B.S. in Mechanical Engineering – Mechanical Engineering Major
Not math-ready, with summer courses¹ (4-year plan)

First year:
take courses when eligible.
Can add Pathways electives to fill in schedule.

Freshman:
Summer (8 credits)

Sophomore:
1st semester (16 credits)

Sophomore:
2nd semester (16 credits)

Junior:
1st semester (16 credits)

Junior:
2nd semester (16 credits)

Senior:
1st semester (18 credits)

Senior:
2nd semester (18 credits)

CHEM 1035 (3) Chemistry
Chem Lab Co: CHEM 1Y03

PHYS 2305 (4) Physics I
Pre: MATH1225, MATH2214,
Co: MATH 1226

PHYS 2306 Physics II (4)
Pre: PHYS 2305, MATH1226

ME 2004 (3) Numerical Methods
Pre: MATH1226, ENGE1215, MATH2114

ME 2024 (4) Mech. Design (w/lab)
Pre: ESM2104,MATH2214,
Co: MATH 1226

ME 2134 (4) Thermodynamics
Pre: CHEM1035, MATH 2204 & PHYS2305

ME 2144 (4) Fluid Mech (w/lab)
Pre: MATH2114, 2204 & 2204,
ME2004, Co: ME2134

ME 3024 (3) Design & Econ
Pre: ESM2104, ENGE1106

ME 3034 ME Discourse (1)
Pre: ENGL.1106

ME 3304 (3) Heat & Mass Transfer
Pre: ME2134, ME3414, ME2004, & MATH2214

ME 3414 (4) Fluid Mech (w/lab)
Pre: MATH 2114, 2214 & 2204,
ME2004, Co: ME2134

ME 3524 (3) Controls (w/lab)
Pre: ESM2104 & 2304,ME2004,
MATH2114, 2204, & 2214

ME 3534 (4) Mech. Design (w/lab)
Pre: ESM2104, MATH2114, ME2004

ME 3624 (4) Vibrations
Pre: ME2004, ESM2304, MATH 2114 & 2214

ME 3634 (3) Dynamics
Pre: ESM2104 & MATH2204
Co: MATH2214

ME 3644 (3) Thermal & Fluids
Pre: MATH2114, 2204, ME2004

**ME 4015 (5) Senior Capstone Design
Pre: ME3024, ME3304, ME3034,
ME3524, ME3534, ME4005

**ME 4016 (3) Senior Capstone Design
Pre: ME 4015
(continuation of same ME 4015 project from Fall)

ME 4055 ME Lab (3)
Pre: ECE 3054
STAT 3704, & ME3524
Co: MATH1106

ME 4065 Tech Elective (3)

ME/NSEG List #1 Tech Elective (3)

ME/NSEG List #1 (3)

Pathways Concept 2 (3)

Pathways Concept 3 (3)

Pathways Concept 2 (3)

Pathways Concept 3 (3)

Pathways Concept 7 (3)

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

Notes:
- Arrows denote prerequisites. Prerequisites of prerequisites must be met. Prerequisites may change without warning. Please check for updates in the timetable of classes.
- For students graduating in 2023-24, any List #1 technical elective may be used to replace ME4124.
- **Required senior courses are offered only once per year; ME4015 & ME4016 must be taken in order during the same academic year, beginning in Fall.
- ¹Assumes that classes with white fill have been completed before entering ME Department; adjust as necessary.

Still not sure about a major?
See: www.careercorestone.org for help choosing an engineering or science major.

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Revised Sept., 2023. For more information please see 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.