**Yeshiva University**
**Yeshiva College**
**Academic Advising Center**

500 West 185th Street, Furst Hall, Room 101
Phone: **646-592-4425** | Email: **advising@yu.edu**

# Pre- Engineering/ Physics Major Total Credits: 55

## REQUIRED PHYSIC COURSES, 37 CREDITS:

| | |
|---|---|
| **PHY 1051R**, General Physics 1 Lecture, *Fall* ( ) _____ | 4 Credits |
| **PHY 1051L,** General Physics 1 Lab, *Fall* ( ) _____ | 1 Credit |
| **PHY 1052R,** General Physics 2 Lecture, *Spring* ( ) _____ | 4 Credits |
| **PHY 1052L,** General Physics 2 Lab, *Spring* ( ) _____ | 1 Credit |
| **PHY 2051R,** General Physics 3 Lecture, *Fall* ( ) _____ | 4 Credits |
| **PHY 2052R,** General Physics 4 Lecture, *Spring* ( ) _____ | 4 Credits |
| ***PHY 2550,** Physics Computer Programming ( ) _____ | 3 Credits |
| **PHY 5321,** Electromagnetic Theory ( ) _____ | 3 Credits |
| **PHY 5221,** Classical Mechanics ( ) _____ | 3 Credits |
| **PHY 5810,** Advanced Physics Lab ( ) _____ | 3 Credits |
| **PHY 5510**, Statistical Thermodynamics ( ) _____ | 3 Credits |
| **PHY 5621,** Quantum Mechanics ( ) _____ | 3 Credits |
| **PHY 4935,** Physics Colloquium ( ) _____ | 1 Credit |

## PHYSICS ELECTIVES, 6 CREDITS:

*Examples include computational Engineering, mathematical methods for Engineers, Advanced Mechanics, Advanced Electromagnetism*

| | |
|---|---|
| **PHY ELEC** ( ) _____ | 3 Credits |
| **PHY ELEC** ( ) _____ | 3 Credits |

## REQUIRED MATH COURSES, 12 CREDITS:

| | |
|---|---|
| **MAT 1412,** Calculus 1 ( ) _____ | 4 Credits |
| **MAT 1413,** Calculus 2 ( ) _____ | 4 Credits |
| **MAT 1510,** Multivariable Calculus ( ) _____ | 4 Credits |

*PHY 2550 can be replaced, with permission of the department, by ENGR 5301 Computational Methods in Engineering, PHY 5301 Computational Methods in Physics, or equivalent

*Up to 12 credits can be used towards an MA in physics at YU. Students interested in this option need to make an appointment with an academic advisor as soon as possible and make sure to register for classes with the 5000 code.

Updated: 8.1.2022

NOTE:  Courses within any given major or minor require a grade of a “C-“ or better to fulfill its requirement

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