

INE CURRICULUM CHANGES EFFECTIVE AS OF 2026 -2027 SEMESTER

The Academic Board of the METU NCC Industrial Engineering (INE) Programme decided to implement the following modifications to the existing INE curriculum:

A) Courses to be removed from the curriculum

1. INE 489 (Systems Thinking) will be removed as a must course but will be offered as a Technical Elective. The students who took it and received a grade of NA, W, FD, or FF may repeat the course or may take another Technical Elective course.
2. MECH 227 (Engineering Materials) will be removed as a must course but will be offered as a Technical Elective. The students who took it and received a grade of NA, W, FD, or FF may repeat the course or may take another Technical Elective course.
3. INE 422 (Seminar in Industrial Engineering) will be removed from the curriculum as a must course.

Please note that the existing INE curriculum has 143 credits, and we believe this course load needs to be reduced to create a streamlined curriculum for the overall good of our students and also for the specific purpose of addressing the students' feedback on the workload. After the removal of the above three (3) courses, the proposed curriculum will have 137 credits.

B) Courses to be replaced by a new course in the curriculum

1. MAT 219 (Introduction to Differential Equations) will be replaced by INE 223 Discrete Mathematics (new course). The students who did not take MAT 219, or who took it but received a grade of NA, W, FD, or FF, will take the new course. Students who wish to improve their grade in MAT 219 may also take the new course and be able to replace MAT219 with INE223.
2. EEE 381 (Systems and Control) has been removed as a must course and will be replaced by a Technical Elective. The students who did not take EEE 381, or those who took it but received a grade of NA, W, FD, or FF, will take the new course. The students who wish to improve their grade in EEE 381 may also take the new course. Students who have completed this course will be counted under the Technical Elective category.
3. MECH 351 (Thermodynamics) has been removed as a must course and will be replaced by a Technical Elective. The students who did not take EEE 381, or those who took it but received a grade of NA, W, FD, or FF, will take the new course. The students who wish to improve their

grade in EEE 381 may also take the new course. Students who have completed this course will be counted under the Technical Elective category.

Please note that the current INE curriculum offers four Technical Elective courses. We believe that increasing the number of Technical Elective courses would provide students with greater flexibility to pursue their individual academic interests and allow them to focus more extensively on specific areas of Industrial Engineering.

C) Prerequisites to be modified in the curriculum

Some modifications are implemented in the prerequisite chain of the INE curriculum, in part due to the course removals mentioned above. The new modifications will be implemented to provide flexibility to the curriculum so as to eliminate academically unjustifiable requirements without sacrificing the integrity of the curriculum as a whole. These changes also aim to address students' feedback on the prerequisite chain and its impact on delaying graduation.

The following items describe the modifications to the prerequisite relationships that we plan to implement:

1. The MAT 120 prerequisite is removed from INE 265. INE 265 Prerequisite: none.
2. The MAT 260 prerequisite is removed from INE 251.
3. The INE 265 prerequisite is removed from INE 368. The INE 266 prerequisite is added to INE 368. INE 368 prerequisite: INE 266.
4. The INE 265 prerequisite is removed from INE 372. The INE 266 prerequisite is added to INE 372. INE 372 Prerequisite: INE 266 and CNG 240.
5. The following courses are prerequisites for INE 497: INE 252, INE 324, INE 372, INE 368.
6. The INE 300 prerequisite for INE 400 is removed.

INE400 Prerequisite sets:

One of the following sets must be satisfied to take the INE 400 course.

Set 1: 3880252 , 3880304 , 3880323 , 3880324 , 3880333

Set 2: 3880252 , 3880304 , 3880323 , 3880333 , 3880368

Set 3: 3880252 , 3880304 , 3880323 , 3880333 , 3880372

Set 4: 3880252 , 3880323 , 3880324 , 3880333 , 3880368

Set 5: 3880252 , 3880323 , 3880324 , 3880333 , 3880372

Set 6: 3880252 , 3880323 , 3880333 , 3880368 , 3880372

Set 7: 3880252 , 3880368 , 3880372 , 5680323 , 5680333

7. The corequisite chain between INE 489 and INE 497 is removed.

D) Changes regarding the reduction of the course load

Since we plan to have this new curriculum take effect starting in Fall 2026-2027 term, MECH 227, MECH 351, EEE 381 and INE 422 (as a must course) will no longer be offered to current students. Therefore, students who started the program with the 143-credit requirement will take additional technical elective courses to satisfy the requirements of the curriculum applicable to them. So the adjustment procedure will operate as follows:

- New students who will enroll in the INE program for the first time in Fall 2026-2027 will follow

the updated curriculum with 137 credits without being impacted by the modifications to the INE curriculum

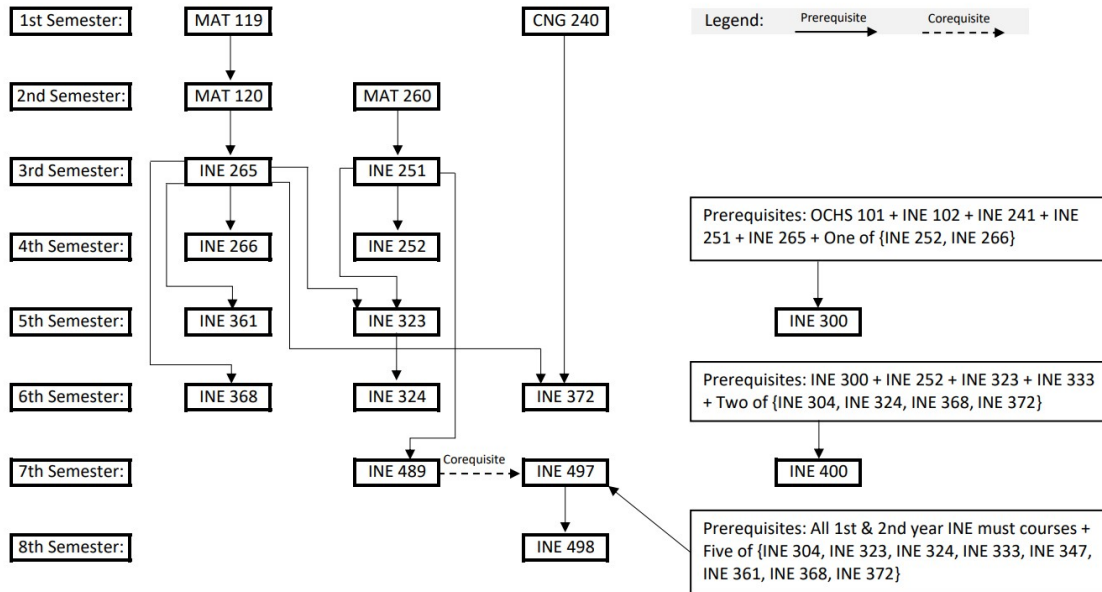
- Existing students who started the program with the 143-credit requirement will take additional technical elective courses to satisfy the requirements of the old curriculum applicable to them, as they have to graduate with 143 credits.

Attachment

1. Existing prerequisite chain of the INE program
2. Modified prerequisite chain of the INE program

Current prerequisite chain:

INDUSTRIAL ENGINEERING - PREREQUISITE CHAIN



Updated prerequisite chain:

INDUSTRIAL ENGINEERING – PREREQUISITE CHAIN

