 12 | 0 |

| Semester | Status | Required Courses (# of units) | Elective Courses (# of units) | GE Courses | Total B.S. Units | Total Major Units | Total M.S. Units |
|---------------------------|--|--|---|-----------------------------|------------------|-------------------|------------------|
| Year 3: Fall | 60 units completed, eligible for EDGE, enrolled in 12+ discipline-specific units | <ul style="list-style-type: none"> • MATH 364 (3) • PHYS 320 (3) • PHYS 310 and/or 360 (3) <i>(transfers take both)</i> | <ul style="list-style-type: none"> • Elective (3) <i>(not for transfers)</i> • PHYS 390 or elective (3) | | 16 | 16 | 0 |
| Year 3: Spring | Eligible for EDGE | <ul style="list-style-type: none"> • PHYS 340A(3) • PHYS 350(3) • PHYS 496 (1) • PHYS 494 or 495 (1) | PHYS 510 (3) | GE Area UD B = MATH 361 (3) | 14 | 11 | 3 |
| Year 4: Fall | Eligible for EDGE | <ul style="list-style-type: none"> • PHYS 340B (3) • PHYS 450 (3) • MATH 380 (3) • PHYS 496 (1) | <ul style="list-style-type: none"> • PHYS 560A (3) • PHYS 545 or 546 (3) | GE UD (Area C-UD, D-UD) (3) | 16 | 10 | 6 |
| Year 4: Spring | End of B.S. degree (121 units, 85 in major); Advance to candidacy before starting M.S. | <ul style="list-style-type: none"> • PHYS 380 (4) • PHYS 390 or 434 or 465 or 447/448 (3) • PHYS 494 or 401 (1) • PHYS 496 (1) | PHYS 540A or PHYS 522 (3) | GE UD (Area C-UD, D-UD) (3) | 15 | 12 | 3 |
| Year 5: Fall | Enter graduate standing with 12 units of M.S. units from EDGE | 9-10 units of graduate coursework: <ul style="list-style-type: none"> • PHYS 550A (3) • PHYS 562 or 515 or 570 or 545 or 546 or 555 (3) • PHYS 595 (1) <i>(1 time only)</i> • PHYS 698 (3 units of thesis) | | | 0 | 9-10 | 9-10 |

| Semester | Status | Required Courses (# of units) | Elective Courses (# of units) | GE Courses | Total B.S. Units | Total Major Units | Total M.S. Units |
|---------------------------|---|---|-------------------------------|------------|------------------|-------------------|------------------|
| Year 5: Spring | End of Applied Physics M.S. degree (31 units) | 9-10 units of graduate coursework: <ul style="list-style-type: none"> • PHYS 547 or 548 (3) • PHYS 522 or 540A (3) <i>(whichever not taken in Year 4 Spring)</i> • PHYS 595 (1) <i>(1 time only)</i> • PHYS 698 (3 units of thesis) | | | 0 | 9-10 | 9-10 |

Please see [Physics B.S. + Applied Physics M.S.: Physics EDGE Program](#) for more information.