Central Connecticut State University

1615 Stanley Street
New Britain, Connecticut 06053-4010

Address:

Name:

I.D.#

email

Effective Fall 2006

# BS in Biomolecular Sciences

## Specializaton: General Program

### General Education

Study Area I -*Arts and Humanities (9)*

| | | |
|---|---|---|
| | Literature | 3 |
| | | 3 |
| | | 3 |

Study Area II - *Social Sciences (9)*

| | | |
|---|---|---|
| | HIST | 3 |
| | | 3 |
| | | 3 |

Study Area III - *Behavioral Sciences (6)*

| | | |
|---|---|---|
| | | 3 |
| | | 3 |

Study Area IV - *Natural Sciences(6-7)*

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|---|---|---|
| X | CHEM 161/162 [b] | 4 |
| X | CHEM 163/164 | 4 |

Skill Area I - *Communication Skills (6)*

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|---|---|---|
| | ENG 110 [a] | 3 |
| | | 3 |

Skill Area II - *Mathematical (6)*

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|---|---|---|
| X | MATH 119 [b, c] | 4 |
| X | MATH 125[b] or 152 [c] | 3 or 4 |

Skill Area III - *Foreign Language*

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| | 3 sequential years of one foreign language at the high school level |
| | passed the foreign language exam. |
| | completed 112 or 114 foreign language courses |
| | completed above 112 or 114 foreign language course |
| | demonstration of native proficiency in a language other than English |

Skill Area IV - *Univ. Requirements (2-3)*

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|---|---|---|
| | PE 144 Fitness/ Wellness | 2 |

### Major Requirements (35 cr)

Core Requirements

| | | | |
|---|---|---|---|
| | BMS 102 & 103 | Intro to BMS w/Lab | 4 |
| | BMS 201 | Principles of Cell & Mol Biol | 4 |
| | BMS 190 & 290 | Intro to Research I & II | 1 |
| | BMS 390 | Independent Research in BMS | 1 |
| | BMS 491 | Advanced Ind Research | 1 |
| | BMS 306 | Genetics | 4 |
| | BMS 311 | Cell Biology | 4 |
| | BMS 316 | Microbiology | 4 |

Biomolecular Electives*

| | | |
|---|---|---|
| | BMS | 4 |
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| | | |

* BMS 318, 319, 320, 322, 391, 412/413, 414, 415, 416, 490, 491, 495, 496/497, 499, 516, 519, 562, 570; CHEM 320, 454/455, 456, 458; or BIO 416, 449/450.

Portfolio Requirement

met: ☐ YES

### Related Requirements

| | | | |
|---|---|---|---|
| | CHEM 161/162 [b] | General Chem I w/ Lab | 4 |
| | CHEM 163/164 | General Chem II w/ Lab | 4 |
| | CHEM 210/211 | Organic Chem I w/ Lab | 4 |
| | CHEM 212/213 | Organic Chem II w/ Lab | 4 |
| | MATH 119 [b, c] | Pre-Calc with Trig | 3 or 4 |
| | MATH 125[b] or 152 [c] | Applied Calc or Calc I | 4 |
| | PHYS 121[c] | General Physics I | 4 |
| | PHYS 122 | General Physics II | 4 |

### Graduation Requirements

Six credit designated "international"

met: ☐ YES

First Year Experience requirement

met: ☐ YES

Electives (to complete the required 122)

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Minor (not required) [d]

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Double-counting restriction: Of the courses taken in the major and minor/concentration, a total of two courses may be counted to fulfill the Study Areas portion of the general education program.

Residency requirements: A minimum of 45 cr. at CCSU with 15 cr. in the major and 9 cr. in the minor or concentration. Eligibility for high honors requires the student to earn 62 cr. in residence at CCSU.

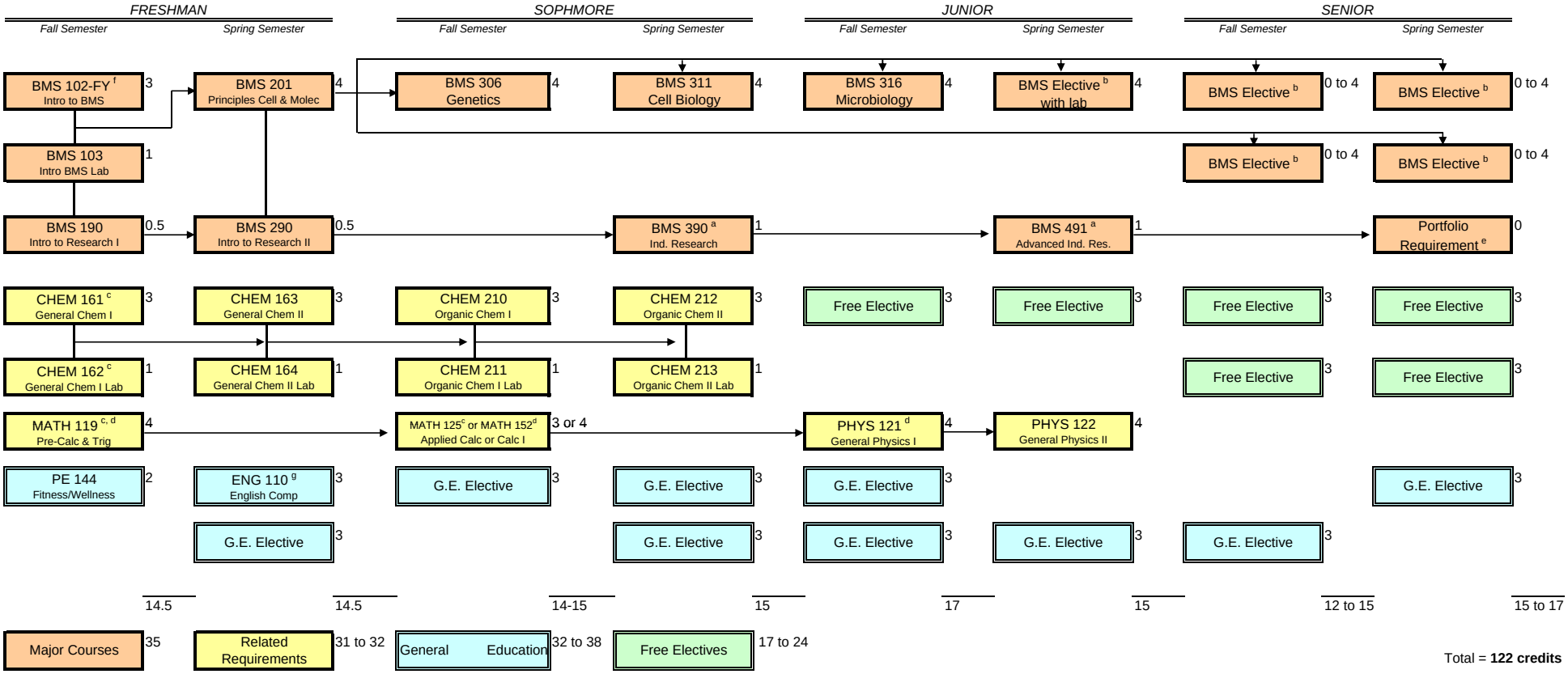
[a] Students not completing ENG 110 prior to earning 61 cr. are required to take both ENG 110 and ENG 202.

[b] MATH 101 or the Mathematics Placement Exam is a prerequisite for CHEM 161/162, and for MATH 119 and 125.

[c] MATH 119 is a prerequisite for PHYS 121. Other appropriate courses may be substituted in Skill Area II if this requirement is already met. MATH 152 is a requirement of the minor in Chemistry.

[d] A minor in Science, B.S., may be elected with a C- or better in related requirement courses CHEM 161/162, 163/164; and PHYS 121, 122.

# Bachelor of Science in Biomolecular Sciences - General Program




[a] BMS 390 and 491 give each student the opportunity to work with an individual faculty member on a research project. Students are welcomed and encouraged to discuss research opportunities with any faculty member as early as their first semester. While the required (2 cr.) project may be completed as late as the senior year, more in-depth research experiences, which may culminate in an undergraduate thesis (BMS 499), may demand an earlier start.

[b] Biomolecular course electives : BMS 318, 319, 320, 322, 391, 412/413, 415, 416, 490, 491, 495, 496/497, 499, 500, 516, 519, 562, 570; CHEM 320, 454/455, 456; BIO 416, 449/450. (Pre-requisites may include 300-level BMS and/or CHEM courses.)

[c] MATH 101 or an appropriate score on the Mathematics Placement Exam is a prerequisite for CHEM 161/162 and for MATH 119 and 125.

[d] MATH 119 is a prerequisite for PHYS 121. Other appropriate courses may be substituted in Skill Area II if this requirement is already met. MATH 152 is a requirement of the Minor in Chemistry.

[e] The Portfolio Requirement is described in the Biomolecular Sciences section of the University Catalog.

[f] First-year students must take an FYE introductory course in the first semester.

[g] Students not completing ENG 110 prior to earning 61 cr. are required to take both ENG 110 and ENG 202.