

BYU-I

USU

Required by USU Major

| Course | Cr | Course | Cr | Course Title | BE ⁵ | CI ⁵ | EN ⁵ | CS ⁵ | CM ⁵ | EL ⁵ | ME ⁵ |
|-----------------------|-----|------------------|-----|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| No Equivalent | | BENG 1880 | 3 | Quantitative Biological Systems | X | | | | | | |
| No Equivalent | | BENG 2330 | 3 | Properties of Biomaterials | X | | | | | | |
| ME 322 | 4 | BENG 2400 | 3 | Biological Thermodynamics | X | | X | | | | |
| No Equivalent | | BIOL 1010 | 3 | Biology and the Citizen | | X | X | X | | | |
| BIO 180+180L | 4 | BIOL 1610 + 1615 | 3+1 | Biology I | X | | | | | | |
| No Equivalent | | BIOL 3300 | 4 | General Microbiology | X | | | | | | |
| No Equivalent | | CEE 1880 | 1 | CEE Orientation & Computer Applications | | X | X | | | | |
| No Equivalent | | CEE 2240 | 3 | Engineering Surveying | | X | X | | | | |
| CHEM 105+105L | 4 | CHEM 1210+1215 | 4+1 | Principles of Chemistry I + Lab I | X | X | X | X ⁴ | | | X |
| CHEM 106+106L | 4 | CHEM 1220+1225 | 4+1 | Principles of Chemistry II + Lab II | | | X | X ⁴ | | | |
| CHEM 351 | 3 | CHEM 2300 | 3 | Principles of Organic Chemistry | X | | X | | | | |
| CHEM 351L | 1 | CHEM 2315 | 1 | Organic Chemistry Lab I | X | | | | | | |
| CHEM 481 | 3 | CHEM 3700 | 3 | Introduction to Biochemistry | X | | | | | | |
| No Equivalent | | CHEM 3710 | 1 | Introduction to Biochemistry Lab | X | | | | | | |
| CS 124 ^{1,2} | 3 | CS 1400 | 4 | Intro to Computer Science - CS 1 | X | X | X | X | X ² | X ² | X ² |
| CS 165 ¹ | 3 | CS 1410 | 3 | Intro to Computer Science - CS 2 | | | | X | X | X | |
| CS 235 ¹ | 3 | CS 2420 | 3 | Algorithms & Data Structures - CS 3 | | | | X | X | | |
| No Equivalent | | CS 2410 | 3 | Intro to Event-driven Programming & GUIs | | | | X | | | |
| CS 313 | 3 | CS 2610 | 3 | Developing Web Applications | | | | X | | | |
| No Equivalent | | CS 3000 | 1 | Undergraduate Seminar | | | | X | | | |
| CS 345 | 3 | CS 3100 | 3 | OS + Concurrency | | | | X | X | | |
| No Equivalent | | CS 3810 | 3 | Organization & Architecture | | | | X | | | |
| ECEN 150 | 3 | ECE 2250 | 3 | Electrical Circuits I | | | | | X | X | |
| ECEN 250 | 4 | ECE 2290 | 3 | Electrical Circuits II | | | | | X | X | |
| ECEN 160 | 3 | ECE 2700 | 4 | Digital Circuits | | | | | X | X | |
| FDENG 101 | 3 | ENGL 1010 | 3 | Introduction to Writing | X | X | X | X | X | X | X |
| FDENG 301 | 3 | ENGL 2010 | 3 | Intermediate Writing | X | X | X | X | X | X | X |
| ME 201 | 3 | ENGR 2010 | 3 | Engineering Mechanics - Statics | X | X | X | | | | X |
| ME 204 | 3 | ENGR 2030 | 3 | Engineering Mechanics - Dynamics | | X | X | | | | X |
| ME 202 | 3 | ENGR 2140 | 3 | Mechanics of Materials | X | X | | | | | X |
| No Equivalent | | ENGR 2450 | 3 | Engineering Numerical Methods | X | | | | | | |
| ECEN 150 | 3 | ENGR 2210 | 3 | Fundamental Electronics | X | X ³ | | | | | X |
| ME 172 | 3 | ENGR 2270 | 2 | Computer Engineering Drafting | X | X | X | | | | |
| GEOL 111+ 111L | 3+1 | GEO 1110+1115 | 3+1 | Dynamic Earth | | X | | | | | |
| No Equivalent | | MAE 1200 | 2 | Engineering Graphics | | | | | | | X |
| ME 250 | 3 | MAE 2160 | 3 | Material Science | | | | | | | X |
| ME 250L | 1 | MAE 2165 | 1 | Material Science Lab | | | | | | | X |
| ME 322 | 4 | MAE 2300 | 3 | Thermodynamics I | | X ³ | | | | | X |
| FDMAT 112 | 4 | MATH 1210 | 4 | Calculus I | X | X | X | X | X | X | X |
| MATH 113 ¹ | 3 | MATH 1220 | 4 | Calculus II | X | X | X | X | X | X | X |
| MATH 214 ¹ | 3 | MATH 2210 | 3 | Multivariable Calculus | | X | | | | X | X |
| No Equivalent | | MATH 2250 | 4 | Linear Algebra & Differential Equations | X | X | X | | | | X |
| MATH 341 | 3 | MATH 2270 | 3 | Linear Algebra | | | | X | X | X | |
| No Equivalent | | MATH 2280 | 3 | Ordinary Differential Equations | | | | | X | X | |
| No Equivalent | 3 | MATH 3310 | 3 | Discrete Mathematics | | | | X | X | | |
| MATH 423 | 3 | MATH 5710 | 3 | Introduction to Probability | | | | | X | X | |
| PH 121+123 | 3+1 | PHYS 2210 + 2215 | 4+1 | General Physics - Science I | X | X | X | X ⁴ | X | X | X |
| PH 220 | 3 | PHYS 2220 + 2225 | 4+1 | General Physics - Science II | | | | X ⁴ | X | X | X |

¹Series should be completed at one school (byui.edu).

²Mechanical Engineering requires C++ or C. Electrical/Computer Engineering requires C++.

³Civil Engineering students can choose one out of ENGR 2210 and MAE 2300.

⁴Computer Science students can choose either PHYS 2210&2220 or CHEM 1210&1220.

⁵BE= Biological Engineering, CI = Civil Engineering, EN = Environmental Engineering, CS = Computer Science, CM = Computer Engineering, EL = Electrical Engineering, ME = Mechanical Engineering.

Additional classes may be acceptable for the professional program. Contact USU for more information.

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