New CS & Phys B.S. Degree.

List of Mathematics Requirements:
   Math 1041 (4 cr.) Calculus I
   Math 1042 (4 cr.) Calculus II
   Math 2043 (4 cr.) Calculus III
Subtotal 12 credits

List of Computer Science Requirements:
   CIS 1068 (4 cr.) Program Design and Abstraction
   CIS 1166 (4 cr.) Mathematical Concepts in Computing I
   CIS 2107 (4 cr.) Computer Systems and Low-Level Programming
   CIS 2166 (4 cr.) Mathematical Concepts in Computing II
   CIS 2168 (4 cr.) Data Structures
   CIS 3207 (4 cr.) Introduction to Systems Programming and Operating Systems
   CIS 3223 (3 cr.) Data Structures and Algorithms
   CIS 3238 (4 cr.) Software Design or Elective (3-4 cr.)
Subtotal 30-31 credits

List of Physics Requirements:
   Phys 1061 (4 cr.) Elementary Classical Physics I
   Phys 1062 (4 cr.) Elementary Classical Physics II
   Phys 2101 (3 cr.) Classical Mechanics
   Phys 2501 (3 cr.) Computing for Scientists
   Phys 2502 (4 cr.) Mathematical Physics
   Phys 2796 (4 cr.) Introduction to Modern Physics
   Phys 3301 (3 cr.) Electricity and Magnetism
   Phys 3701 (3 cr.) Introduction to Quantum Mechanics
   Phys 4101 (3 cr.) Thermodynamics and Kinetic Theory or Elective
Subtotal 31 credits

Capstone Requirement:
   CIS 4397 (3 cr.) Independent Research or CIS 4398 (3 cr.) Projects in Computer Science or Phys 4796 (4 cr.) Experimental Physics I
Subtotal 3-4 credits

Total 76-78 credits
Comparison to CS BA:

Changed
- Phys 4796 (4 cr.) added as an alternate to CIS 4298 (3 cr.) or CIS 4397 (3 cr.)

Removed
- CIS 1001 (1 cr.) Introduction to Academics in Computer Science
- CIS 2033 (4 cr.) Computational Probability and Statistics

Added
- CIS 3223 (4 cr.) Data Structures and Algorithms
- Math 2043 (4 cr.) Calculus III
- All Physics courses beyond Phys 1062

Comparison to CS BS:

Changed
- Phys 4796 (4 cr.) added as an alternate to CIS 4298 (3 cr.) or CIS 4397 (3 cr.)

Removed
- CIS 1001 (1 cr.) Introduction to Academics in Computer Science
- CIS 2033 (4 cr.) Computational Probability and Statistics
- 14 cr. CIS Electives

Added
- Math 2043 (4 cr.) Calculus III
- All Physics courses beyond Phys 1062
Comparison to Phys BA:

**Changed**
- CIS 4298 (3 cr.) or CIS 4397 (3 cr.) added as an alternate to Phys 4796 (4 cr.)
- 1 of the 3 Physics electives specified as Phys 2501 (3 cr.) Computing for Scientists
- 1 of the 3 Physics electives specified as Phys 3701 (3 cr.) Introduction to Quantum Mechanics
- 1 of the 3 Physics electives specified as Phys 4101 (3 cr.) Thermodynamics and Kinetic Theory

**Removed**
- 2 Sequenced Science Courses

**Added**
- All CIS courses

Comparison to Phys BS:

**Changed**
- CIS 4298 (3 cr.) or CIS 4397 (3 cr.) added as an alternate to Phys 4796 (4 cr.)
- 1 of the 3 Physics electives specified as Phys 2501
- 1 of the 3 Physics electives specified as Phys 3701
- 1 of the 3 Physics electives specified as Phys 4101

**Removed**
- Phys 3101 (3 cr.) Analytical Mechanics
- Phys 3302 (3 cr.) Classical Electromagnetism
- Phys 4302 (3 cr.) Optics
- 2 Physics electives

**Added**
- All CIS courses