

TAMS Traditional Science to Biomedical Engineering: 2020-2021 Catalog Year

Year One

| FALL | | SPRING | |
|----------------------------|----|------------------------------|----|
| MATH 1650, Pre-Calculus | 5 | MATH 1710, Calculus I | 4 |
| ENGL 1315, Writing I | 3 | ENGL 1325, Writing II | 3 |
| BIOL 1711, Biology I | 3 | BIOL 1722, Biology II | 3 |
| BIOL 1761, Biology Lab | 2 | CHEM 1420, Chemistry II | 3 |
| CHEM 1410, Chemistry I | 3 | CHEM 1440, Chemistry II Lab | 1 |
| CHEM 1430, Chemistry I Lab | 1 | BMEN 1400, Software for BMEN | 4 |
| Seminar | 0 | Seminar | 0 |
| Total hours | 17 | Total hours | 18 |

Year Two

| FALL | | SPRING | |
|------------------------------|----|--|----|
| MATH 1720, Calculus II | 3 | MATH 2730, Multivariable Calculus | 3 |
| PHYS 1710, Mechanics | 3 | PHYS 2220, Electricity and Magnetism | 3 |
| PHYS 1730, Mechanics Lab | 1 | PHYS 2240, Electricity and Magnetism Lab | 1 |
| ENGL 2210, World Literature | 3 | ENGL 2220, World Literature | 3 |
| HIST 2610, U.S. History I | 3 | HIST 2620, U.S. History II | 3 |
| BMEN 1300, Discover BMEN | 3 | PSCI 2305 or 2306, Government | 3 |
| TECM 2700, Technical Writing | 3 | TAMS Elective | 3 |
| Total hours | 19 | Total hours | 19 |

Year Three

| FALL | | SPRING | |
|------------------------------------|----|-----------------------------------|----|
| MATH 2700, Linear Algebra | 3 | MATH 3410, Differential Equations | 3 |
| BMEN 2210, DAQ Practices | 3 | MATH 3680, Applied Statistics | 3 |
| Elective Track Course | 3 | BMEN 2320, Instrumentation | 3 |
| PSCI 2305 or PSCI 2306, Government | 3 | Elective Track Course | 3 |
| Total Hours | 12 | Total Hours | 12 |

Year Four

| FALL | | SPRING | |
|--------------------------------|----|-----------------------------------|----|
| BMEN 3310, Human Systems | 3 | BMEN 3312, Intro. to Biomechanics | 3 |
| BMEN 3311, Signal Analysis | 3 | BMEN 3321, Biomaterials | 3 |
| BMEN 3350, Transport Phenomena | 3 | Elective Track Course | 3 |
| Elective Track Course | 3 | Creative Arts Core | 3 |
| Total Hours | 12 | Total Hours | 12 |

Year Five

| FALL | | SPRING | |
|-----------------------------|---|-----------------------------|---|
| BMEN 4310, Modeling | 3 | BMEN 4222, Senior Design II | 3 |
| *BMEN 4212, Senior Design I | 1 | *BMEN 4***, BMEN Elective | 3 |
| *BMEN 4***, BMEN Elective | 3 | *BMEN 4***, BMEN Elective | 3 |

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|-------------------------------------|----|-----------------------|----|
| Elective Track Course | 3 | Elective Track Course | 3 |
| Social and Behavioral Sciences Core | 3 | Total Hours | 12 |
| Total Hours | 13 | | |

*Master of Science Grad Track Option Available.

Completion of 9 hours of grad track during bachelor's degree plan results in 21-24 hours to earn master's degree.