**All data based on general catalog for 2016-2017 and 2017-2018**

**http://catalog.ucdavis.edu/Programs/MAT/MATreqt.html#MAOR**

**General Mathematics (A.B.)**

Required courses:

mat12, mat21a, mat21b, mat21c, mat21d, mat22b, mat25, {mat22a AND mat108 or mat 67}, mat22al or eng6(I highlighted non-math courses required by the major)

Optional:

one of the following courses: {mat108, mat114, mat115A, mat141, mat145}

Core:

mat125a, mat125b, mat135a, mat150a

Enrichment:

18 Additional upper division mathematics units (it can be any non-repeated upper division math course)

Capstone:

One of the following {mat189, mat192, mat194, mat180}

**Secondary Teaching (A.B.)**

Required courses:

mat12, mat21a, mat21b, mat21c, mat21d, mat22b, mat25, {mat22a AND mat108 or mat 67}, mat22al or eng6

Optional:

one of the following courses {mat108, mat114, mat115A, mat141, mat145}

Core:

mat125a, mat125b, mat135a, mat150a

Enrichment:

Mat111, mat115A, mat141 and 6 units of upper division math courses

Capstone:

One of the following {mat189, mat192, mat194, mat180}

**Applied Mathematics (B.S.)**

Required courses:

mat12, mat21a, mat21b, mat21c, mat21d, mat22b, mat25, {mat22a AND mat108 or mat 67}, mat22al or eng6, ecs30, ecs40

One of the following two-quarter sequence: {phy9a, phy9b}, {bio2a, bio2b}, {che2a, che2b}, {ecn1a, ecn1b} or {sta32, sta100}

Optional:

one of the following courses {mat108, mat114, mat115A, mat141, mat145}

Core:

mat150a, mat135a, mat125a, mat125b, mat119a, mat185a and one of the following {mat128a, mat128b, mat128c}

Enrichment:

Any three math courses between mat111 and mat185b (with at least 4 units each)

Capstone:

One of the following {mat189, mat192, mat194, mat180}

**Mathematical Analytics and Operations Research (B.S.)**

Required courses:

mat12, mat21a, mat21b, mat21c, mat21d, mat22b, mat25, mat22a AND mat108 or mat 67, mat22al or eng6, ecs30, ecn1a, ecn1b, sta32 or sta100

Optional:

one of the following courses {mat108, mat114, mat115A, mat141, mat145}

Core:

mat125a, mat125b, mat128a, mat135a, mat135b, mat150a, mat160, mat168

Enrichment:

2 courses from the following {mat114, mat118a, mat118b, mat118c, mat119a, mat119b, mat128b, mat133, mat145, mat165, mat167, sta131b, sta131c, sta137}

AND

2 courses from the following {ecn100, ecn121a, ecn121b, ecn122, ecn134, ecn140, ecn145, are155, are156, are157}

Capstone:

One of the following {mat189, mat192, mat194, mat180}

**General Mathematics (B.S.)**

Required courses:

mat12, mat21a, mat21b, mat21c, mat21d, mat22b, mat25, mat22a AND mat108 or mat 67, mat22al

ecs30 or eng6, phy9a

Optional:

one of the following courses {mat108, mat114, mat115A, mat141, mat145}

Core:

mat150a, mat150b, mat150c, mat135a, mat125a, mat125b, mat185a

Enrichment:

five courses between mat111 and mat185b (at least 4 units each)

Capstone:

One of the following {mat189, mat192, mat194, mat180}

**Secondary Teaching (B.S.)**

Required courses:

mat12, mat21a, mat21b, mat21c, mat21d, mat22b, mat25, mat22a AND mat108 or mat 67, mat22al

ecs30 or eng6, one of the following courses {phy7a, phy9a, sta13, sta32, sta100}

Optional:

one of the following courses {mat108, mat114, mat115A, mat141, mat145}

Core:

mat150a, mat135a, mat125a, mat125b, mat111, mat115a, mat141

Enrichment:

five courses between mat111 and mat185b (at least 4 units each)

Capstone:

One of the following {mat189, mat192, mat194, mat180}

**Mathematical and Scientific Computation (B.S.)**

Required courses:

mat12, {mat21a, mat21b, mat21c OR mat17a, mat17b, mat17c}, mat21d, mat22b, mat25, mat22a AND mat108 or mat 67, mat22al or eng6, ecs30, ecs40

Optional:

one of the following courses {mat108, mat114, mat115A, mat141, mat145}

Core:

mat150a, mat135a, mat125a, mat125b, mat128a, mat128b, mat128c

Enrichment:

One of the following courses {mat118a, mat118b, mat118c, mat119a, mat119b, mat129, mat133, mat167, mat185a}

AND

2 courses from the following {mat111, mat114, mat115a, mat116, mat135b, mat141, mat145, mat147, mat148, mat150b, mat165}

Emphasis

a. Computational and Mathematical Biology Emphasis

mat124

b. Computational and Mathematics Emphasis

mat168

Capstone:

One of the following {mat189, mat192, mat194, mat180}

Prerequisites

mat17b: mat16a, mat17a or mat21a

mat17c: mat17b

mat21b: mat21b

mat21c: mat16c, mat17c or mat21b

mat21d: mat21c

mat22a: eng6 or mat22al

mat22b: mat22a or mat67

mat25: mat21c

mat67: mat21a

mat108: mat21b

mat111: one of the following {mat25, mat67, mat108, mat114, mat115a, mat141, mat145}

mat114: mat21c, {mat22a or mat67}

mat115a: mat21b

mat116: mat125a

mat118a: mat21d, mat22b, {mat22a or mat67}

mat118b: mat118a

mat118c: mat118b

mat119a: mat21d, mat22b, {mat22a or mat67}

mat119b: mat119a

mat124: mat22b, {mat22a or mat67}

mat125a: mat25

mat125b: mat125a, {mat22a or mat67}

mat128a: mat21c, ecs30

mat128b: mat21c, {mat22a or mat67}, ecs30

mat128c: mat22b, {mat22a or mat67}, ecs30

mat129: mat21d, {mat22a or mat67}, mat22b, mat25

mat133: {mat67 or (mat22a and mat108)}, mat135a

mat135a: mat125a

mat135b: mat135a, {mat22a or mat67}

mat141: mat22b, {mat22a or mat67}

mat145: mat21d

mat146: mat25, {mat22a or mat67}, mat145

mat147: mat25

mat148: {mat67 or (mat22a and mat108)}

mat150a: {mat67 or (mat22a and mat108)}

mat150b: mat150a

mat150c: mat150b

mat160: mat67 or mat22a, and one of the following {mat25, mat108, mat114, mat115a, mat145}

mat167: mat67 or mat22a

mat168: {mat67 or (mat22a and mat108)}, mat21c

mat180: {mat67 or (mat22a and mat108)}, mat25

mat185a: {mat67 or (mat22a and mat108)}, mat125a

mat185b: mat185a

mat189: {mat67 or (mat22a and mat108)}, mat25