Michigan Technological University
Registrar's Office

| Major Requirements: 76 - 77 Credits |  |  |
| :--- | :---: | :---: |
| Course Number | Credits | Course Status Code <br> M, R, P, WVD, SUB* |
| Biology Requirements (30 Credits) |  |  |
| BL 1100 and BL 1110 | $3 / 1$ |  |
| BL 1200 and BL 1210 | $3 / 1$ |  |
| BL 1580 | 1 |  |
| BL 2200 and BL 2210 | $3 / 1$ |  |
| BL 2700 | 3 |  |
| BL 3020 | 3 |  |
| BL 3300 | 3 |  |
| BL 3782 | 2 |  |
| BL 4030 | 3 |  |
| BL 4840 | 3 |  |
| Chemistry Requirements (11 Credits) |  |  |
| CH 1150 and CH 1151 | $3 / 1$ |  |
| CH 1160 and CH 1161 | $3 / 1$ |  |
| CH 2410 | 3 |  |
| Computer Science Requirements (18 Credits) |  |  |
| CS 1121 | 3 |  |
| CS 1122 | 3 |  |
| CS 2311 | 3 |  |
| CS 2321 | 3 |  |
| CS 3425 | 3 |  |
| CS 4321 | 3 |  |
| Mathematics Requirements (17 - 18 Credits) |  |  |
| MA 1160/1161 | $4 / 5$ |  |
| MA 2160 | 4 |  |
| MA 2330 | 3 |  |
| MA 3715 | 3 |  |
| MA 3740 | 3 |  |

Biology Capstone Requirement (2-3 Credits)
Biology Capstone Requirement (2-3 Credits)
Select either Biology Capstone option. Research credits in Biology (BL 4000/4001) may be taken individually and require arrangement with the instructor. Additional research credits beyond the capstone requirement count as free elective credits.

| requirement count as free elective credits. |  |  |
| :--- | :---: | :--- |
| BL 4510 | 2 |  |
| BL 4000 or BL 4001 and | 2 |  |
| BL 4530 | 1 |  |

## Major Electives: 9-11 Credits

| Course Number | Credits | Course Status Code <br> M, R, P, WVD, SUB* |
| :--- | :---: | :---: |
| Bioinformatics Elective (3 Credits) |  |  |
| BL 4300 | 3 |  |
| FW 4082 | 3 |  |
| FW 4099 | 3 |  |
| Approved Electives: Select at least 6 credits of approved electives <br> from the lists below. Some courses may have additional prerequisite <br> requirements. |  |  |

Biology Approved Electives

| Biology Approved Electives |  |  |
| :--- | :--- | :--- |
| BL 3210 or | 4 |  |
| BL 3310 | 3 |  |
| BL 3820 | 2 |  |
| BL 4020 | 3 |  |
| BL 4370 | 3 |  |

Chemistry Approved Electives

| CH 3510 | 3 |  |
| :--- | :--- | :--- |
| CH 5560 | 3 |  |

Computer Science Approved Electives

| CS 1142 | 3 |  |
| :--- | :--- | :--- |
| CS 3141 | 3 |  |
| CS 3311 | 3 |  |
| CS 3331 | 3 |  |
| CS 4811 | 3 |  |
| CS 4821 | 3 |  |
| CS 5811 | 3 |  |
| CS 5821 | 3 |  |
| CS 5841 | 3 |  |

Mathematics Approved Electives

| MA 3160 | 4 |  |
| :--- | :--- | :--- |
| MA 3720 | 3 |  |
| MA 4710 | 3 |  |
| MA 4720 | 3 |  |
| MA 4760 | 3 |  |
| MA 4770 | 3 |  |
| MA 4780 | 3 |  |
| MA 4790 | 3 |  |

Physics Approved Electives

| PH 2100 | 3 |  |
| :--- | ---: | ---: |
| University-Wide Approved Electives |  |  |
| UN 3002 | 2 |  |
| UN 5390 | 3 |  |

General Education Requirements: 24 Credits


Courses used to complete General Education may not be used to complete other degree requirements.

| Core: 12 Credits |  |  |
| :---: | :---: | :---: |
| UN 1015 | 3 |  |
| UN 1025 or upper level modern language | 3 |  |
| Critical and Creative Thinking | 3 |  |
| Social Responsibility and Ethical Reasoning | 3 |  |
| HASS: 12 Credits |  |  |
| $\checkmark$ Students must complete 12 credits of HASS course work <br> $\checkmark$ Six of the 12 credits must be at the 3000 - or 4000 -level* <br> $\checkmark$ At least three credits each in the following: Communication/Comp, <br> Humanities and Fine Arts, and Social \& Behavioral Sciences. <br> $\checkmark$ No more than three credits may come from the Restricted List |  |  |
| Communication/ Composition | minimum 3 |  |
| Humanities and Fine Arts | minimum 3 |  |
| Social and Behavioral Sciences | minimum 3 |  |
| Course from any list above or Restricted List | 0-3 |  |

*an upper division language course in place of UN1025 does not meet this requirement.

## Co-Curricular Activities: 3 Credits

Required for graduation, but not included in the GPA calculation or in the overall credits required for the degree.

| Co-Curricular Activities: 3 Credits |  |  |  |
| :--- | :--- | :--- | :---: |
| Required for graduation, but not included in the GPA calculation or in the <br> overall credits required for the degree. |  |  |  |
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Free Electives: 5-9 Credits

| Course Number | Credits | Course Status Code <br> M, R, P, WVD, SUB* |
| :---: | :--- | :--- |
|  |  |  |
|  |  |  |
|  |  |  |
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|  |  |  |

*M-Passed with valid grade, transfer, or Advance Placement credit; Registered in course; Plan to take in future, WVD-Waived course or credit (does not reduce total degree credits required), SUB-Petitioned as substitute course.

Advisor Use Only

| Total Credits Required | 120 |
| :--- | :---: |
| Total Credits Completed |  |
| Total Credits Needed |  |

