

What-if Report Career Simulation Report

Career/Program(Gen Ed)/ Major/Option	Req Term
Undergraduate Career	Fall 2019
Engineering Program	Fall 2019
Computer Science (BS) Major	Fall 2019
Science Program	Fall 2019
Mathematics (BS) Major	Fall 2019
Systems Analysis Option	Fall 2019

*****DEGREE AUDIT NOTES*****

****TUTORIAL:** To review the "Interpreting a Degree Audit" tutorial, visit the student Help page: <http://lionpathsupport.psu.edu/student-help/>**

****HAVE QUESTIONS/FOUND AN ISSUE?** The following reporting lines of communication should be followed:

- Students should contact their academic adviser;
- Academic adviser or other faculty/staff member should contact their college's degree audit contact. This contact is often a campus registrar or college records coordinator,; and
- College degree audit contact should address the question/report the issue to their designated contact in the Office of the University Registrar who will work towards a resolution.**

This report is an unofficial working copy of a student's progress.

Graduation certification of degree requirements is subject to the approval of the student's college dean. Questions about the report should be directed to the student's academic adviser or college dean.

College of Engineering Majors

This report includes requirements for the following majors:

Computer Science Major (CMPSC_BS)
 Computer Science Major (CMPSC_BS)

Eberly College of Science Majors

This report includes requirements for the following majors:

Mathematics Major, Systems Analysis Option (MTHBS_BS-SYANL)
 Mathematics Major, Systems Analysis Option (MTHBS_BS-SYANL)

Entrance Requirements for the College of Engineering

Courses enrolled in a future term will not display in this entrance requirements section until the start of the future term.

Courses must be satisfactorily completed by the end of the semester during which the admission to major process is carried out.

Computer Science Major

Credit Requirement Previously Fulfilled

Student is in the major or conditionally approved for the major.

3.0 cumulative GPA minimum

GPA must be met when application is submitted, and maintained through the term the entrance courses are completed.

· **GPA:** 3.000 required, 3.260 completed

MATH 140-C or higher required

Satisfied

· **Units:** 4.00 required, 4.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2019	MATH	140	Calc Anly Geom I	4.00	C

MATH 141-C or higher required

· **Units:** 4.00 required, 4.00 used

Term	Subject	Cat #	Course Title	Units	Grade
SP 2020	MATH	141	CALC ANLY GEOM II	4.00	SAT

PHYS 211-C or higher required

· **Units:** 4.00 required, 4.00 used

Term	Subject	Cat #	Course Title	Units	Grade
SP 2020	PHYS	211	Mechanics	4.00	SAT

PHYS 212-C or higher required

· **Units:** 4.00 required, 4.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2020	PHYS	212	Elect. and Mag.	4.00	SAT

MATH 230-C or higher required

· **Units:** 4.00 required, 4.00 used

Term	Subject	Cat #	Course Title	Units	Grade
SP 2021	MATH	230	Calc/Vector Anly	4.00	A-

CMPSC 122 or CMPSC 132-C or higher required

· **Units:** 3.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
SU 2021	CMPSC	132	PROG & COMP II	3.00	B+

Entrance Requirements for the Eberly College of Science

Courses enrolled in a future term will not display in this entrance requirements section until the start of the future term.

29.1 units minimum

Satisfied

· **Units:** 29.10 required, 91.00 used

2.0 cumulative GPA minimum

Satisfied

· **GPA:** 2.000 required, 3.260 completed

MATH 140-C or higher required

Satisfied

· **Units:** 4.00 required, 4.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2019	MATH	140	Calc Anly Geom I	4.00	C

High School Science Courses or Substitution

Complete 3 high school science courses, or complete an approved substitution. Courses with the Natural Science (GN) attribute fulfill this substitution.

Satisfied:

Additional Entrance Requirements for MTHBS_BS

MATH 141-C or higher required

Satisfied

· **Units:** 4.00 required, 4.00 used

Term	Subject	Cat #	Course Title	Units	Grade
SP 2020	MATH	141	CALC ANLY GEOM II	4.00	SAT

In Progress Courses

Degrees are not complete until all requirements are satisfied.

In Progress Courses

In Progress Courses

Term	Subject	Cat #	Course Title	Units	Grade
SP 2022	CMPEN	331	Comp Org and Design	3.00	IP
SP 2022	CMPSC	311	Intro Sys Progmng	3.00	IP
SP 2022	CMPSC	456	Intro Num Anly II	3.00	IP
SP 2022	CMPSC	461	Prog Lang Concepts	3.00	IP
SP 2022	CMPSC	465	Data Struc and Algor	3.00	IP
SU 2022	CMPSC	473	Operating Sys	3.00	IP
SP 2022	MATH	415	Intro Math Stat	3.00	IP
SU 2022	MATH	486	Math Thy of Games	3.00	IP

Withdrawn, Unsatisfactory, Repeated, & Excluded Academic Renewal Courses

Withdrawn and Unsatisfactorily Completed Courses

Term	Subject	Cat #	Course Title	Units	Grade
FA 2020	EMCH	211	Statics	3.00	LD
FA 2019	ENGL	5	Writing Tutorial	1.00	LD
FA 2019	ENGL	15	Rhetoric and Comp	3.00	LD
FA 2020	GAME	220	Intro Game Design	3.00	LD

Ineligible Courses

Courses below are ineligible for baccalaureate degree requirements

Term	Subject	Cat #	Course Title	Units	Grade
SP 2020	ENGL	5	Writing Tutorial	1.00	PS

World Language Admission Requirement

NOTE: Additional Language Proficiency Required by some Majors

Admissions Foreign Language Satisfied

Satisfied

First-Year Seminar

First-Year Seminar

First-Year Seminar Course

Satisfied

· **Units:** 1.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2019	EDSGN	100S	Intro Engr Dsgn	3.00	A

Writing Across the Curriculum

Students are required to complete 3 units of writing-intensive coursework offered within their major(s) or college(s) of enrollment

Writing Across the Curriculum - College of Engineering

Not Satisfied: Courses with the Writing Across the Curriculum attribute offered by the college satisfy this requirement
 · **Units:** 3.00 required, 0.00 used, 3.00 needed

Writing Across the Curriculum - College of Science

Not Satisfied: Courses with the Writing Across the Curriculum attribute offered by the college satisfy this requirement
 · **Units:** 3.00 required, 0.00 used, 3.00 needed

United States and International Cultures (US/IL)

Courses with US or IL attributes satisfy these requirements

United States and International Cultures (US/IL)

Courses with US and/or IL attributes satisfy these requirements

United States Cultures (US)

Satisfied

· **Units:** 3.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2021	HIST	21	Amer Civ From 1877	3.00	TR

International Cultures (IL)

Satisfied

· **Units:** 3.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2021	HIST	11	World Hist II	3.00	TR

Minimum 2.00 Cumulative Grade Point Average Required for Graduation

Senate Policy 82-40

Cumulative Grade Point Average

Satisfied

· **GPA:** 2.000 required, 3.260 completed

Residency Requirements

Senate Policy 83-80

At least 36 of the last 60 units must be earned at Penn State

Satisfied

· **Units:** 36.00 required, 50.00 used

At least 60 units must be earned in the last five years

Satisfied

· **Units:** 60.00 required, 109.00 used

General Education- Computer Science Major (CMPSC_BS)

45 units required

Writing/Speaking (GWS)

Complete 9 units with 3 units in each area: Composition, Speech and Effective Writing.

Units also apply to major requirements.

C or higher required

ENGL 15 (or equivalent)

Satisfied

· **Units:** 3.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
SP 2020	ENGL	15	Rhetoric and Comp	3.00	SAT

CAS 100A or CAS 100B
Satisfied

· Units: 3.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2020	CAS	100B	Effective Speech	3.00	SAT

ENGL 202C
Satisfied

· Units: 3.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2021	ENGL	202C	Technical Writing	3.00	TR

Quantification (GQ)

Complete at least 6 GQ units, as shown below.

Units also apply to major and/or option requirements.

C or higher required

MATH 140
Satisfied

· Units: 4.00 required, 4.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2019	MATH	140	Calc Anly Geom I	4.00	C

MATH 141
Satisfied

· Units: 4.00 required, 4.00 used

Term	Subject	Cat #	Course Title	Units	Grade
SP 2020	MATH	141	CALC ANLY GEOM II	4.00	SAT

Integrative Studies

Complete 6 Inter-Domain units *OR* 6 Linked units

Courses may satisfy other General Education or Major requirements per approved curriculum.

· Units: 6.00 required, 0.00 used, 6.00 needed

Inter-Domain Courses or Linked Courses
Not Satisfied: Complete 6 Inter-Domain or 6 Linked units

You may *not* fulfill a General Education (GN, GA, GH, GS, GHW) requirement listed below solely with Inter-Domain courses.

· Units: 6.00 required, 0.00 used, 6.00 needed

Natural Sciences (GN)

Complete at least 9 units, as shown below.

Units also apply to major requirements.

At least 3 units of GN must be fulfilled by a class that is *not* Inter-Domain.

PHYS 211
Satisfied

· Units: 4.00 required, 4.00 used

Term	Subject	Cat #	Course Title	Units	Grade
SP 2020	PHYS	211	Mechanics	4.00	SAT

PHYS 212
Satisfied

· Units: 4.00 required, 4.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2020	PHYS	212	Elect. and Mag.	4.00	SAT

PHYS 213 or PHYS 214 or Approved Natural Science Course
Satisfied

· Units: 1.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2019	CHEM	110	Chem Princ I	3.00	C

Arts (GA)

Courses with the GA attribute fulfill this requirement

At least 3 units of GA must be fulfilled by a class that is *not* Inter-Domain.

Arts (GA)
Not Satisfied: Complete 6 GA units

At least 3 units cannot be Inter-Domain.

· Units: 6.00 required, 3.00 used, 3.00 needed

Term	Subject	Cat #	Course Title	Units	Grade
SP 2020	PHOTO	100	Intro Photo	3.00	A-

Humanities (GH)

Courses with the GH attribute fulfill this requirement

At least 3 units of GH must be fulfilled by a class that is *not* Inter-Domain.

Humanities (GH)
Satisfied

· Units: 6.00 required, 6.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2021	HIST	11	World Hist II	3.00	TR
FA 2021	HIST	21	Amer Civ From 1877	3.00	TR

Social and Behavioral Sciences (GS)

Courses with a GS attribute fulfill this requirement

At least 3 units of GS must be fulfilled by a class that is *not* Inter-Domain.

Social and Behavioral Sciences (GS)
Not Satisfied: Complete 6 GS units

At least 3 units cannot be Inter-Domain.

· Units: 6.00 required, 3.00 used, 3.00 needed

Term	Subject	Cat #	Course Title	Units	Grade
FA 2019	ECON	102	Microeconomic Analysis	3.00	B-

Health and Wellness (GHW)

Courses with the GHW attribute fulfill this requirement

At least 3 units of GHW must be fulfilled by a class that is *not* Inter-Domain.

Health and Wellness (GHW)
Satisfied

· Units: 3.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
SP 2021	KINES	61	Fit	3.00	A-

Term	Subject	Cat #	Course Title	Units	Grade
			Thry&Practice		

Computer Science, BS (CMPSC_BS) Major

106-108 units required

Prescribed Courses

49-50 units required

Prescribed Courses-C or higher required

Satisfied

· Units: 37.00 required, 37.00 used

Term	Subject	Cat #	Course Title	Units	Grade
SP 2022	CMPEN	331	Comp Org and Design	3.00	IP
FA 2021	CMPSC	221	Oop With Web	3.00	A
SP 2022	CMPSC	311	Intro Sys Progmg	3.00	IP
FA 2021	CMPSC	360	Discrete Math/Cs	3.00	B-
SP 2022	CMPSC	461	Prog Lang Concepts	3.00	IP
SP 2022	CMPSC	465	Data Struc and Algor	3.00	IP
SU 2022	CMPSC	473	Operating Sys	3.00	IP
FA 2019	MATH	140	Calc Anly Geom I	4.00	C
SP 2020	MATH	141	CALC ANLY GEOM II	4.00	SAT
SP 2020	PHYS	211	Mechanics	4.00	SAT
FA 2020	PHYS	212	Elect. and Mag.	4.00	SAT

Prescribed Courses

Not Satisfied: Complete the following

· Units: 10.00 required, 7.00 used, 3.00 needed

Term	Subject	Cat #	Course Title	Units	Grade
FA 2021	ENGL	202C	Technical Writing	3.00	TR
SP 2021	MATH	230	Calc/Vector Anly	4.00	A-

Course List: CMPSC 464

MATH 220 - Variable Units

Satisfied

· Units: 2.00 required, 2.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2020	MATH	220	Matrices	2.00	A

Additional Courses

35 units required

CMPSC 121 or CMPSC 131 - C or higher required

Satisfied

· Units: 3.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2020	CMPSC	121	Intro Prgmg Tech	3.00	C+

CMPSC 122 or CMPSC 132 - C or higher required

Satisfied

· Units: 3.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
SU 2021	CMPSC	132	PROG &	3.00	B+

Term	Subject	Cat #	Course Title	Units	Grade
			COMP II		

CMPEN 270 - C or higher required

Satisfied

· Units: 4.00 required, 4.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2021	CMPEN	270	Digital Design	4.00	A-

First-Year Seminar

Satisfied

· Units: 1.00 required, 1.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2019	EDSGN	100S	Intro Engr Dsgn	1.00	A

ENGL 15 or ENGL 137

Satisfied

· Units: 3.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
SP 2020	ENGL	15	Rhetoric and Comp	3.00	SAT

CAS 100A or CAS 100B or ENGL 138

Satisfied

· Units: 3.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2020	CAS	100B	Effective Speech	3.00	SAT

Probability

Satisfied

· Units: 3.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2021	MATH	414	Intro Prob Theory	3.00	B

Statistics

Satisfied

· Units: 3.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
SP 2022	MATH	415	Intro Math Stat	3.00	IP

Additional Computer Science Courses

Satisfied

· Units: 6.00 required, 6.00 used

Term	Subject	Cat #	Course Title	Units	Grade
SP 2022	CMPSC	456	Intro Num Anly II	3.00	IP
FA 2021	MATH	455	Intro Num Anly I	3.00	B+

CMPSC 431W or CMPSC 483W-Writing

Not Satisfied: Complete 3 units with the writing attribute to meet university writing and major requirements.

· Units: 3.00 required, 0.00 used, 3.00 needed

Course List: CMPSC 431W, CMPSC 483W

400-level CMPEN or CMPSC

Not Satisfied: Complete 3 units

· Units: 3.00 required, 0.00 used, 3.00 needed

Supporting Courses and Related Areas-Physics and Natural Science

2-3 units required

PHYS 213 or PHYS 214 or Approved Natural Science Course
Satisfied

· Units: 2.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2019	CHEM	110	Chem Princ I	3.00	C

Supporting Courses and Related Areas-400 Level Non-CMPEN/CMPSC

6 units required

Group 1

Not Satisfied: Complete 6 units in consultation with adviser

· Units: 6.00 required, 0.00 used, 6.00 needed

OR Group 2

Not Satisfied: Complete 6 units in consultation with adviser

· Units: 6.00 required, 0.00 used, 6.00 needed

OR Group 3

Not Satisfied: Complete 6 units in consultation with adviser

· Units: 6.00 required, 0.00 used, 6.00 needed

OR Group 4

Not Satisfied: Complete 6 units in consultation with adviser

· Units: 6.00 required, 0.00 used, 6.00 needed

OR Group 5

Not Satisfied: Complete 6 units in consultation with adviser

· Units: 6.00 required, 0.00 used, 6.00 needed

OR Group 6

Not Satisfied: Complete 6 units in consultation with adviser

· Units: 6.00 required, 0.00 used, 6.00 needed

OR Group 7

Not Satisfied: Complete 6 units in consultation with adviser

· Units: 6.00 required, 0.00 used, 6.00 needed

OR Group 8

Not Satisfied: Complete 6 units in consultation with adviser

· Units: 6.00 required, 0.00 used, 6.00 needed

OR Group 9

Not Satisfied: Complete 6 units in consultation with adviser

· Units: 6.00 required, 3.00 used, 3.00 needed

Term	Subject	Cat #	Course Title	Units	Grade
SU 2022	MATH	486	Math Thy of Games	3.00	IP

OR Group 10

Not Satisfied: Complete 6 units in consultation with adviser

· Units: 6.00 required, 0.00 used, 6.00 needed

OR Group 11

Not Satisfied: Complete 6 units in consultation with adviser

· Units: 6.00 required, 0.00 used, 6.00 needed

OR Group 12

Not Satisfied: Complete 6 units in consultation with adviser

· Units: 6.00 required, 0.00 used, 6.00 needed

Supporting Courses and Related Areas-Language and Dept List

14 units required

· Units: 14.00 required, 11.00 used, 3.00 needed

Foreign Language (Second-Semester Proficiency)

Not Satisfied: Complete 4 units

· Units: 4.00 required, 0.00 used, 4.00 needed

Department List

Satisfied

· Units: 10.00 required, 11.00 used

Term	Subject	Cat #	Course Title	Units	Grade
SP 2020	DIGIT	210	Textanalysis	3.00	B-
FA 2019	EDSGN	100S	Intro Engr Dsgn	2.00	A
SP 2021	EMCH	211	Statics	3.00	A-
SP 2021	MATH	250	Ord Diff Equations	3.00	A

Computer Science Major, (CMPSC_BS) Total

127 units are required for the degree

· Units: 127.00 required, 107.00 used, 20.00 needed

Computer Science Major, (CMPSC_BS) Total units

121-127 units required for General Education & Computer Science Major

· Units: 121.00 required, 107.00 used, 14.00 needed

Knowledge Domain Flexibility

Complete 0-6 units

**Includes 6 additional units of possible electives from the General Education Knowledge Domain Flexibility **

· Units: 0.00 used

30 units General Education Coursework in areas of GN, GA, GH, GS, GHW

This area verifies that 30 units of General Education Coursework in the areas of GN, GA, GH, GS, GHW have been completed.

If the GN, GA, GH, GS and GHW requirements in the General Education area above are completed prior to earning 30 total General Education units in those areas, complete additional General Education courses with those attributes in order to meet the 30 unit requirement.

· Units: 30.00 required, 45.00 used, 22.00 needed

Term	Subject	Cat #	Course Title	Units	Grade
SP 2021	ASTRO	1	Astro Universe	3.00	A
FA 2019	CHEM	110	Chem Princ I	3.00	C
FA 2019	ECON	102	Microeconomic Analysis	3.00	B-
FA 2021	HIST	11	World Hist II	3.00	TR
FA 2021	HIST	21	Amer Civ From 1877	3.00	TR
SP 2021	KINES	61	Fit Thry&Practice	3.00	A-
FA 2019	MATH	140	Calc Anly Geom I	4.00	C
SP 2020	MATH	141	CALC ANLY GEOM II	4.00	SAT
SP 2020	PHOTO	100	Intro Photo	3.00	A-
SP 2020	PHYS	211	Mechanics	4.00	SAT
FA 2020	PHYS	212	Elect. and Mag.	4.00	SAT

Courses not used to satisfy degree requirements in CMPSC_BS

(Courses not used in total units required for the degree)

Courses Not Used

Term	Subject	Cat #	Course Title	Units	Grade
SP 2021	ASTRO	1	Astro Universe	3.00	A
FA 2019	CHEM	108	Prob Solving Chem	1.00	B+
SP 2021	CMPSC	XFRGEN	CMPSC-General Transfer Credit	3.00	TR

General Education- Mathematics Major (MTHBS_BS)

45 units required

Writing/Speaking (GWS)

Complete 9 units with 3 units in each area: Composition, Speech and Effective Writing

C or higher required

ENGL 15 (or equivalent)

Satisfied

· Units: 3.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
SP 2020	ENGL	15	Rhetoric and Comp	3.00	SAT

CAS 100 (or equivalent)

Satisfied

· Units: 3.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2020	CAS	100B	Effective Speech	3.00	SAT

ENGL 202 (or equivalent)

Satisfied

· Units: 3.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2021	ENGL	202C	Technical Writing	3.00	TR

Quantification (GQ)

Complete at least 6 GQ units, as shown below.

Units also apply to major and/or option requirements.

C or higher required

MATH 140

Satisfied

· Units: 4.00 required, 4.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2019	MATH	140	Calc Anyl Geom I	4.00	C

MATH 141

Satisfied

· Units: 4.00 required, 4.00 used

Term	Subject	Cat #	Course Title	Units	Grade
SP 2020	MATH	141	CALC ANYL GEOM II	4.00	SAT

Integrative Studies

Complete 6 Inter-Domain units *OR* 6 Linked units

Courses may satisfy other General Education or Major requirements per approved curriculum.

· Units: 6.00 required, 0.00 used, 6.00 needed

Inter-Domain Courses or Linked Courses

Not Satisfied: Complete 6 Inter-Domain or 6 Linked units

You may *not* fulfill a General Education (GN, GA, GH, GS, GHW) requirement listed below solely with Inter-Domain courses.

· Units: 6.00 required, 0.00 used, 6.00 needed

Natural Sciences (GN)

Courses with the GN attribute fulfill this requirement

At least 3 units of GN must be fulfilled by a class that is *not* Inter-Domain.

Natural Sciences (GN)

Satisfied

· Units: 9.00 required, 9.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2019	CHEM	110	Chem Princ I	3.00	C
SP 2020	PHYS	211	Mechanics	4.00	SAT
FA 2020	PHYS	212	Elect. and Mag.	2.00	SAT

Arts (GA)

Courses with the GA attribute fulfill this requirement

At least 3 units of GA must be fulfilled by a class that is *not* Inter-Domain.

Arts (GA)

Not Satisfied: Complete 6 GA units

At least 3 units cannot be Inter-Domain.

· Units: 6.00 required, 3.00 used, 3.00 needed

Term	Subject	Cat #	Course Title	Units	Grade
SP 2020	PHOTO	100	Intro Photo	3.00	A-

Humanities (GH)

Courses with the GH attribute fulfill this requirement

At least 3 units of GH must be fulfilled by a class that is *not* Inter-Domain.

Humanities (GH)

Satisfied

· Units: 6.00 required, 6.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2021	HIST	11	World Hist II	3.00	TR
FA 2021	HIST	21	Amer Civ From 1877	3.00	TR

Social and Behavioral Sciences (GS)

Courses with a GS attribute fulfill this requirement

At least 3 units of GS must be fulfilled by a class that is *not* Inter-Domain.

Social and Behavioral Sciences (GS)

Not Satisfied: Complete 6 GS units

At least 3 units cannot be Inter-Domain.

· Units: 6.00 required, 3.00 used, 3.00 needed

Term	Subject	Cat #	Course Title	Units	Grade
FA 2019	ECON	102	Microeconomic Analysis	3.00	B-

Health and Wellness (GHW)

Courses with the GHW attribute fulfill this requirement

At least 3 units of GHW must be fulfilled by a class that is *not* Inter-Domain.

Health and Wellness (GHW)

Satisfied

· **Units:** 3.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
SP 2021	KINES	61	Fit Thry&Practice	3.00	A-

Mathematics, BS (MTHBS_BS) Major

30-32 units required

Prescribed Courses

24-25 units required

Prescribed Courses-C or higher required

Not Satisfied: Complete the following

· **Units:** 15.00 required, 12.00 used, 3.00 needed

Term	Subject	Cat #	Course Title	Units	Grade
FA 2019	MATH	140	Calc Anly Geom I	4.00	C
SP 2020	MATH	141	CALC ANLY GEOM II	4.00	SAT
SP 2021	MATH	230	Calc/Vector Anly	4.00	A-

Course List: MATH 312

Prescribed Courses

Not Satisfied: Complete the following

· **Units:** 4.00 required, 0.00 used, 4.00 needed

Course List: STAT 200

MATH 311W-Writing-C or higher required

Satisfied

· **Units:** 3.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2021	CMPSC	360	Discrete Math/Cs	3.00	B-

CMPSC 360 has been directed to this line.

CMPSC 360 substituted for MATH 311W per approved petition.

2/15/22 KMM

Entered by: KML5346

MATH 220 - Variable Units - C or higher required

Satisfied

· **Units:** 2.00 required, 2.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2020	MATH	220	Matrices	2.00	A

Additional Courses

6-7 units required

Computer Science

Satisfied

· **Units:** 3.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2020	CMPSC	121	Intro Prgmg Tech	3.00	C+

Differential Equations-C or higher required

Satisfied

· **Units:** 3.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
SP 2021	MATH	250	Ord Diff Equations	3.00	A

Systems Analysis Option - MTHBS_BS-SYANL

50-51 units required

· **Units:** 50.00 required, 30.00 used, 20.00 needed

Prescribed Courses

12 units required

****C or higher required****

Prescribed Courses

Not Satisfied: Complete the following

****MATH 414 and STAT 414 are cross-listed courses. Only complete one course.****

****MATH 415 and STAT 415 are cross-listed courses. Only complete one course.****

· **Units:** 12.00 required, 6.00 used, 6.00 needed

Term	Subject	Cat #	Course Title	Units	Grade
FA 2021	MATH	414	Intro Prob Theory	3.00	B
SP 2022	MATH	415	Intro Math Stat	3.00	IP

Course List: MATH 436, MATH 484, STAT 414, STAT 415

Additional Courses

9 units required

****C or higher required****

Advanced Mathematics

Not Satisfied: Complete 6 units

· **Units:** 6.00 required, 3.00 used, 3.00 needed

Term	Subject	Cat #	Course Title	Units	Grade
SU 2022	MATH	486	Math Thy of Games	3.00	IP

Course List: CMPSC 451, MATH 310, MATH 451, MATH 485

400 Level Mathematics

Satisfied

· **Units:** 3.00 required, 3.00 used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2021	MATH	455	Intro Num Anly I	3.00	B+

Supporting Courses and Related Areas

29-30 units required

Area of Application

Not Satisfied: Complete 12 units in consultation with adviser

· **Units:** 12.00 required, 0.00 used, 12.00 needed

Department List

Satisfied

· **Units:** 17.00 required, 18.00 used

Term	Subject	Cat #	Course Title	Units	Grade
SP 2021	ASTRO	1	Astro Universe	3.00	A
FA 2019	CHEM	108	Prob Solving Chem	1.00	B+
FA 2021	CMPEN	270	Digital Design	2.00	A-
SU 2021	CMPSC	132	PROG & COMP II	3.00	B+
SP 2020	DIGIT	210	Textanalysis	3.00	B-
FA 2019	EDSGN	100S	Intro Engr Dsgn	3.00	A
SP 2021	EMCH	211	Statics	3.00	A-

Mathematics Maj, Systems Analysis Opt (MTHBS_BS-SYANL) Elect & Total

120 units are required for the degree

· **Units:** 120.00 required, 93.00 used, 27.00 needed

Math Maj, Systems Analysis Opt (MTHBS_BS-SYANL) Total units not incl elect

113-120 units required for General Education and Mathematics Major, Systems Analysis Option

· **Units:** 113.00 required, 86.00 used, 27.00 needed

Mathematics Major, Systems Analysis Opt (MTHBS_BS-SYANL) Electives

Complete 0-7 units

Includes 6 additional units of possible electives from the General Education Knowledge Domain Flexibility

· **Units:** 7.00 used

Term	Subject	Cat #	Course Title	Units	Grade
SP 2022	CMPEN	331	Comp Org and Design	3.00	IP
FA 2021	CMPSC	221	Oop With Web	3.00	A
SP 2022	CMPSC	311	Intro Sys Progmg	1.00	IP

30 units General Education Coursework in areas of GN, GA, GH, GS, GHW

This area verifies that 30 units of General Education Coursework in the areas of GN, GA, GH, GS, GHW have been completed.

If the GN, GA, GH, GS and GHW requirements in the General Education area above are completed prior to earning 30 total General Education units in those areas, complete additional General Education courses with those attributes in order to meet the 30 unit requirement.

· **Units:** 30.00 required, 35.00 used, 30.00 needed

Term	Subject	Cat #	Course Title	Units	Grade
SP 2021	ASTRO	1	Astro Universe	3.00	A
FA 2019	CHEM	110	Chem Princ I	3.00	C
FA 2019	ECON	102	Microeconomic Analysis	3.00	B-
FA 2021	HIST	11	World Hist II	3.00	TR
FA 2021	HIST	21	Amer Civ From 1877	3.00	TR
SP 2021	KINES	61	Fit Thry&Practice	3.00	A-
FA 2019	MATH	140	Calc Any Geom I	4.00	C
SP 2020	MATH	141	CALC ANY GEOM II	4.00	SAT
SP 2020	PHOTO	100	Intro Photo	3.00	A-
SP 2020	PHYS	211	Mechanics	4.00	SAT
FA 2020	PHYS	212	Elect. and Mag.	2.00	SAT

Courses not used to satisfy degree requirements in MTHBS_BS-SYANL

(Courses not used in total units required for the degree)

Courses Not Used

Term	Subject	Cat #	Course Title	Units	Grade
FA 2021	CMPEN	270	Digital Design	2.00	A-
SP 2021	CMPSC	XFRGEN	CMPSC-General Transfer Credit	3.00	TR
SP 2022	CMPSC	311	Intro Sys Progmg	2.00	IP
SP 2022	CMPSC	456	Intro Num Anly II	3.00	IP
SP 2022	CMPSC	461	Prog Lang Concepts	3.00	IP
SP 2022	CMPSC	465	Data Struc and Algor	3.00	IP
SU 2022	CMPSC	473	Operating Sys	3.00	IP
FA 2020	PHYS	212	Elect. and Mag.	2.00	SAT

Total Units Earned

Total Units Earned

· **Units:** 114.00 used

Term	Subject	Cat #	Course Title	Units	Grade
SP 2021	ASTRO	1	Astro Universe	3.00	A
FA 2020	CAS	100B	Effective Speech	3.00	SAT
FA 2019	CHEM	108	Prob Solving Chem	1.00	B+
FA 2019	CHEM	110	Chem Princ I	3.00	C
FA 2021	CMPEN	270	Digital Design	4.00	A-
SP 2022	CMPEN	331	Comp Org and Design	3.00	IP
SP 2021	CMPSC	XFRGEN	CMPSC-General Transfer Credit	3.00	TR
FA 2020	CMPSC	121	Intro Prgmg Tech	3.00	C+
SU 2021	CMPSC	132	PROG & COMP II	3.00	B+
FA 2021	CMPSC	221	Oop With Web	3.00	A
SP 2022	CMPSC	311	Intro Sys Progmg	3.00	IP
FA 2021	CMPSC	360	Discrete Math/Cs	3.00	B-
SP 2022	CMPSC	456	Intro Num Anly II	3.00	IP
SP 2022	CMPSC	461	Prog Lang Concepts	3.00	IP
SP 2022	CMPSC	465	Data Struc and Algor	3.00	IP
SU 2022	CMPSC	473	Operating Sys	3.00	IP
SP 2020	DIGIT	210	Textanalysis	3.00	B-
FA 2019	ECON	102	Microeconomic Analysis	3.00	B-
FA 2019	EDSGN	100S	Intro Engr Dsgn	3.00	A
SP 2021	EMCH	211	Statics	3.00	A-
SP 2020	ENGL	15	Rhetoric and Comp	3.00	SAT
FA 2021	ENGL	202C	Technical Writing	3.00	TR
FA 2021	HIST	11	World Hist II	3.00	TR
FA 2021	HIST	21	Amer Civ From 1877	3.00	TR
SP 2021	KINES	61	Fit Thry&Practice	3.00	A-
FA 2019	MATH	140	Calc Any Geom I	4.00	C
SP 2020	MATH	141	CALC ANY GEOM II	4.00	SAT

Term	Subject	Cat #	Course Title	Units	Grade
FA 2020	MATH	220	Matrices	2.00	A
SP 2021	MATH	230	Calc/Vector Anly	4.00	A-
SP 2021	MATH	250	Ord Diff Equations	3.00	A
FA 2021	MATH	414	Intro Prob Theory	3.00	B
SP 2022	MATH	415	Intro Math Stat	3.00	IP
FA 2021	MATH	455	Intro Num Anly I	3.00	B+
SU 2022	MATH	486	Math Thy of Games	3.00	IP
SP 2020	PHOTO	100	Intro Photo	3.00	A-
SP 2020	PHYS	211	Mechanics	4.00	SAT
FA 2020	PHYS	212	Elect. and Mag.	4.00	SAT

MATH	455	Intro Num Anly I	3.00	FA 2021	B+	EN
CMPEN	331	Comp Org and Design	3.00	SP 2022		IP
CMPSC	311	Intro Sys Progmng	3.00	SP 2022		IP
CMPSC	456	Intro Num Anly II	3.00	SP 2022		IP
CMPSC	461	Prog Lang Concepts	3.00	SP 2022		IP
CMPSC	465	Data Struc and Algor	3.00	SP 2022		IP
MATH	415	Intro Math Stat	3.00	SP 2022		IP
CMPSC	473	Operating Sys	3.00	SU 2022		IP
MATH	486	Math Thy of Games	3.00	SU 2022		IP

Course History						
Subject	Catalog #	Title	Units	Term	Grade	Type
CHEM	110	Chem Princ I	3.00	FA 2019	C	EN
ECON	102	Microeconomic Analysis	3.00	FA 2019	B-	EN
EDSGN	100S	Intro Engr Dsgn	3.00	FA 2019	A	EN
ENGL	5	Writing Tutorial	1.00	FA 2019	LD	EN
ENGL	15	Rhetoric and Comp	3.00	FA 2019	LD	EN
MATH	140	Calc Anly Geom I	4.00	FA 2019	C	EN
CHEM	108	Prob Solving Chem	1.00	FA 2019	B+	EN
DIGIT	210	Textanalysis	3.00	SP 2020	B-	EN
ENGL	5	Writing Tutorial	1.00	SP 2020	PS	EN
ENGL	15	Rhetoric and Comp	3.00	SP 2020	SAT	EN
MATH	141	CALC ANLY GEOM II	4.00	SP 2020	SAT	EN
PHOTO	100	Intro Photo	3.00	SP 2020	A-	EN
PHYS	211	Mechanics	4.00	SP 2020	SAT	EN
CAS	100B	Effective Speech	3.00	FA 2020	SAT	EN
MATH	220	Matrices	2.00	FA 2020	A	EN
CMPSC	121	Intro Prgmg Tech	3.00	FA 2020	C+	EN
EMCH	211	Statics	3.00	FA 2020	LD	EN
GAME	220	Intro Game Design	3.00	FA 2020	LD	EN
PHYS	212	Elect. and Mag.	4.00	FA 2020	SAT	EN
CMPSC	XFRGEN	CMPSC-General Transfer Credit	3.00	SP 2021	TR	TE
ASTRO	1	Astro Universe	3.00	SP 2021	A	EN
EMCH	211	Statics	3.00	SP 2021	A-	EN
KINES	61	Fit Thy&Practice	3.00	SP 2021	A-	EN
MATH	230	Calc/Vector Anly	4.00	SP 2021	A-	EN
MATH	250	Ord Diff Equations	3.00	SP 2021	A	EN
CMPSC	132	PROG & COMP II	3.00	SU 2021	B+	EN
ENGL	202C	Technical Writing	3.00	FA 2021	TR	TR
HIST	11	World Hist II	3.00	FA 2021	TR	TR
HIST	21	Amer Civ From 1877	3.00	FA 2021	TR	TR
CMPEN	270	Digital Design	4.00	FA 2021	A-	EN
CMPSC	221	Oop With Web	3.00	FA 2021	A	EN
CMPSC	360	Discrete Math/Cs	3.00	FA 2021	B-	EN
MATH	414	Intro Prob Theory	3.00	FA 2021	B	EN