Michigan Technological University
Registrar's Office

Academic Year 2018-19 Bachelor of Science in Biochemistry and Molecular Biology Biology Focus SMBBUG

| Major Requirements: 67-68 Credits |  |  |  |
| :---: | :---: | :---: | :---: |
| Course Number | Credits | Course Status Code <br> M, R, P, WVD, SUB* |  |

Biology Requirements: 26 Credits

| BL 1010 | 4 |  |
| :--- | :--- | :--- |
| BL 1020 | 4 |  |
| BL 2200 | 3 |  |
| BL 3210 | 4 |  |
| BL 3300 | 3 |  |
| BL 4030 | 3 |  |
| BL 4820 | 2 |  |
| BL 4840 | 3 |  |

Chemistry Requirements: $\mathbf{2 5}$ Credits

| CH 1150 and | 3 |  |
| :--- | :--- | :--- |
| CH 1151 and | 1 |  |
| CH 1153 | 1 |  |
| CH 1160 and | 3 |  |
| CH 1161 and | 1 |  |
| CH 1163 | 1 |  |
| CH 2410 and | 3 |  |
| CH 2411 | 1 |  |
| CH 2420 and | 3 |  |
| CH 2421 | 2 |  |
| CH 3510 | 3 |  |
| CH 3540 | 3 |  |

Mathematics Requirements: 8-9 Credits

| MA 1160 OR MA 1161 | $4 / 5$ |  |
| :--- | :---: | :--- |
| MA 2160 | 4 |  |

Physics Requirements: 8 Credits

| PH 1100 | 1 |  |
| :--- | :---: | :---: |
| PH 2100 | 3 |  |
| PH 1200 | 1 |  |
| PH 2200 Credit Subtotal |  |  |
|  |  |  |


| Concentration Requirements: 29-31 Credits |  |  |
| :---: | :---: | :---: |
| Course Number | Credits | Course Status Code M, R, P, WVD, SUB* |
| BL 1580 | 1 |  |
| BL 2100 | 3 |  |
| BL 2210 | 1 |  |
| BL 2700 | 3 |  |
| BL 3012 | 3 |  |
| BL 3782 | 2 |  |
| BL 4010 | 3 |  |
| BL 4020 | 3 |  |
| MA 3715 | 3 |  |
| Biology Capstone Requirement: 4 Credits <br> Research credits in Biochemistry (BL 4995) may be taken individually and require arrangement with the instructor. Additional research credits beyond the capstone requirement count as free elective credits. |  |  |
| BL 4995 and <br> BL 4530 | $\begin{aligned} & 3 \\ & 1 \end{aligned}$ |  |
| Biochemistry and Molecular Biology Elective: <br> Select one of the following approved Biology electives: |  |  |
| BL 3190 | 3 |  |
| BL 3640 | 3 |  |
| BL 4038 | 3 |  |
| BL 4070 | 3 |  |
| BL 4140 | 3 |  |
| BL 4200 | 3 |  |
| BL 4370 | 3 |  |
| BL 4752 | 3 |  |
| BL 4800 | 5 |  |
| Credit Su |  |  |

General Education Requirements: 24 Credits

Course Number $\quad$ Credits | Course Status Code |
| :--- |
| M, R, P, WVD, SUB* |

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.

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Free Electives: 5-8 credits

| Course Number | Credits | Course Status Code <br> $\mathbf{M}, \mathbf{R}, \mathbf{P}$, 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),

