



Curricular Plan Computational Physics BS/MS

The plan below provides a roadmap for completing this academic program and the UB Curriculum within 5 years. Your actual plan may vary depending on point of entry to the university, course placement and/or waivers based on standardized test scores, earned alternative credit and/or college transfer credit.

All students are encouraged to use this plan in conjunction with other academic planning resources such as your academic advisor, the hUB Academic Advisement Report, My Planner and Path Finder tool.

In addition to following this course roadmap, all other admission and academic requirements of this major (as per the Undergraduate Catalog) must be met in order to successfully complete this degree.

First Year – Fall Semester		
Course	Category	Credit
UB Seminar	UBS	3
CSE 115	M	4
MTH 141	M/MQR	4
PHY 107/PHY 117	M/SLI 1	4
Pathway	P	3
<i>Total Credits:</i>		18

First Year – Spring Semester		
Course	Category	Credit
CSE 116	M	4
MTH 142	M	4
PHY 108/PHY 118	M/SL 2	4
PHY 158	M/SLI 2	1
ENG 105	CL 1	4
<i>Total Credits:</i>		17

Second Year – Fall Semester		
Course	Category	Credit
CSE/MTH 191	M	4
MTH 241	M	4
MTH 306	M	4
PHY 208	M	3
Pathway and Diversity Learning	P/DL*	3
<i>Total Credits:</i>		18

Second Year – Spring Semester		
Course	Category	Credit
CSE 250	M	4
PHY 207	M	4
PHY 257	M	1
Pathway	P	3
Pathway	P	3
<i>Total Credits:</i>		15

Third Year – Fall Semester		
Course	Category	Credit
CSE 442	M	4
PHY 301	M	3
PHY 401	M	3
Communication Literacy	CL 2	3
Pathway	P	3
<i>Total Credits:</i>		16

Third Year – Spring Semester		
Course	Category	Credit
MTH 309	M	4
PHY 307	M	2
CSE 305	M	4
Pathway	P	3
UBC 399	CAP	1
<i>Total Credits:</i>		14

Fourth Year – Fall Semester		
Course	Category	Credit
PHY 403	M	3
PHY 405	M	3
Elect (Prob/Stat w Calc)	M	3
PHY 505	M	3
<i>Total Credits:</i>		12

Fourth Year – Spring Semester		
Course	Category	Credit
PHY 506	M	3
PHY 552 (or 551 fall)	M	3
PHY 500-level elect. (and MS Thesis)	M	3
Elective	E	3
<i>Total Credits:</i>		12

Fifth Year – Fall Semester		
Course	Category	Credit
PHY 515	M	3
PHY 500-level elect. (and MS Thesis)	M	3
PHY 500-level elect. (and MS Thesis)	M	3
<i>Total Credits:</i>		9

Fifth Year – Spring Semester		
Course	Category	Credit
PHY 516	M	3
PHY 500-level elect. (and MS Thesis)	M	3
PHY 500-level elect. (and MS Thesis)	M	3
<i>Total Credits:</i>		9

Total Credits Required for Degree:	140
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**Approved Diversity Learning course if not met through approved major, elective, or UBC course.*

Category Legend:

M = Course Required for Major (including pre-requisites needed for admission to the major)

E = Elective (course not required for major or UB Curriculum)

The following are all components of the UB Curriculum (UBC) For more information on the UBC and course options visit: <https://catalog.buffalo.edu/policies/ubcurriculum.html>

- UBS = UB Seminar
- CL1/CL 2 = Communication Literacy (2 required)
- CAP = UB Capstone
- DL = Diversity Learning
- MQR = Math and Quantitative Reasoning
- P = Pathway Course (6 required: 3 Global, 3 Thematic)
- SLI1/SLI2 = Scientific Literacy and Inquiry (2 required)

Note: Some classes may count toward both a major (M) and UB Curriculum (UBC) requirement. Courses that count towards more than one requirement are indicated by a "/" (slash) in the category column indicating which categories the course will satisfy.