# UCO Engineering Physics-Mechanical Engineering

## Core Curriculum

1. **Fall Year 1**
   - MATH 2313 Calculus 1
   - CC/Quant

2. **Spring Year 1**
   - ENGR 1213 Comp. & Lab

3. **Fall Year 2**
   - MATH 2313 Calculus 2
   - CC/Crit

4. **Spring Year 2**
   - ENGR 2000 Intro. to Engr. & Lab
   - CC/Comm

5. **Fall Year 3**
   - MATH 2313 Calculus 3
   - CC/Quant

6. **Spring Year 3**
   - ENGR 2113 Eng. Computation & Lab
   - CC/Comm

7. **Fall Year 4**
   - ENGR 3203 Thermodynamics

8. **Spring Year 4**
   - POL 1113 Am. Nat. Govt.
   - CC/Soc

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### Prerequisite

- **C**: Concurrent Enrollment
- **P**: Permission Required
- **J**: Junior Standing
- **S**: Senior Standing

### Mechanical Engineering Core Areas

- **Dynamics and Control (DC)**
- **Solid Mechanics and Materials (SM)**
- **Thermal and fluids (TF)**

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### Elective Group A

- [DC1] ENGR 3143 Machine Dynamics (14,15)
- [DC2] ENGR 4143 Vibration (14,15)
- [DC3] ENGR 3222 Digital Logic Design and Lab (22,23)
- [DC4] ENGR 4303 Control System (29)
- [TF1] ENGR 4313 Fluid Dynamics (14, 20,J)

### Elective Group B

- [DC5] ENGR 3803 Electrical Power System (13, 22, 23)
- [SM1] ENGR 4103 Finite Element Analysis (17, 19C, 24)
- [SM2] ENGR 4343 Biomechanics (15,16)
- [SM3] PHY 4163 Analytical Mechanics (19)
- [TF2] ENGR 4203 Refrigeration and Air Conditioning (16, 20, 31C)

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### CC/Comm
- Written and Oral Communication
- Critical Inquiry

### CC/Crit
- Aesthetic Analysis

### CC/Cult
- Cultural Language Analysis

### CC/Hist
- Historical Political Analysis

### CC/Life
- Life Skills

### CC/Quant
- Quantitative Reasoning

### CC/Soc
- Social Behavior Analysis