BYU Mathematics:

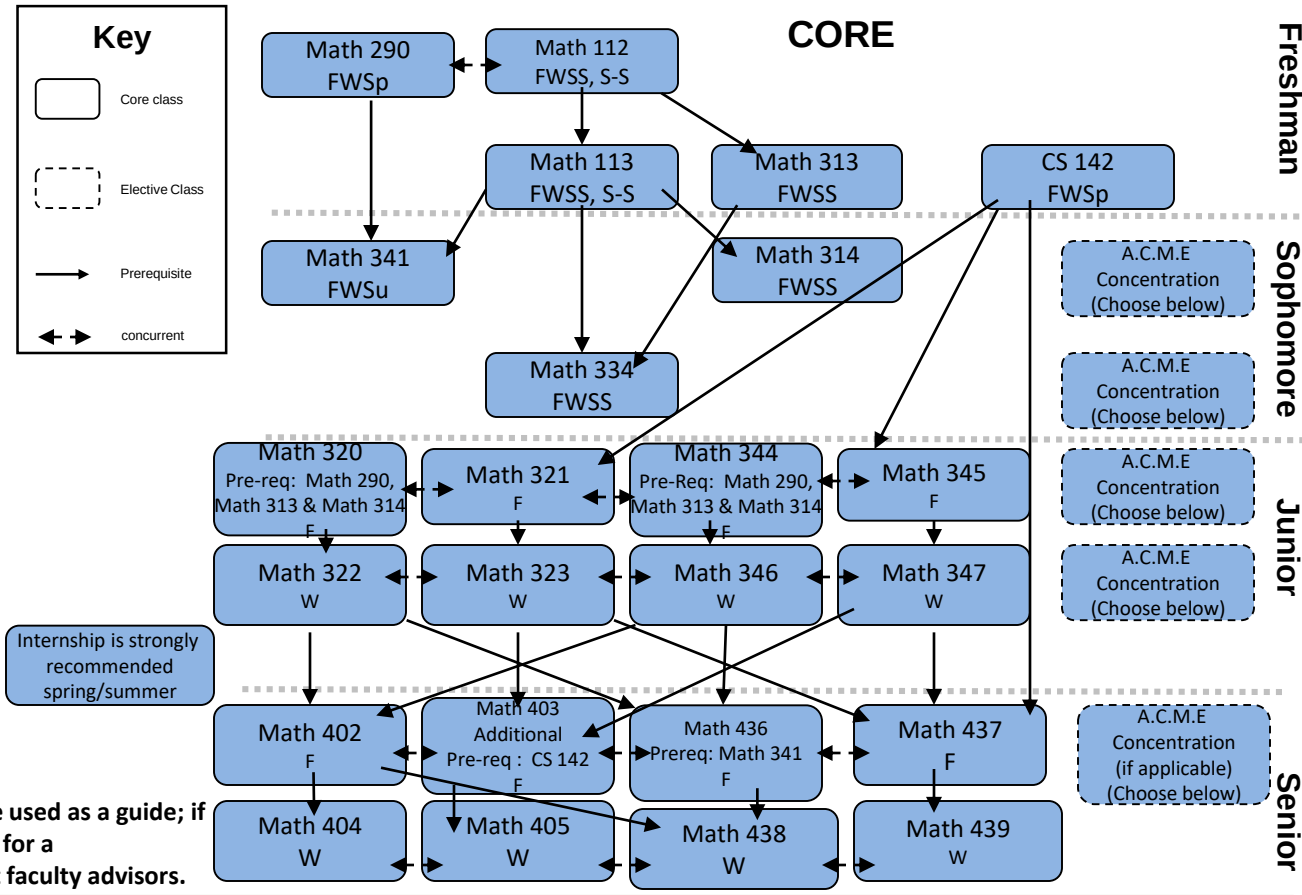
Applied & Computational Mathematics Emphasis

Requirements / Prerequisites

2018-2019 Academic Year

Major (70 Hours)

1. Complete the following core requirements: CS 142, Math 112, Math 113, Math 290, Math 313, Math 314, Math 334, Math 341.
2. Complete the following core courses during fall semester of junior year: Math 320, Math 321, Math 344, Math 345
3. Complete the following core courses during winter semester junior year: Math 322, Math 323, Math 346, Math 347.
5. An internship in the spring/summer after your junior year is strongly recommended.
6. Complete the following core requirements during fall semester of senior year: Math 402, Math 403, Math 436, Math 437.
7. Complete the following core classes during winter semester of senior year: Math 404, Math 405, Math 438, Math 439.
8. Complete a concentration from list found at http://www.acme.byu.edu/emphases/.



Complete a Concentration

Concentration lists below are used as a guide; if courses are no longer offered for a concentration, please contact faculty advisors.

Biology
Biol 130, 165, MMBio 240, PWS 340

Business Management
ACC 200, FIN 201, MKTG 201, & HRM 300

Chemical Engineering
CH EN 273, 374, 533, 541

Chemistry
Chem 111H, 112, 462, 463

Civil Engineering
Geotechnical
CE EN 103, 203, 321, 341, 424

Civil Engineering: Structures/Structural Mechanics
CE EN 103, 203, 304, 306, 321, 424

Civil Engineering: Transportation
CE EN 103, 203, 304, 306, 341, 361

Civil Engineering
Water Resources and Environmental
CE EN 103, 203, 332, 351; and CE EN 431 or 433

Computer Science
CS 142,224, 235, 236, 240

Cryptography
Talk to ACME Adviser

Data Analysis
Talk to ACME Adviser

Economics
Econ 380, 388, 580
& One of the following:
Econ 382, 478, 581, 582, 588

Electrical and Computer Engineering: Circuits
EC EN 240, 340
& one of the following
EC EN 443 or 445

Electrical and Computer Engineering: Electromagnetics
EC EN 240, 360,462
& one of the following
EC EN 464 or 466

Electrical and Computer Engineering: Signals and Systems
EC EN 240, 370, 380
& one of the following:
EC EN 483, 485, or 487

Financial Markets
Econ 388, Econ 380, Econ 382, Econ 450

Geological Sciences
Geol 111, Geol 351, Geol 352, Geol 440

Manufacturing Systems Design
Math 431 or Stat 201
MFG 480, 533, 580

Mathematical Biology
Bio 130, Math 425
& two of following:
Bio 350, 420, MMBio 240
PDBIO 360, 362, PWS 340

Mathematical Theory
Four of the following:
Math 355, 371, 372, 450 451, 465, 473, 485, 510, 532, 534, 540, 541,553, 554, 561, 562, 565, 586, 587

Mechanical Engineering: Dynamic Systems
CE EN 204, EC EN 301, ME EN 335, 431

Mechanical Engineering: Fluids & Thermodynamics
PHSCS 123,
MC EN 312, 321, 340

Physics
PHSCS 121, 220
& two of following
PHSCS 222, 321, 360, 471, 441, 442, 451

Political Science
Econ 110, Poli 200
& two of following:
Pl Sc 306R, 328, 317, 318, 344, 444

Pre_Medical
Chem 351, Chem 352, Chem 481,
Pd Bio 210 or 220,
PDBIO 305

Statistics: Actuarial Science
Stat 340, 274, 475, 230 (372 recommended)

Statistics: Biostatistics
Four of following
Stat 251, 230, 330
Hlth 345, Bio 130
MMBIO 240

Statistics
One of following:
Stat 121, 251, 201, 301
Complete:
Stat 230, 240, 330, 340

Note: When Taught is subject to change

Guide only—please consult MyMAP for full requirements.

Updated 9/10/2018