Applied Mathematics Electives		**(18)**
Select 18 credit hours [1]		18
Minor Requirement		**(15)**
Select five related courses from an area outside of applied mathematics		15
Computer Science Requirements		**(4-6)**
Select one of the following sequences:		4-6
CS 115 & CS 116	Object-Oriented Programming I and Object-Oriented Programming II	4
CS 104 & CS 201	Introduction to Computer Programming for Engineers and Accelerated Introduction to Computer Science	6
CS 105 & CS 201	Introduction to Computer Programming and Accelerated Introduction to Computer Science	6
Science Requirement		**(4)**
PHYS 123	General Physics I: Mechanics	4
Science Electives		**(9)**
Select nine credit hours		9
Humanities and Social Science Requirements		**(21)**
See Illinois Tech Core Curriculum, sections B and C		21
Interprofessional Projects (IPRO)		**(6)**
See Illinois Tech Core Curriculum, section E		6
Free Electives		**(9)**
Select nine credit hours		9

Minimum degree credits required: 128

BS Applied Mathematics

Proposed Changes:
(1) Reduce the science elective from 9 credits to 6 credits.

(2) Reduce the free electives as follows:

(i) For students who took CS 115& 116 for their CS requirement. They will take 4 credits of free elective, bring the total to 120 credits.

(ii) For students who tool CS 104 & 201 or CS 105&201 will required to take at least a 2 credits course to reach the total of 120 credits.

So the free elective will be set as (2-4 credits).

statistics

Computer Science Requirements			(7-9)
Select one of the following sequences:			4-6
CS 115 & CS 116	Object-Oriented Programming I and Object-Oriented Programming II		4
CS 104 & CS 201	Introduction to Computer Programming for Engineers and Accelerated Introduction to Computer Science		6
CS 105 & CS 201	Introduction to Computer Programming and Accelerated Introduction to Computer Science		6
CS 331	Data Structures and Algorithms		3
Natural Science and Engineering Requirements			(10)
See Illinois Tech Core Curriculum, section D			10
Humanities and Social Science Requirements			(21)
See Illinois Tech Core Curriculum, sections B and C			21
Interprofessional Projects (IPRO)			(6)
See Illinois Tech Core Curriculum, section E			6
Free Electives			(8)
Select eight credit hours			8

Minimum degree credits required: 126

BS Statistics

Proposed Changes:
(1) Add DS 100 as an option for "Intro to Profession" in addition to MATH 100.
The new requirement will read "MATH 100 or DS 100". This is reasonable for Stats students and in line with current advising practice.

(2) Reduce the free electives by 6 credits to bring the minimum degree credits required to the new minimum 120.
Thus the new free electives requirement will be set to (0-2 credits) because:
(i) A student who takes CS 115 & 116 as part of their CS requirement will need 2 or more credits of free electives.
(ii) A student who takes CS 104 & CS 201 or CS 105 & CS 201, will need no further free electives to get to the 120 credit hours.

Data Science Technical Depth		(12)
Select four of the following:		12
CS 422	Data Mining	3
CS 429	Information Retrieval	3
CS 430	Introduction to Algorithms	3
CS 451	Introduction to Parallel and Distributed Computing	3
CS 481	Artificial Intelligence Language Understanding	3
CS 522	Advanced Data Mining	3
CS 577	Deep Learning	3
CS 584	Machine Learning	3
CSP 554	Big Data Technologies	3
MATH 435	Linear Optimization	3
MATH 446	Introduction to Time Series	3
MATH 475	Probability	3
MATH 476	Statistics	3
MATH 535	Optimization I	3
MATH 546	Introduction to Time Series	3
MATH 563	Mathematical Statistics	3
MATH 564	Regression	3
MATH 569	Statistical Learning	3
MATH 574	Bayesian Computational Statistics	3

BS Data Science

Proposed Changes:
(1) Reduce the Data Science Technical Depth from 12 credits to 9 credits.

(2) Reduce Free Electives from 9 credits to 2-5 credits, subject to a minimum 120 total credits

  (i) Students who take CS 104 and CS 201 will need 2 fewer Free Electives than those who take CS 115 and CS 116.
  (ii) Students who take Math 252 and Math 350 will need 1 fewer Free Elective than those who take DS 251 and DS 351.

Overall credits reduced from 127-130 to 120 credits.