

| Required for USU Major | | | | | | Articulation of Pre-engineering Courses between Brigham Young University - Idaho and Utah State University current as of: 6/17/2011 | | | | |
|---------------------------|---|---|---|---|---|--|-----|--|-------------------|--------|
| B | C | E | C | E | M | USU | | | BYU - I | |
| I | I | N | O | L | E | Course | Cr | Course Title | Course | Cr |
| E | V | V | M | E | C | | | | | |
| N | L | I | P | C | H | | | | | |
| X | | | | | | BENG 1880 | 3 | Quantitative Biological Systems | | |
| X | | | | | | BENG 2330 | 3 | Properties of Biomaterials | | |
| X | | | | | | BENG 2400 | 3 | Biological Thermodynamics | ME 322 | 4 |
| X | | | | | | BIOL 1610 (was 1210) | 4 | Biology I | BIO 180 | 4 |
| X | | | | | | BIOL 3300 | 4 | General Microbiology | BIO 221+222 | 3+1 |
| | X | X | | | | CEE 1880 | 1 | CEE Orientation & Computer Applications | | |
| | X | X | | | | CEE 2240 | 3 | Engineering Surveying | | |
| X | X | X | | | | CEE 2870 | 2 | Intro to Programming | | |
| | | X | | | | CEE 2890 | 1 | Sophomore Seminar - Environmental | | |
| X | X | X | | | X | CHEM 1210 | 4 | Principles of Chemistry I | CHEM 105 | 4 |
| X | X | | | | X | CHEM 1215 (was 1230) | 1 | Principles of Chemistry Lab I | CHEM 105 | 4 |
| X | | | | | | CHEM 2300 | 3 | Principles of Organic Chemistry | CHEM 351 | 4 |
| X | | | | | | CHEM 2315 (was 2330) | 1 | Organic Chemistry Lab I | CHEM 351 | 4 |
| X | | | | | | CHEM 3700 | 3 | Introduction to Biochemistry | CHEM 481 | 4 |
| X | | | | | | CHEM 3710 | 1 | Introduction to Biochemistry Lab | | |
| | | | X | X | | CS 1400 (was 1700)* | 3 | Intro to Computer Science - CS 1 | CS 124* | 3 |
| | | | | | | CS 1405 (was 1710)* | 1 | Intro to Computer Science - CS 1 Lab | | |
| | | | X | X | | CS 1410 (was 1720)* | 3 | Intro to Computer Science - CS 2 | CS 165* | 3 |
| | | | X | | | CS 2420 (was 2200)* | 3 | Algorithms & Data Structures - CS 3 | CS 235* | 3 |
| | | | X | | | CS 3100 | 3 | OS + Concurrency | CS 345 | 3 |
| | | | X | X | | ECE 1000 (was 1010) | 2 | Intro to Electrical & Computer Engineering | ECEN 150 | 3 |
| | | | X | X | | ECE 2250 (was 2270/2410) | 4 | Electrical Circuits | ECEN 250 | 4 |
| | | | X | X | | ECE 2700 (was 2530) | 4 | Digital Circuits | ECEN 224 | 3 |
| X | X | X | X | X | X | ENGL 1010 | 3 | Introduction to Writing | FDENG 101 | 3 |
| X | X | X | X | X | X | ENGL 2010 | 3 | Intermediate Writing | FDENG 201 | 3 |
| X | X | X | | | X | ENGR 2010 (was 2000) | 3 | Engineering Mechanics - Statics | | |
| X | X | X | | | X | ENGR 2030 (was 2020) | 3 | Engineering Mechanics - Dynamics | ME 204 | 3 |
| | X | X | | | X | ENGR 2140 (was 2040) | 3 | Strength of Materials | ME 202 | 3 |
| X | X | X | | | | ENGR 2450 (was 2210) | 3 | Engineering Numerical Methods | | |
| X | X | | | | X | ENGR 2210 (was ETE) | 3 | Electrical Engineering for Non-majors | ECEN 250 | 4 |
| X | X | X | | | | ETE 2270 | 2 | Computer Engineering Drafting | ME 172 | 3 |
| | X | X | | | | GEO 1110/1115 | 3+1 | Dynamic Earth | Geol 111+ 111L | 3+1 |
| | | | | | X | MAE 1200 | 2 | Engineering Graphics | | |
| | X | | | | X | MAE 2160 (was 2060) | 3 | Material Science | ME 250 | 3 |
| | X | | | | X | MAE 2165 | 1 | Material Science Lab | ME 250L | 1 |
| | | | | | X | MAE 2200 | 3 | Engineering Numerical Methods I | ME 142* | 2 |
| | X | X | | | X | MAE 2300 (was 2400) | 3 | Thermodynamics I | ME 322 | 4 |
| | | | | | X | MAE 2450 (was 2210) | 3 | Engineering Numerical Methods II | ME 342* | 3 |
| X | X | X | X | X | X | MATH 1210 | 4 | Calculus I | FDMAT 112** | 4 |
| X | X | X | X | X | X | MATH 1220 | 4 | Calculus II | Math 113 or 215** | 3 or 4 |
| | X | | | X | X | MATH 2210 | 3 | Multivariable Calculus | Math 214 or 316** | 3 or 4 |
| X | X | X | | | X | MATH 2250 | 4 | Linear Algebra & Differential Equations | Math 341+ 371** | 3+3 |
| | | | X | X | | MATH 2270 | 3 | Linear Algebra | Math 341 | 3 |
| | | | X | X | | MATH 2280 | 3 | Ordinary Differential Equations | Math 371 | 3 |
| | | | X | | | MATH 3310 | 3 | Discrete Mathematics | CS 237 | 3 |
| | | | X | X | | MATH 5710 | 3 | Introduction to Probability | | |
| | | | | | X | PHYS 2200 | 2 | Elements of Mechanics | Ph 121 | 3 |
| X | X | X | X | X | X | PHYS 2210 + 2215 | 4+1 | General Physics - Science I | Ph 121+150 | 3+1 |
| | | | X | X | X | PHYS 2220 + 2225 | 4+1 | General Physics - Science II | Ph 123+220+250 | 3+3+1 |

*Series should be completed at one school

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**112+113+214+341+371 or 112+215+316+3 credits math