

# Advising & Registration Notes for Fall 2021

## Purdue Core Curriculum Listing:

<https://engineering.purdue.edu/MSE/foryou/undergraduate>

## MSE General Education Policy:

[https://engineering.purdue.edu/MSE/foryou/undergraduate/General\\_Education\\_Program](https://engineering.purdue.edu/MSE/foryou/undergraduate/General_Education_Program)

*What courses satisfy the General Education requirement of “At least six credit hours must be at the 30000 level or above, or from courses with a required prerequisite in the same department”?*

Two 3xx level courses **OR** any course that requires a prerequisite in the same Dept. As an example, SPAN 10200 can even be used even though it is not a 30000-level course since it requires SPAN 10100 as a prerequisite

**MSE Course Offering Schedule:** *Plan ahead as some courses are only offered fall or spring*

[https://engineering.purdue.edu/MSE/foryou/undergraduate/MSE\\_recommended\\_course\\_sequence](https://engineering.purdue.edu/MSE/foryou/undergraduate/MSE_recommended_course_sequence)

## All 200 level courses – fall and spring

330 – spring only

335 - fall and spring

340 - fall and spring

367 - fall and spring

370 - fall only

382 - spring only

420 - fall only

430 - fall only

440 - spring

445 - fall only

## Summer 2021 Specifics

MSE 230, 250, 270, 330 and 420 - **ALL ONLINE**

MSE Labs: 235, 335, 367 - *limit of 20 for each lab*

**Materials Engineering Major Courses (42 credits)**

Required MSE Courses (42 credits)

- |  |  |
|--|--|
| ____ (3) MSE 23000- Structure and Prop. of Materials | ____ (3) MSE 36700 – Materials Processing Lab              |
| ____ (3) MSE 23500 – Materials Properties Lab        | ____ (3) MSE 37000 – Elec, Opt, Mag Props. of Materials    |
| ____ (3) MSE 25000- Physical Properties in Eng.      | ____ (3) MSE 38200 - Mechanical Response of Materials      |
| ____ (3) MSE 26000- Thermodynamics of Materials      | ____ (0) MSE 39000 – Seminar (taken each semester)         |
| ____ (3) MSE 27000- Bonding and Crystallography      | ____ (3) MSE 42000 – Struct. & Props. of Organic Materials |
| ____ (3) MSE 33000 – Proc. and Props. of Materials   | ____ (3) MSE 43000 – Materials Processing and Design I     |
| ____ (3) MSE 33500 – Material Characterization Lab   | ____ (3) MSE 44000 – Materials Processing And Design II    |
| ____ (3) MSE 34000 – Transport Phenomena             | ____ (3) MSE 44500 – Materials Engr Systems Analysis       |

**MSE technical Electives (18 credits)** *(See the MSE undergraduate manual for an approved list)*

- |                                  |   |
|----------------------------------|---|
| _____ (3) Technical Elective I   | _____ (3) Technical Elective IV                             |
| _____ (3) Technical Elective II  | _____ (3) Technical Elective V or Support Area Elective I   |
| _____ (3) Technical Elective III | _____ (3) Technical Elective VI or Support Area Elective II |

**Other Departmental /Program Course Requirements (66 credits)**

General Engineering Requirements (4 credits)

- \_\_\_\_ (2) ENGR 13100/14100 (honors) - Transforming Ideas to Innovation I  
 \_\_\_\_ (2) ENGR 13200/14200 (honors)- Transforming Ideas to Innovation II

Mathematics Requirements (18 credits).

- \_\_\_\_ (4/5) MA 16500/16100 - Analytic Geometry And Calculus I (satisfies Quantitative Reasoning Selective for  
 \_\_\_\_ (4/5) MA 16600/16200 - Analytic Geometry And \_\_\_\_\_ (3) MA 26500 - Linear Algebra  
 \_\_\_\_ (4) MA 26100 - Multivariate Calculus \_\_\_\_\_ (3) MA 26600 - Ordinary Differential  
 Alternative sequence to MA 265/266 is MA 26200 followed by either MA 30300 or MA 35100

Science Requirements (20 credits)

- \_\_\_\_ (4) CHM 11500/13600 (honors) - General Chemistry I (satisfies Science Selective for core)  
 \_\_\_\_ (4) CHM 11600/13600 (honors) – General Chemistry II  
 \_\_\_\_ (4) PHYS 17200 – Modern Mechanics (satisfies Science Selective for core)  
 \_\_\_\_ (3/4) PHYS 24100/27200- Electricity and Optics \_\_\_\_\_ (1) PHYS 25200 - Elec. And Optics Lab  
 PHYS 25200 may be replaced by another 1-cr hour science laboratory  
 PHYS 27200 replaces both PHYS 24100 & PHYS 25200

MSE General Education Requirement (24)

Foundation Core (<http://www.purdue.edu/provost/initiatives/curriculum/course.html>)

- \_\_\_\_ (4/3) Course that satisfies Information Literacy and Written Communications Selectives (e.g., ENGL 10600)  
 \_\_\_\_ (3) Course that satisfies Oral Communication for University Core (for example COM 11400)  
 \_\_\_\_\_ (3) G.E. I – (satisfies Human Cultures Humanities for core)  
 \_\_\_\_\_ (3) G.E. II – (satisfies Human Culture Behavioral/Social Science for core)  
 \_\_\_\_\_ (3) G.E. III – (satisfies Science, Technology & Society Selective for core)

MSE General Education Electives (See the MSE undergraduate manual for an approved list)

- \_\_\_\_\_ (3) G.E IV \_\_\_\_\_ (3) G.E. V \_\_\_\_\_ (3)G.E. VI