B.S. in Mechanical Engineering

**DEGREE PATH SHEET - Class of 2022**

### Freshman: 1st semester (16 credits)
- **CHEM 1035 (3)** Chemistry
- **CHEM 1045 (1)** Chem Lab Co: CHEM 1035

### Freshman: 2nd semester (16 credits)
- **PHYS 2305 (4)** Physics I Pre: MATH1225, Co: MATH226
- **MATH 2114 (3)** Linear Algebra Pre: MATH1225 (B) or MATH226

### Sophomore: 1st semester (16 credits)
- **MSE 2034 (3)** Elem Materials Engr Pre: CHEM 1035, MATH 2204 & PHYS2306, Co: MATH2214
- **PHYS 2306 (4)** Physics II Pre: PHYS 2305, MATH 2226

### Sophomore: 2nd semester (16 credits)
- ****ME2134 (4)** Thermodynamics (C-) Pre: CHEM1035, MATH 2204 & PHYS2306, Co: MATH2214
- **ECE 2054 (3)** Electrical Theory Pre: PHYS 2306, Co: MATH 2214
- **ME2004 (3)** Numerical Methods (C-) Pre: MATH1225, ENGE1216, MATH 2114

### Junior: 1st semester (17 credits)
- **ME3024 (3)** Design & Econ Pre: ME2004(C-), ESM204, ESM 2304
- **ME3524 (4)** Vibrations Pre: ME2004(C-), ESM204, MATH 2114 & 2214

### Junior: 2nd semester (17 credits)
- **ME3041 (4)** Fluid Mechanics (w/lab) Pre: MATH 2114, 2214 & 2204, ME2004(C-), Co: ME2134
- **ME3024 (3)** Design & Econ Pre: ME2004(C-), ESM204, MATH 2114 & 2214
- **ME3534 (4)** Controls (w/lab) Pre: ESM204, ME2004(C-), MATH2114, 2204, & 2214

### Senior: 1st semester (15 credits)
- **ME4124 (3)** CAD Thermal/Fluid Design Pre: ME2134(C-), ME3414, ME3304
- **ME4015 (3)** Senior Capstone Design Pre: ME 4015 (continuation of same ME 4015 project from Fall)

### Senior: 2nd semester (15 credits)
- ****ME 4016 (3)** Senior Capstone Design Pre: ME 4015
- **ME Major Elective (3)**
- **ME Major Elective (3)**

### Color Code:
- Basic Science
- Math
- Design
- Humanities
- Electrical, Instrumentation, Measurement
- Major Electives
- Mechanical, Materials, & Processes
- Thermal Fluid Sciences

Notes:
- Arrows denote prerequisites. Prerequisites of prerequisites must be met.
- Prerequisites may change without warning. Please check for updates in the undergraduate catalog.
- *Must earn C- or higher in ME2004 & ME2134 to meet prerequisite & graduation requirements.
- **ME 4015 (3)** Senior Capstone Design Pre: ME 4015 (or CLE area 2*)
- **ME Major Elective (3)**
- **ME Major Elective (3)**
- **ME Major Elective (3)**

Notes on course requirements:
- 200 minimum in-major GPA (all "ME" & "NSEG" courses)
- 200 minimum extended in-major GPA ("ME", "NSEG" courses & ESM2104, 2204, & 2304)
- 200 minimum overall GPA (all courses)
- By 45 attempted required hours completion of ESM2104, MATH2204 & MATH2114
- By 60 attempted required hours completion of MATH2214, ESM2304, & ME2004(C-)
- By 72 attempted required hours completion of ME2134(C-), ME3624 or ME 3024, & ME3524
- By 93 attempted required credits completion ME4015 and ME4124

Continued enrollment requirements: see ME website for more information, www.me.vt.edu.

This is an unofficial planning tool only; please see the approved checksheets on the Registrar’s website for official graduation requirements.

Revised October 20, 2020 - For more information please see www.me.vt.edu.