BIOLOGICAL ENGINEERING BS

College of Engineering
UtahStateUniversity

The following is a sample 4-year plan. Please note that student-specific plans may differ. Consult with your academic advisor for your specific plan.

For more information on major requirements and required elective courses, go to catalog.usu.edu and select "Degree Maps."

Plan designed for students working less than 20 hours per week.

PRE-PROFESSIONAL PROGRAM

FRESHMAN FALL

COURSE	CR+	SEM+
BENG 1000* Intro to Undergrad. Research	1	F
BIOL 1610* Biology 1	3	F
BIOL 1615* Biology 1 Lab	1	F
CHEM 1210* Chemistry 1	4	FSpSu
CHEM 1215* Chemistry 1 Lab	1	FSpSu
MATH 1210* Calculus 1	4	FSpSu
GENERAL EDUCATION Breadth Course (BCA)	3	FSpSu
TOTAL CREDITS	**17**	

FRESHMAN SPRING

COURSE	CR+	SEM+
BENG 1880* Quantification Biol. Processes	3	Sp
BENG 1200* SolidWorks	2	Sp
MATH 1220* Calculus 2	4	FSpSu
PHYS 2210* Physics 1	4	FSpSu
PHYS 2215* Physics 1 Lab	1	FSpSu
ENGL 2010* Intermediate Writing	3	FSpSu
TOTAL CREDITS	**17**	

SOPHOMORE FALL

COURSE	CR+	SEM+
BENG 2330* Properties of Biomaterials	3	F
CHEM 2300* Principles of Organic Chem.	3	F
CHEM 2315* Organic Chemistry 1 Lab	1	F
ENGR 2010* Statics	3	FSpSu
MATH 2250* Linear Algebra & Diff. Eq.	4	FSpSu
GENERAL EDUCATION Breadth Course (BAI)	3	FSpSu
TOTAL CREDITS	**17**	

SOPHOMORE SPRING

COURSE	CR+	SEM+
BENG 2400* Thermodynamics	3	Sp
ENGR 2140* Mechanics of Materials	3	FSpSu
ENGR 2210 Fundamental Electronics	3	FSpSu
CHEM 3700 Introductory Biochemistry	3	Sp
CHEM 3710 Introductory Biochemistry Lab	1	Sp
GENERAL EDUCATION Breadth Course (BSS)	3	FSpSu
TOTAL CREDITS	**16**	

PROFESSIONAL PROGRAM

JUNIOR FALL

COURSE	CR+	SEM+
BENG 3200 Intro to Unit Operations	3	F
BENG 3500 Fluid Mechanics in Biol. Engr.	3	F
CS 1400 Computer Science 1	4	FSpSu
STAT 3000 Statistics for Scientists	3	FSpSu
GENERAL EDUCATION Breadth Course (BHU)	3	FSpSu
TOTAL CREDITS	**16**	

JUNIOR SPRING

COURSE	CR+	SEM+
BENG 3000 Instrumentation for Bio. Sys.	3	Sp
BENG 3670 Transport Phenomena	3	Sp
BENG 3870 Biol. Engr. Design 1	1	Sp
ENGR 2450 Numerical Methods	3	Sp
ENGR 3080 Tech. Comm. for Engineers	3	FSp
GENERAL EDUCATION Depth Course (DHA)	2	FSpSu
TOTAL CREDITS	**15**	

SENIOR FALL

COURSE	CR+	SEM+
BENG 4880 Biol. Engr. Design 2	3	F
BENG 5020 Biol. Modeling and Controls	3	F
BENG ELECTIVE *See approved list*	3	FSp
BIOL 3300 General Microbiology	4	FSp
TECHNICAL ELECTIVE *See approved list*	2	FSp
FUND. OF ENGR. EXAM (FE) Graduation Requirement		
TOTAL CREDITS	**15**	

SENIOR SPRING

COURSE	CR+	SEM+
BENG 4890 Biol. Engr. Design 3	3	Sp
BENG ELECTIVE *See approved list*	3	FSp
TECHNICAL ELECTIVE *See approved list*	3	FSp
ENGR ELECTIVE *See approved list*	3	FSp
GENERAL EDUCATION Depth Course (DSS)	3	FSpSu
TOTAL CREDITS	**15**	

TOTAL CREDITS REQUIRED **128**

UNIVERSITY REQUIREMENTS

English 1010 is a University requirement and is a prerequisite for English 2010. An English ACT score of 29+ or an SAT verbal score of 640+ will fulfill the English 1010 requirement.

PRE-PROFESSIONAL PROGRAM (PPRU) REQUIREMENTS

- Complete courses marked with an asterisk (*)
- No more than three total repeats for PPRU courses
- Minimum 2.3 PPRU GPA
- Minimum grade of C- for PPRU courses

PROFESSIONAL PROGRAM (PP) REQUIREMENTS

- No more than three total repeats for Professional Program courses
- Minimum 2.0 Professional GPA
- Minimum grade of C- for Professional courses

+Abbreviations: (CR) Credits • (SEM) Semester • (F) Fall • (Sp) Spring • (Su) Summer

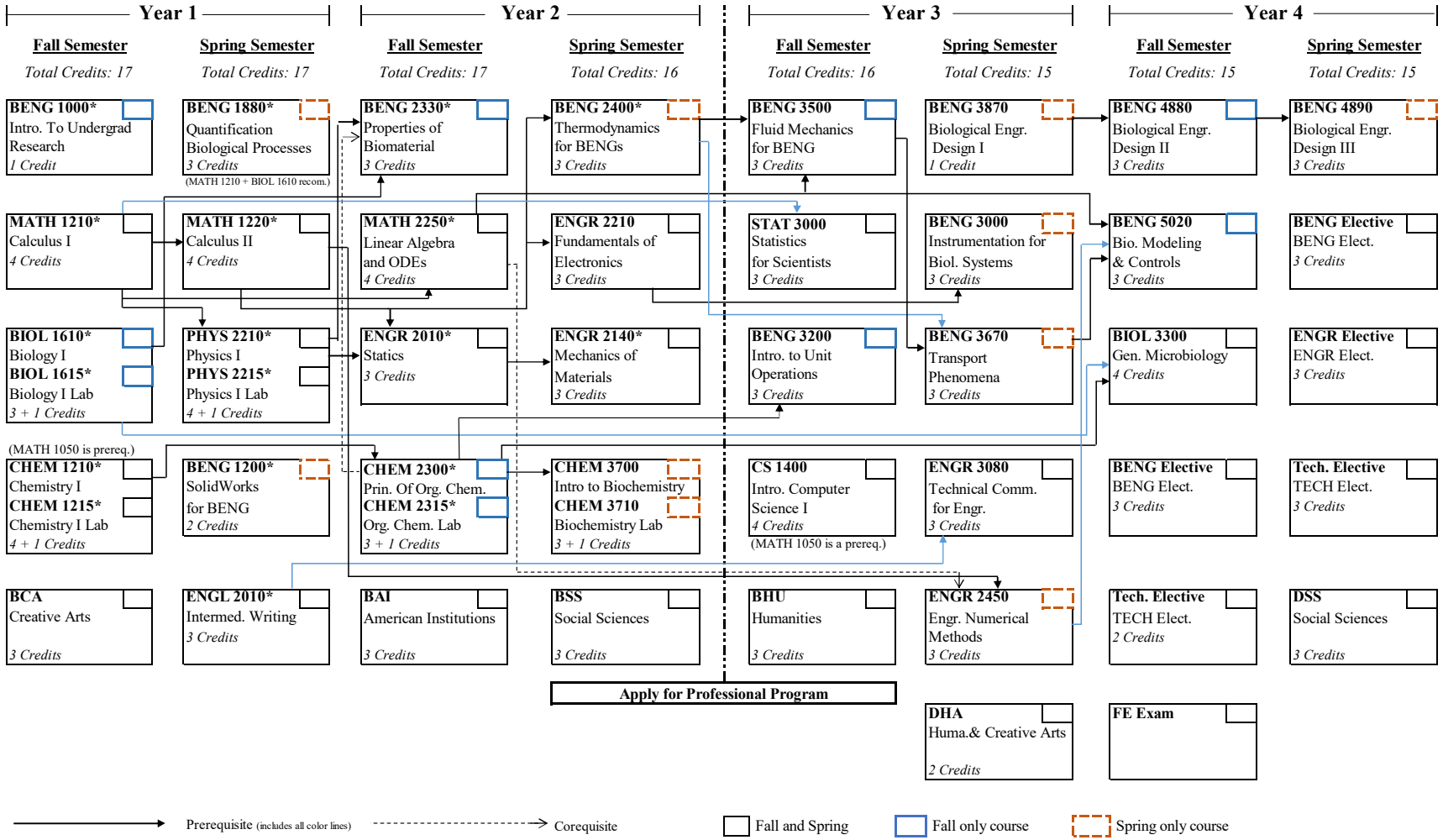
ACADEMIC YEAR
2023-24

BIOLOGICAL ENGINEERING RECOMMENDED FOUR-YEAR CURRICULUM

BS

College of Engineering
UtahStateUniversity

Any discrepency between this chart and the 2023-24 General Catalog is resolved in favor of the General Catalog.



* Required for admission to Professional Program.

ACADEMIC YEAR
2023-24