



Junior Year - Undergraduate Degree

SPRING SEMESTER

| Semester/Year | Course | Title | Hours | Grade | Applied toward BSCE? |
|-----------------------|---------|---|----------|-------|----------------------|
| | CBE 501 | Chemical & Biological Engineering Seminar | 1 | | |
| Total Semester Hours: | | | 1 | | |

Senior Year - Undergraduate Degree

FALL SEMESTER

| Semester/Year | Course | Title | Hours | Grade | Applied toward BSCE? |
|-----------------------|---------|--|----------|-------|----------------------|
| FA | CBE 586 | Introduction to Statistics and Design of Experiments | 3 | | |
| | | Technical Elective ⁽¹⁾ | 3 | | |
| Total Semester Hours: | | | 6 | | |

SPRING SEMESTER

| Semester/Year | Course | Title | Hours | Grade | Applied toward BSCE? |
|-----------------------|----------|-----------------------------------|----------|-------|----------------------|
| | NSMS 595 | ST: NSME-BME-CBE Cohort Seminar | 1 | | |
| | | Technical Elective ⁽¹⁾ | 3 | | |
| Total Semester Hours: | | | 4 | | |

First Year - MS in Chemical Engineering

FALL SEMESTER

| Semester/Year | Course | Title | Hours | Grade | Applied toward BSCE? |
|-----------------------|-----------|--|-----------|-------|----------------------|
| | NSMS 550 | Social and Ethical Issues in Nanotechnology | 1 | | |
| FA | CBE 502 | Chemical & Biological Engineering Research Practices | 3 | | |
| FA | NSMS 512 | Characterization Methods for Nanostructures | 3 | | |
| FA | NSMS 574L | Microelectronics Processing ⁽²⁾ | 3 | | |
| FA | NSMS 518 | Synthesis of Nanostructures | 3 | | |
| Total Semester Hours: | | | 13 | | |

SPRING SEMESTER

| Semester/Year | Course | Title | Hours | Grade | Applied toward BSCE? |
|---------------|----------|---|-------|-------|----------------------|
| SP | NSMS 510 | Chemistry and Physics at the Nanoscale | 3 | | |
| SP | NSMS 519 | Theory, Fabrication, and Characterization of NEMS/MEMS ⁽²⁾ | 3 | | |
| | | Technical Elective ⁽¹⁾ | 3 | | |

Total Semester Hours: **9**
Total Hours for MSCHE: **30**

(1) Technical electives are chosen with consultation of your advisor.

(2) Students can choose to take either NSME 574L or NSME 519 to fulfill the topdown fabrication course requirement.