

B.S. in Mechanical Engineering 2022-2023: Option 1 - CWILT

| FIRST YEAR | | | | | |
|---|---------|---|---------|---|------------|
| Fall (even) | Credits | Interim | Credits | Spring (odd) | Credits |
| GES 160 Inquiry Seminar | 3 | ENR 160 Introduction to Engineering | 3 | COS 205 Scientific Computing | 3 |
| GES 130 Christianity/Western Culture | 4 | | | GES 140 Introduction to Wellbeing | 3 |
| MAT 124M Calculus 1 | 4 | | | MAT 125 Calculus 2 | 4 |
| PHY 292 & PHY 292D | 4 | | | PHY 296 & PHY 297 | 4 |
| General Physics I and General Physics I Lab | | | | General Physics II and General Physics II Lab | |
| | | | | Artistic Experience (A) course | 0-3 |
| | 15 | | 3 | | 14-17 |
| SECOND YEAR | | | | | |
| Fall (odd) | Credits | Interim | Credits | Spring (even) | Credits |
| BIB 101 Introduction to the Bible | 3 | ENR 265 Computer Aided Design & Engineering | 3 | ENR 318 Engineering Thermal Science | 3 |
| CHE 208 & CHE 208D | 4 | | | ENR 352 & ENR 353 | 4 |
| Accelerated General Chemistry and Accelerated General Chemistry Lab | | | | Computer Methods in Physics & Engineering and Computer Methods in Physics & Engineering Lab | |
| PHY 302 & PHY 303 | 4 | | | PHY 312 & PHY 313 | 4 |
| Electronics and Electronics Lab | | | | Modern Physics and Modern Physics Lab | |
| MAT 223 Multivariable Calculus | 3 | | | GES 125 Introduction to the Creative Arts | 4 |
| ENR 260 Careers in Engineering & Physics Seminar | 1 | | | THE 201 Christian Theology | 3 |
| | 15 | | 3 | | 18 |
| THIRD YEAR | | | | | |
| Fall (even) | Credits | Interim | Credits | Spring (odd) | Credits |
| MAT 224 Differential Equations with Linear Algebra | 4 | World Cultures (U) course | 3 | ENR 308 Statics and Mechanics of Materials | 4 |
| ENR 320 Mathematical Methods in Physics & Engineering | 4 | | | ENR 348 Heat Transfer | 3 |
| ENR 422 & ENR 423 | 4 | | | ENR 446 & ENR 447 | 4 |
| Fluid Mechanics and Fluid Mechanics Lab | | | | Control Systems and Control Systems Lab | |
| Second Language (S) course *1 | 4 | | | Contemporary Western Life and Thought (L) course | 3 |
| | | | | Leisure and Lifetime Sports (Q) course | 1 |
| | | | | Cross-cultural Experience (Z) course | 0-3 |
| | 16 | | 3 | | 15-18 |
| FOURTH YEAR | | | | | |
| Fall (odd) | Credits | Interim | Credits | Spring (even) | Credits |
| ENR 465 Engineering Design Seminar | 1 | Comparative Systems (G) course | 3 | ENR 490 Engineering Design Project | 3 |
| ENR 304 & ENR 305 | 4 | | | ENR 358 & ENR 359 | 4 |
| Engineering Materials and Engineering Materials Lab | | | | Design of Mechanical Components & Systems and Design of Mechanical Components and Systems Lab | |
| ENR 356 Fundamentals of Design and Manufacturing | 3 | | | ENR 402 Mechanical Systems and Measurements Lab | 3 |
| PHY 340 Mechanics | 4 | | | Science, Technology, and Society (K) course | 3 |
| Interpreting Biblical Themes (J) course | 3 | | | Contemporary Christian Issues (P) course | 3 |
| | 15 | | 3 | | 16 |
| Minimum Total Credits 136 | | | | | 136 |

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*1. Students must complete through the second semester of a first year language course or equivalent. (Check the catalog for details of this option.)

Most financial aid packages stipulate 12 credits/semester; Minnesota state grants are reduced when credit load falls below 15 credits/semester. (Interim credits may be split between fall and spring for state grant purposes only.)

B.S. in Mechanical Engineering 2022-2023: Option 2 - Humanities

| FIRST YEAR | | | | | |
|--|-----------|--|----------|---|--------------|
| Fall (even) | Credits | Interim | Credits | Spring (odd) | Credits |
| GES 145 Humanities I: Greco-Roman through Middle Ages | 4 | GES 147 Humanities II: Renaissance and Reformation | 4 | GES 244 Humanities III: European Enlightenment and American Culture to 1877 | 4 |
| BIB 101 Introduction to the Bible | 3 | | | COS 205 Scientific Computing | 3 |
| MAT 124M Calculus 1 | 4 | | | MAT 125 Calculus 2 | 4 |
| PHY 292 & PHY 292D | 4 | | | PHY 296 & PHY 297 | 4 |
| General Physics I and General Physics I Lab | | | | General Physics II and General Physics II Lab | |
| BIB 101 Introduction to the Bible | | | | Artistic Experience (A) course | 0-3 |
| | 15 | | 4 | | 15-18 |
| SECOND YEAR | | | | | |
| Fall (odd) | Credits | Interim | Credits | Spring (even) | Credits |
| GES 246 Humanities IV: Modern and Contemporary Western Culture | 4 | ENR 160 Introduction to Engineering | 3 | ENR 318 Engineering Thermal Science | 3 |
| CHE 208 & CHE 208D | 4 | | | ENR 352 & ENR 353 | 4 |
| Accelerated General Chemistry and Accelerated General Chemistry Lab | | | | Computer Methods in Physics & Engineering and Computer Methods in Physics & Engineering Lab | |
| PHY 302 & PHY 303 | 4 | | | PHY 312 & PHY 313 | 4 |
| Electronics and Electronics Lab | | | | Modern Physics and Modern Physics Lab | |
| MAT 223 Multivariable Calculus | 3 | | | World Cultures (U) course | 3 |
| ENR 260 Careers in Engineering & Physics Seminar | 1 | | | GES 140 Introduction to Wellbeing | 3 |
| | 16 | | 3 | | 17 |
| THIRD YEAR | | | | | |
| Fall (even) | Credits | Interim | Credits | Spring (odd) | Credits |
| MAT 224 Differential Equations with Linear Algebra | 4 | ENR 265 Computer Aided Design & Engineering | 3 | ENR 308 Statics and Mechanics of Materials | 4 |
| ENR 320 Mathematical Methods in Physics & Engineering | 4 | | | ENR 348 Heat Transfer | 3 |
| ENR 422 & ENR 423 | 4 | | | ENR 446 & ENR 447 | 4 |
| Fluid Mechanics and Fluid Mechanics Lab | | | | Control Systems and Control Systems Lab | |
| Second Language (S) course *1 | 4 | | | Science, Technology, and Society (K) course | 3 |
| | | | | Leisure and Lifetime Sports (Q) course | 1 |
| | | | | Cross-cultural Experience (Z) course | 0-3 |
| | 16 | | 3 | | 15-18 |
| FOURTH YEAR | | | | | |
| Fall (odd) | Credits | Interim | Credits | Spring (even) | Credits |
| ENR 465 Engineering Design Seminar | 1 | Comparative Systems (G) course | 3 | ENR 490 Engineering Design Project | 3 |
| ENR 304 & ENR 305 | 4 | | | ENR 358 & ENR 359 | 4 |
| Engineering Materials and Engineering Materials Lab | | | | Design of Mechanical Components & Systems and Design of Mechanical Components and Systems Lab | |
| ENR 356 Fundamentals of Design and Manufacturing | 3 | | | ENR 402 Mechanical Systems & Measurements Lab | 3 |
| PHY 340 Mechanics | 4 | | | Contemporary Christian Issues (P) course | 3 |
| Interpreting Biblical Themes (J) course | 3 | | | | |
| | 15 | | 3 | | 13 |
| Minimum Total Credits 135 | | | | | |

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*1. Students must complete through the second semester of a first year language course or equivalent. (Check the catalog for details of this option.)

Most financial aid packages stipulate 12 credits/semester; Minnesota state grants are reduced when credit load falls below 15 credits/semester. (Interim credits may be split between fall and spring for state grant purposes only.)