

NEET Living Machines

Do you want to apply engineering principles and concepts to problems in the life and medical sciences through various biotechnology innovations?

In the New Engineering Education Transformation (NEET) Living Machines (LM) thread, you will work on disruptive research areas, united by the goal of improving our understanding of and development of therapies for human disease. NEET LM scholars choose from one of six tracks:

Tissue Engineering

Microfluidic Device Engineering

Biotechnology for Environmental Engineering

Computational Biology Immune, Cancer, + Infection Engineering

Synthetic Biology + Biomanufacturing

NEET is a three-year, experiential learning certificate program (sophomore through senior year) that you complete along with your major in the usual four years. All NEET scholars gain exclusive access to the NEET Scholars Collaboration Space (3-001) and other unique opportunities and benefits.



Dr. Mehdi Salek msalek@mit.edu LM Lead Instructor, Lecturer NEET, MIT School of Engineering



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LM Thread Requirements

20.051 | Introduction to NEET Living Machines (6 units)

Choose 2 Subjects From 1 of the 6 Living Machines Tracks

Synthetic Biology + Biomanufacturing

- Choose ONE: 10.28 (10.28 A&B), 10.29, 20.129/6.4880, or 20.109
- Choose ONE: 2.180/6.027, 10.321, 10.345, 20.305/6.580, 7.36, 7.38, 7.46, 10.03/7.458, or 10.442

Biotechnology for Environmental Engineering

- Choose ONE: 10.28 (10.28 A&B), 10.29, 20.129/6.129, 20.109, 20.106/1.084, 7.21, 12.004, or 7.30/1.018/12.031
- Choose ONE: 2.180, 20.305/6.580, 1.089, 1.063, 1.088, 7.26, or 12.007

Immune, Cancer, + Infection Engineering

- Choose ONE: 20.230/7.23, 1.088, 7.21, or 20.106/1.084
- Choose ONE: 20.365, 7.24, 7.26, 1.063, 7.36, or 7.371

Tissue Engineering

- Choose ONE: 2.793/20.230/6.4830, or 20.310/2.797/6.4840/3.053
- Choose ONE: 20.375, 20.363/3.055, 7.46, 6.4820/2.792/HST.542, or 2.787/HST.535

Microfluidic Device Engineering

- Choose ONE: 2.793/20.330/6.4830, 10.301, 2.005, 2.674, 1.060, 1.066/8.292/12.330, or 1.063
- Choose ONE: 2.676, 20.334, or 6.2600/3.155

Computational Biology

- Choose ONE: 20.260, 6.3900, or 20.390/6.8711
- Choose ONE: 20.320, 2.180, or 20.334

Intellectual Diversity Requirement (IDR)

A core subject from outside of your major.

Living Machines Activities + Seminars

20.054 | NEET Living Machines Research Immersion

20.054 | NEET Living Machines Research Immersion + UROP (two semesters), internship, senior thesis, or iGEM.

Professor Linda Griffith

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