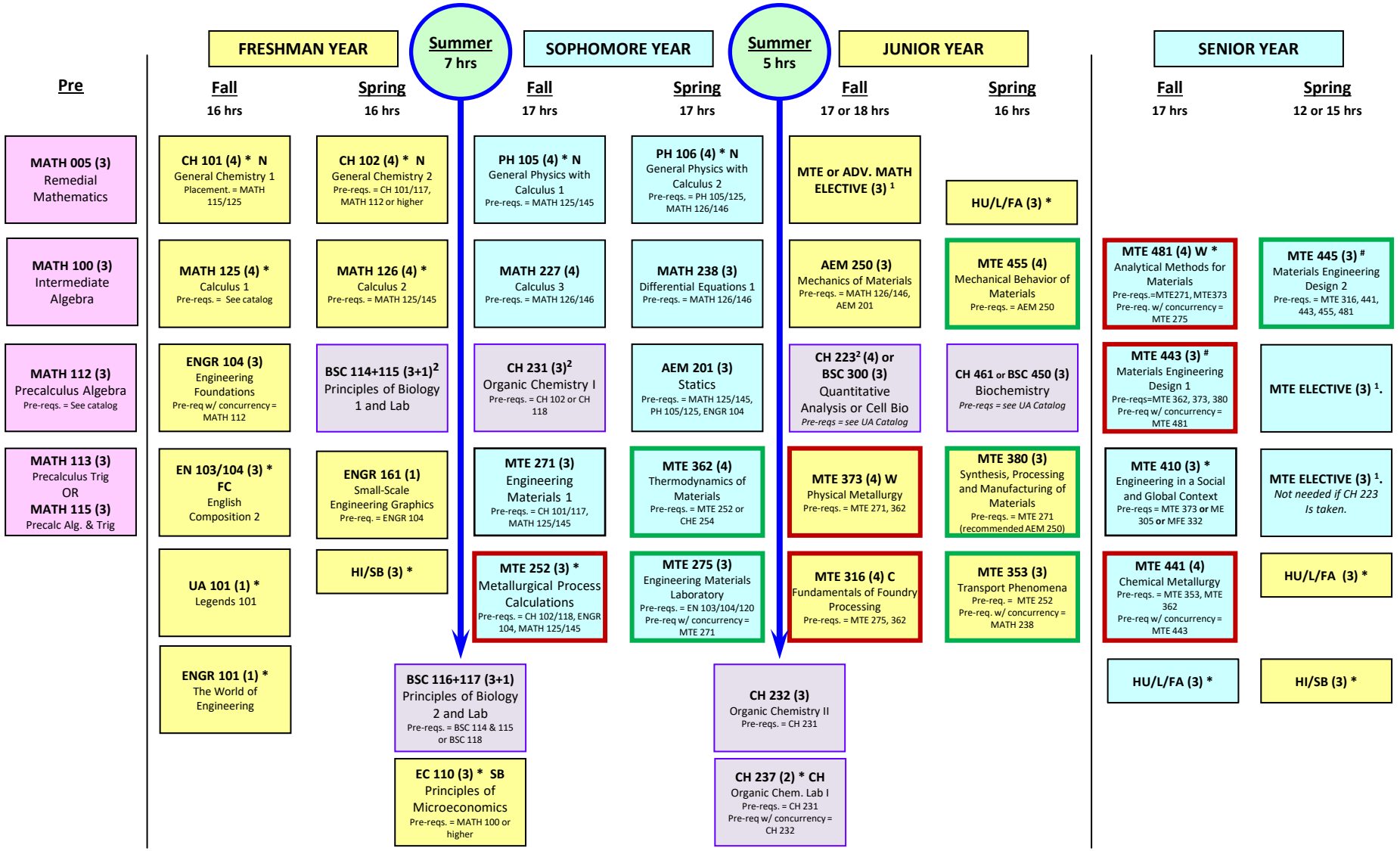
ROADMAP TO YOUR GRADUATION

*Metallurgical & Materials Engineering **with Pre-Medical** Curriculum – BS MTE Degree – Fall 2025*

141-143 hrs total



* Core Curriculum courses – NOTE: At least one HU/L/FA course must carry the Literature (L) attribute and at least one HI/SB course must carry the History (HI) attribute

\# Senior standing

1. A list of courses that satisfy the MTE elective requirements can be found in the UA Catalog at http://catalog.ua.edu/
2. Counts towards MTE elective requirements

Pre-Medical Course Requirements

Fall - Only course offering

Spring - Only course offering

This is an unofficial flowchart prepared to assist students in planning their coursework. The UNIVERSITY CATALOG contains the official listing of academic information. The MTE Department may change prerequisites and corequisites from time to time as course content changes to keep pace with changing technology. Students should consult the CATALOG and academic advisor prior to course registration.

Updated 5-16-2025 TCT

Approved MTE Elective Courses**

BSC 114 – Principles of Biology
CE 262 – Civil & Construction Engineering Materials
CE 425 – Air Pollution (see prerequisites in catalog)
CH 223 – Quantitative Analysis
CH 231 – Elementary Organic Chemistry I
ECE 320 – Fundamentals of Electrical Engineering
GEO 210 – Minerology
GY 339 – Natural Resources & Environmental Planning
MFE 342 – Fundamentals of Materials Processing
MFE 442 – Advanced Materials Science and Additive Processes
MTE 412 (or CHE 412) – Polymer Materials Engineering
MTE 439 – Metallurgy of Welding
MTE 449 – Powder Metallurgy
MTE 450 – Plasma Processing of Thin Films
MTE 467 – Strengthening Mechanisms in Materials
MTE 476 – Physical Ceramics
MTE 487 – Corrosion Science & Engineering
PH 253 – Modern Physics
PH 331 – Electricity and Magnetism I
PH 481 – Solid State Physics
MATH 237 – Introduction to Linear Algebra
MATH 343 – Applied Differential Equations II
MATH 411 – Numerical Analysis I
GES 255 or 400 – Engineering Statistics
ST 260 – Statistical Data Analysis

** Other courses in “materials-related” or “engineering-related” sciences can be taken provided that it has been approved by the Department and Dean via petition.

Engineering Registration as a Professional Engineer

Engineering is a profession requiring state registration to become a “Professional Engineer.” The first step towards becoming registered is passing the Fundamentals of Engineering Exam. Students are strongly encouraged (but not required) to take and pass the Fundamentals of Engineering Exam before they graduate.

THE UNIVERSITY OF ALABAMA® | College of Engineering
Metallurgical and Materials Engineering

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