THE NEET EXPERIENCE

First-Year Discovery Class (3 units)

SP.248
The NEET Experience

Register now for Fall 2025!

Do you want to exercise and apply your algorithmic, creative, and systems thinking skills through hands-on, team-based challenges?

In SP.248 | The NEET Experience, first-year students learn valuable techniques to solving real-world problems through engaging in a variety of challenges taken from the New Engineering Education Transformation (NEET) program's immersive, interdisciplinary domains of study, or "threads."

- Formulate a Search Strategy For a Minibot
- Create a More Bike-Friendly City
- Improve the Design of a Clean Energy System
- Design a Microfluidic Device for Drug Delivery Experiments

SP.248 students also have the opportunity to explore the unique benefits, resources, mentorship, and communities provided exclusively to NEET scholars and alumni.

Dr. Rea Lavi
realavi@mit.edu
SP.248 Lead Instructor
Curriculum Designer, NEET
Digital Education Lecturer, AeroAstro
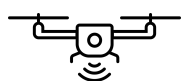MIT School of Engineering

VIEW SYLLABUS

About SP.248 + The NEET Threads
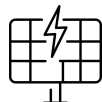
SP.248 Learning Objectives:

- Become exposed to basic concepts in autonomous machines, climate and sustainability, digital cities, and living machines.
- Become familiar with the NEET program and its four threads.
- Understand basic concepts in algorithmic thinking, creative thinking, and systems thinking.
- Be able to apply algorithmic thinking, creative thinking, and systems thinking techniques to problems.

Every two weeks, the SP.248 lead instructor is joined by one of the NEET thread instructors to focus on an interdisciplinary domain taken from one of the four NEET threads.

NEET Thread Lead Instructors + SP.248 Co-Instructors:

Dr. Gregory Long
Autonomous Machines

Dr. Nathan Melenbrink
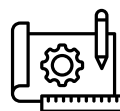Climate + Sustainability Systems

Dr. Cong Cong
Digital Cities

Dr. Mehdi Salek
Living Machines

Fall 2025 Class Details
- Tuesdays, 2:00 PM – 3:00 PM
- Building 2, Room 142 (2-142)

Grading + Requirements
- First-year discovery class (graded P/D/F)
- 1-0-2 (counts towards the 6 units for discovery and related exceptions)
- No prerequisites, no pre-requirements

Preview some of the challenges in SP.248 The NEET Experience by downloading SP.248 NEET Ways of Thinking, a previous version of this course, on MIT OpenCourseWare.

EXPLORE.
DISCOVER.
CREATE.

Enroll now in SP.248 The NEET Experience for Fall 2025! Open to all first-years.