ROBOTICS (MINOR)

Program Description

The Minor in Robotics provides students with a foundation in the fundamental areas of the interdisciplinary field of robotics. Together with a degree in engineering or computer science, the Minor in Robotics prepares students for careers and graduate studies in robotics.

Applying for the Minor

Apply for a minor in Albert using the link in the My Academics section of the Student Center.

Students should apply for the minor before applying for graduation. After applying for the minor, the application is then forwarded to the Home School Advising Office, Host School Advising Office, Host School Department/Program, and the Academic Dean's office.

The departmental advisers governing the minor will have access to approve or disapprove the minor online using the Graduation Tracking Search page. If a student is registered for a course for the minor during their last semester, the adviser can still set the status to departmental approved pending current courses.

Program Requirements

The minor requires the **completion of at least 14 credits** from the list below. Please note that only one Special Topic in Robotics course can be applied to the requirements of the minor.

Course	Title	Credits
ROB-UY 2004	Robotic Manipulation and Locomotion	4
ROB-UY 3203	Robot Vision	3
ROB-UY 3303	Robot Motion and Planning	3
ROB-UY 3404	Introduction To Haptics and Telerobotics in Medicine	4
ROB-UY 4423	Special Topics in Robotics	3

Interested students should allow 4 semesters (two years) to complete the four courses for the Minor in robotics.

Minor Prerequisites

The courses for the Minor in Robotics have the following prerequisites in computer science, mathematics, and physics.

1. Computer Science - Introduction to Programming
2. Mathematics - Differential Equations and Linear Algebra
3. Physics - Mechanics

Students at NYU Tandon and other schools of NYU who meet the prerequisites may enroll in ROB-UY courses. Various courses across NYU schools and NYU global campuses satisfy these prerequisites, as follows.

1. The Computer Science prerequisite is satisfied by any of the following:

Course	Title	Credits
CS-UY 1114	Intro To Programming & Problem Solving	4
CS-UY 1113	Problem Solving and Programming I	3
CS-UY 1133	Engineering Problem Solving and Programming	3
ENGR-UH 1000	Computer Programming for Engineers	4
CS-UH 1001	Introduction to Computer Science	4
CSCI-SHU 11	Introduction to Computer Programming	4
CSCI-SHU 101	Introduction to Computer and Data Science	4

2. The Mathematics prerequisites is satisfied by a single course covering linear algebra and differential equations or by separate courses in linear algebra and differential equations.

Course	Title	Credits
Select one of the following options:		
Option 1: Single course covering linear algebra and differential equations		
MA-UY 2034	Linear Algebra and Differential Equations	4
or MATH-SHU 265	Linear Algebra and Differential Equation	
Option 2: Separate courses in linear algebra and differential equations		
Select one of the following courses in linear algebra:		4
MA-UY 1044	Linear Algebra	
MATH-UA 140	Linear Algebra	
MATH-UH 1022Q	Linear Algebra	
MATH-SHU 140	Linear Algebra	
Select one of the following courses in differential equations:		4
MA-UY 4204	Ordinary Diff Equations	
MATH-UA 262	Ordinary Diff Equations	
MATH-UH 1024Q	Fundamentals of Ordinary Differential Equations	
MATH-SHU 262	Ordinary Differential Equations	

3. The Physics prerequisite is satisfied by any of the following:

Course	Title	Credits
PH-UY 1013	Mechanics	3
PHYS-UA 11	General Physics I	5
PHYS-UA 91	Physics I	3
ENGR-UH 2012	Conservation Laws in Engineering	2
PHYS-SHU 11	General Physics I	3
PHYS-SHU 91	Foundations of Physics I Honors	3

Notes

'UH' designates courses offered at NYU-Abu Dhabi
'SHU' designates courses offered at NYU-Shanghai

Policies

Program Policies

Minor GPA Policy

In order for the Minor to be awarded and recorded on the official student transcript, the student must obtain an overall 2.00 GPA in the Minor courses.

NYU Policies

University-wide policies can be found on the New York University Policy pages (https://bulletins.nyu.edu/nyu/policies/).

Tandon Policies

Additional academic policies can be found on the Tandon academic policy page (https://bulletins.nyu.edu/undergraduate/engineering/academic-policies/).